

SAS00004 Tippets, William State of California 11/6/2003

SAS00004-1

Comment:

The Department has provided comments for the previous SEIS/EIR which considered Alternatives A, B, and C. Our letter, dated September 21, 2001, is attached.

Under Alternative D (Enhanced Safety and Security Plan), the number of runways would stay the same at four. Two existing runways would be moved, two runways would be lengthened, and all runways further separated from one another to improve operational efficiency and safety. Alternative D would encourage a long-term regional approach to serving air traffic demand in the Los Angeles basin by designing facilities at LAX to accommodate passenger and cargo activity levels equivalent to the No Action/No Project Alternative activity level, but would be designed to allow air carriers to emphasize international routes at LAX. Alternative D would enhance security by limiting access by private vehicles to the main airport infrastructure to reduce the risk to airport users. The public parking structures in the CTA would be relocated and would be replaced by new centralized passenger terminals. The existing Terminals 1 through 7 would be reconfigured. The Tom Bradley International Terminal (TBIT) would be reconfigured with the addition of a new North/South Linear Concourse. A West Satellite Concourse would be built west of the TBIT.

A new Ground Transportation Center (GTC) and an Intermodal Transportation Center (ITC) would be constructed east of Aviation Boulevard and would be the primary access points for all passenger drop-off and pick-up and vehicle parking. Passengers and employees would access the CTA via an Automated People Mover (APM) system from new GTC, ITC and consolidated Rental Car (RAC) facilities. Intersection improvements would be made to the off-airport transportation network to accommodate the shift in traffic patterns from the CTA to the GTC and ITC areas. Some cargo facilities would be modified under Alternative D, with the overall square footage being equivalent to the No Action/No Project Alternative.

Alternative D would require the acquisition of approximately 77 acres of property, the least amount of land acquisition of all the proposed build alternatives. The 340-acre, LAX Northside project described in the No Action/No Project Alternative that is currently recognized within the City's current General Plan and Zoning for 4.5 million square feet of development, would be developed for Alternative D; however, under Alternative D, the existing trip cap that exists for LAX Northside would be reduced to limit vehicle trips to a level comparable to that associated with the 2.6-million-square-foot Westchester Southside development proposed under Alternatives A, B, and C.

Response:

Comment noted. The California Department of Fish & Game's September 21, 2001 comment letter on the Draft EIS/EIR is identified as comment letter AS00005. For responses to these comments, please see comment letter AS00005. For responses to the Department of Fish & Game's comments on the Supplement to the Draft EIS/EIR, please see Responses to Comments below.

SAS00004-2

Comment:

The Department offers the following comments and recommendations:

The precipitous decline of species associated with open grasslands within the Los Angeles Basin is well documented, with LAX likely supporting the largest population of loggerhead shrike (*Lanius ludovicianus*) in the Los Angeles Basin based on an estimate of five to eight sites remaining in the Basin and San Gabriel/San Fernando Valleys¹. The project site supports one of only three known occurrences of San Diego black tailed jackrabbit (*Lepus californicus bennettii*) within the Los Angeles Basin. Similarly, western spadefoot toad (*Scaphiopus hammondi*) is known from no more than five occurrences within the Los Angeles Basin. Federally threatened and endangered species that would be

3. Comments and Responses

impacted by the project include the endangered El Segundo blue butterfly (*Euphilotes battoides allyni*) and Riverside fairy shrimp (*Streptocephalus woottoni*).

Although the impacts associated with Alternative D differ from other alternatives discussed in the previous EIS/EIR, the basic points of our letter addressing the inadequacies of the previous EIS/EIR apply in this case as well. Our most serious concerns remain the inadequate and inappropriate methodologies used for biologic baseline documentation, impact assessment, and mitigation calculations. For this reason we request an opportunity to meet with the applicant, the Federal Aviation Administration (FAA), and the City of Los Angeles to address our concerns prior to final certification action. The U.S. Fish and Wildlife Service should also be invited to participate.

At issue is the use of a "modified Habitat Evaluation Procedure" (re-named "Mitigation Land Evaluation Procedure - MLEP" for the SEIS/EIR). As stated in our previous letter this procedure does not accurately represent the current biologic conditions or the impacts of the project alternatives, nor does it provide for mitigation that is proportional to the impacts. The current application of the MLEP is therefore inadequate to meet the basic requirements of CEQA. In our extensive experience with land use planning and CEQA in southern California, this radical departure from accepted impact analysis methods has no precedence or justification.

1 Kimball Garrett, Ornithology Collections Manager, Natural History Museum of Los Angeles County; personal communication via electronic mail, November 5, 2003.

Response:

With regard to the loggerhead shrike, please see Response to Comment AS00005-18 for the discussion of mitigation for impacts to 171.86 acres of disturbed bare ground and non-native grassland utilized by loggerhead shrike. Please see Response to Comment AS00005-17 for the discussion of mitigation for impacts to 118.75 acres of disturbed bare ground and non-native grassland utilized by San Diego black-tail jackrabbit (only one black-tailed jackrabbit was observed during all surveys at LAX). Please see Response to Comment AL00033-394 for the discussion of mitigation for impacts to 8.97 acres of disturbed bare ground and non-native grassland utilized by the western spadefoot toad.

Please see Topical Response TR-BC-1 regarding the Habitat Evaluation Procedure (HEP) analysis and use of modified HEP methodology.

SAS00004-3

Comment:

The Department has determined that all of the four alternatives as currently proposed would have significant, unmitigated impacts on sensitive biological resources. Specifically, the actions will substantially reduce the habitat of sensitive wildlife species, reduce the numbers of endangered, threatened or rare species, and result in significant impacts in light of past habitat losses and the small amount of remaining habitat to support sensitive species in western Los Angeles County. Suggested mitigation measures are provided in our previous comment letter.

Response:

The mitigation measures described in this Final EIS/EIR mitigate for all impacts to biological resources and endangered and threatened species to levels below CEQA thresholds of significance. All comments to the Draft EIS/EIR and the Supplement to the Draft EIS/EIR were addressed in this Final EIS/EIR.

SAR00001

Parsons, John

South Bay Cities Council of Governments

7/9/2003

SAR00001-1

Comment:

The South Bay Cities Council of Governments (SBCCOG) has just been notified that we have received the Supplement to the Draft EIS/EIR, Draft EIS/EIR, Draft Master Plan and Draft Master Plan

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SAR00003 Eckles, Paul

El Toro Reuse Planning
Authority

11/5/2003

SAR00003-1

Comment:

The El Toro Reuse Planning Authority (ETRPA) has consistently disputed two flawed premises frequently used in the SCAG region's aviation forecasting and planning: 1) aviation demand forecasts attributed to Orange County, and the resulting demand/capacity gap in Orange County, and 2) the legitimacy of allocating aviation demand and capacity on the basis of county political boundaries.

The LAX EIR/EIS relies entirely on the 2001 SCAG RTP demand projections for the six-county region. ETRPA has consistently disputed the validity of those projections, especially the assumptions used for Orange County. In 1999 the ratio of passengers per resident in the SCAG region was 5.0. This ratio is very consistent with the ratio for the State of California (5.0) and for the United States as a whole (4.9).

Based upon the FAA's Terminal Area Forecast and the U.S. Census Bureau's middle series population projections, by 2015 the national ratio of airline passengers to residents will grow to 7.5. SCAG's regional projections of passengers and population are consistent with this ratio. With the 2001 RTP Medium (2025) Activity at Airports (Table TC-13 of the 2001 SCAG PEIR), the ratio of passengers per resident will be 7.6. With Scenario 8 of the 2001 RTP, the regional ratio will be 7.4 (Table PD-10 and Table PH-16 of the 2001 SCAG PEIR).

The county-by-county variations and projected changes in the ratio of passengers to residents are significant, as shown for Los Angeles and Orange Counties in the following table.

Annual Airport Passengers per Resident

	1999	2025 (Medium Activity)	2025 (Scenario 8)
All SCAG Counties	5.0	7.6	7.4
Los Angeles County	7.1	8.3	7.4
Orange County	2.7	9.7	11.1

With Scenario 8 of the 2001 RTP, Orange County would have 50 percent more passengers per resident than the SCAG region as a whole. Even if Orange County were to have a greater propensity to fly than other parts of the region, it would not be reasonable to expect that Orange County would generate 50 percent more air travel per capita than Southern California as a whole.

As shown in the following table, Orange County contains 17 percent of the region's population with only 2 percent of the land area, some of which cannot be developed due to mountainous terrain. Based on Scenario 8 of the 2001 RTP, Orange County would have 15 percent of the regional population and 23 percent of the air passengers.

SCAG Population Distribution

County	Area (square miles)	1999 Population	Population per Square Mile
Los Angeles	4,060	9,329,989	2,298
Orange	790	2,760,948	3,495
Riverside	7,208	1,530,653	212
Imperial	4,175	145,287	35
San Bernardino	20,062	1,669,934	83
Ventura	1,846	745,063	404
Total	38,141	16,181,874	424

The RADAM model used in the aviation analysis of SCAG's 2001 RTP PEIR offered almost no information about input or output. For example, no information was provided on which zones within the SCAG region (or outside) the passengers using individual airports are located. This information would allow one to test the logic of the passenger distribution. Although "passenger propensity to fly" is discussed as an important concept to the model, no specific information was provided to support the high propensity to fly in Orange County.

The LAX EIR/EIS recognizes that airlines make service decisions based upon a number of key factors, including the population within a reasonable travel distance and the cost to introduce service at a new airport (LAX Master Plan Addendum, p.1-18). Due to traffic congestion in the SCAG region travel time is used as a better indicator than travel distance. Therefore, the EIR/EIS recognizes that airlines' decisions on which airport(s) to serve are not based on county boundaries but based on the efficiency of ground access and distance from service areas and each airport's catchment area. However, the LAX EIR/EIS continues to use data and analysis which are based upon county political boundaries rather than the catchment area of the existing airports within the region.

Recognizing recent developments, including the impact of the September 11th terrorist attacks, the passage of Measure W in Orange County, as well as, increased emphasis on the importance of improved ground access in optimizing the use of existing regional aviation facilities, and the effectiveness of strategic land use and economic policies on maximizing transportation benefits, SCAG has revised its modeling assumptions and parameters which result in a more logical context for regional aviation planning.

These key developments resulting from the SCAG Growth Visioning process have been incorporated in the revised modeling, especially where it relates to regional aviation planning. As directed by the SCAG Aviation Task Force, the new Growth Visioning demographic projections have been incorporated in the regional aviation modeling. The Growth Vision alternative takes a strategic approach to regional land use distribution, which in turn maximizes both transportation and economic benefits. Among its strategies are increased housing opportunities near job centers, increased job opportunities in housing-rich areas, focusing growth along transit corridors, and revitalizing underutilized development sites. The SCAG Growth Vision Alternative puts a special emphasis on ways to support the implementation of a decentralized aviation strategy, by providing substantially improved balance of housing and employment opportunities in suburban locations in the Inland Empire and north Los Angeles County. Additionally, increased employment in manufacturing and goods movement results in higher regional air cargo volumes in areas where aviation capacity in cargo can support such growth.

The LAX Master Plan EIR/EIS makes no reference to this improved approach to demand forecasting and regional aviation planning strategy.

The LAX Master Plan Addendum, Section 1.3.2 references SCAG 2001 RTP aviation demand figures, excluding El Toro and concludes: "As illustrated in Table 1.3-3, the region's airports would have a projected shortfall of approximately 30 MAP." These figures and ensuing conclusions are entirely in conflict with the most recent SCAG forecasts as approved by the Regional Council. Based on the revised methodology and modeling conducted under the oversight of the SCAG Aviation Task Force, ten (10) Southern California airports (excluding El Toro) will provide a combined 170 MAP capacity with Maglev and 155 MAP capacity without Maglev. The LAX Master Plan EIR/EIS must be revised to include a discussion of the currently employed modeling assumptions and the resulting regional airport capacity figures consistent with SCAG. A number of implementation mechanisms have been suggested by SCAG including those to be undertaken by LAWA. The EIR/EIS makes no reference to these actions which would effectively eliminate a shortfall in the regional aviation capacity.

The LAX Master Plan EIR/EIS offers no discussion of growth forecasts of the Inland Empire and the potential for the Inland Empire airports to absorb the projected regional passenger and cargo demand. During the past two years, the Inland Empire has become increasingly active and vocal in marketing its aviation assets, and there is increased cooperation between Los Angeles and the Inland Empire to better formulate regional solutions. In fact, on October 15, 2003, elected officials and representatives from Los Angeles and Inland Empire held a Press Conference and a Presentation to the Los Angeles City Council to launch a partnership on regional aviation issues. The Press Release stated that elected officials and airport executives from three counties in Southern California announced their "[i]ntention to pursue a working partnership with the City of Los Angeles to implement a regional airport plan with capacity limits at Los Angeles International Airport and that optimizes unused passenger and cargo capacity at existing airports in the Inland Empire."

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In addition to the aviation assets in the SCAG region, the San Diego Regional Airport Authority has formed a Public Working Group to actively explore suitable sites for the development of a regional airport in the San Diego area.

Based on the recent developments in the aviation markets and a renewed regional emphasis on strategic land use and transportation policies that support the development of the Inland Empire airports, the LAX Master Plan EIR/EIS must be revised to incorporate regional aviation demand projections and capacity enhancements consistent with the 2004 SCAG RTP.

1 Based on 81.4 million passengers at Los Angeles, Ontario, John Wayne, Burbank, Long Beach, Palm Springs, Palmdale, and Oxnard in 1999 according to the FAA's December 2000 Terminal Area Forecast (TAF).

2 Calculated from 1999 U.S. Census estimates and 1999 passenger statistics obtained from the TAF.

Response:

Contrary to the commentor's assertion, the Draft EIS/EIR and the Supplement to the Draft EIS/EIR did not rely on the demand projections in the 2001 RTP. However, the capacity of LAX under Alternative D was designed to be in compliance with the allocation of passenger demand made to LAX in the RTP.

The unconstrained LAX Master Plan passenger forecast utilized the RADAM model to allocate local (origin and destination) demand in the region to RADAM zones. The RADAM zones are based upon census tracts. The model was validated using independent socioeconomic variables as projected by SCAG, as well as observed air passenger trips by zone obtained through analysis of recent air passenger surveys, including the 1993 LAX/ONT air passenger surveys and 1992 Air Transportation Systems (ATS) air passenger surveys at the six other LA Region airports. The Geographic Distribution Model converts the resulting demand, by zone and different passenger categories to percentages. When applied to total LA Region domestic O&D demand, these percentages distribute the trips across the LA Region by passenger category. The RADAM zones and the catchment areas for each regional airport were not based upon political boundaries. For ease of reporting, the projected passenger demand was summarized by county.

Alternative D was developed well before the SCAG Growth Visioning process that resulted in the Preferred Aviation Plan was approved. The Preferred Aviation Plan will become part of the 2004 RTP. The regional allocation of passenger demand in SCAG's 2001 RTP and Draft 2004 RTP are discussed in Topical Response TR-RC-1. At the direction of Mayor Hahn, the passenger and cargo capacity of LAX under Alternative D is approximately equal to the capacity of the existing facility. It will be incumbent on the other airports in the region to serve a larger percentage of the regional demand in the future.

The construction of Maglev and SCAG's other implementation mechanisms for distributing regional demand will not impact the planned capacity of LAX. Neither will the development of a replacement airport in the San Diego area.

SAR00004 Wallerstein, Barry South Coast Air Quality 11/7/2003
Management District

SAR00004-1

Comment:

Supplement to the Draft Environmental Impact Statement / Environmental Impact Report (SEIS/R) for the Los Angeles International Airport Master Plan

1. Construction Emissions Analysis: The SCAQMD previously submitted a comment letter dated 9/21/01 on the original Draft EIS/R, which noted that it was difficult to recreate construction emission estimates in the associated technical document because the emission estimate tables provided only total emissions without a breakdown of emissions by emissions source i.e., piece of equipment or construction task. The letter requested that a table, for example, be included providing peak daily

emissions by emissions source showing equations used, assumptions made, etc. Review of the Draft Supplemental EIS/R (SEIS/R) indicates that this same problem persists. The SCAQMD again requests that this information be provided in the Final EIS/R.

Response:

Comment noted. Section 4.6, Air Quality, of the Final EIS/EIR includes such a table for purposes of clarity.

SAR00004-2

Comment:

2. Rock Crushing Emissions: On page 39 of Appendix S-E it is stated that rock crushing will eliminate some haul truck trips to transport debris offsite and that rock crushing emissions are accounted for in the construction analysis. Since emissions from specific emission sources have not been broken down by equipment or construction task, this statement could not be confirmed.

Response:

Rock crushing emissions have been accounted for in the Supplement to the Draft EIS/EIR. A breakdown of the specific emissions associated with rock crushing is included in Section 4.6, Air Quality, of the Final EIS/EIR for clarification purposes.

SAR00004-3

Comment:

3. Exclusion of Architectural Coatings and Asphalt Emission: On page 3 of Appendix S-E it is stated that the construction analysis does not quantify architectural coating or asphalt emissions. The rationale for excluding architectural coating emissions is that they will be water based coatings. No rationale is given for excluding asphalt emissions. Although it is likely that most architectural coatings will likely be water based coatings by 2005, they are still expected to contain VOCs. If substantial volumes of coatings are applied on a daily basis, to paint the exteriors and interiors of new structures, stripe runways and roadways, etc., VOC emissions could be substantial. Further, architectural coatings applied in remote locations such as runways, may not have access to electricity and may require generators to supply power to the coating application equipment. Similarly, paving roadways, runways, parking lots, etc., requires heavy-duty equipment to haul asphalt to the site (haul trucks), unload the asphalt (loaders), lay asphalt (asphalt pavers), etc. It is recommended the NEPA/CEQA lead agencies include architectural coating, asphalt, and associated equipment emissions in the analysis of construction emissions.

Response:

An assumption was made that hot-mix asphalt would be used during construction which is not expected to contribute to VOC emissions.

For hot-mix asphalt, the organic components have high molecular weights and low vapor pressures. Therefore, hot-mix asphalt use produces minimal emissions of VOCs (Ref 1). The VOC emission factor for hot-mix asphalt is estimated to be ~0 lb VOC emitted per 100 lbs of asphalt cement (asphalt pavement refers to the paving mixture of asphalt cement plus aggregate, with aggregate typically comprising 92-96 wt% of the mixture) (Ref 2).

Ref 1: Page 17.2-3, EPA's Emission Inventory Improvement Program, Asphalt Paving (Volume III, Chapter 17), January 2001.

Ref 2: "VOC Emissions from Asphalt Paving", Research Triangle Institute, 28 March 2000.

Similarly, the use of architectural coatings is expected to result in negligible VOC emissions due to the abundance of low- and zero-VOC coatings currently available on the market today. Further advances in coating formulations are expected prior to the 2015 buildout of the LAX Master Plan.

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SAR00004-4

Comment:

4. CARB OFFROAD Model Emission Factors: Additional clarification is needed to ensure that emission factors from CARB's OFFROAD Model were appropriately applied to construction equipment to calculate emissions. Section 4.6.2.2 Emission Estimates of the Draft SEIS/R indicates on Page 4-538 that emission factors used to estimate construction emission inventories have been updated based on CARB's OFFROAD Model. Appendix D of CARB's OFFROAD model contains emission factors for off-road engines, based on engine size and model year. These emission factors are not composite emission factors that are representative of all off-road equipment in the year indicated in Appendix D, the emission factors should be used only for the equipment manufactured for that model year. Emission factors presented in CARB's OFFROAD Model, Appendix D can be applied to construction equipment provided, that the equipment is representative of that model year. If the NEPA/CEQA lead agencies intend to use new equipment each year, additional information is needed to clarify how this will be implemented. If, however, the NEPA/CEQA lead agencies will be using a mix of model years for construction equipment, it is recommended that off-road mobile source emissions be calculated using composite emission factors for specified years, which can be obtained by contacting CARB.

Response:

The analysis completed for Alternative D utilized the CARB off-road model. All emission factors were obtained from CARB's document entitled, "Emission Inventory of Offroad, Large Compression Ignited Engines Using the New Offroad Emissions Model."

SAR00004-5

Comment:

5. Errors in Table S4.6-19: Footnote 2 of Table S4.6-19 on page 4-393 of the Supplement indicates that the baseline, interim, and horizon year inventories that were originally calculated using EDMS 3.2 have been recalculated for the Draft SEIS/R using EDMS 4.11. It appears, however, that the percent reductions associated with each alternative have not been adjusted to reflect the revised inventories. This apparent discrepancy should be explained or corrected in the Final EIS/R.

Response:

Percent reductions are corrected in the Final EIS/EIR. Please note, the percentages have been provided for informational purposes and do not change the conclusions as presented in Section 4.6.9, Level of Significance After Mitigation, of the Supplement to the Draft EIS/EIR.

SAR00004-6

Comment:

6. Overlapping Phases and Peak Emissions: Section 4.20.3 on pages 4-539 and 4- 540 of the Draft SEIS/R describes the three phases of construction that Alternative D, the preferred Alternative, would go through. It is projected that construction of the Alternative D master plan improvements will start in the 3rd quarter of 2004 and end by December 2014. Phase II will commence in 2007, one year before the end of Phase I in 2008. Similarly, Phase III will commence in 2010 one year before Phase II ends. Phase III will end in 2014. It appears therefore that the three phases will overlap one another during different stages of construction. These overlapping construction emissions do not appear to be reflected in the discussion or in the emissions tables. Similarly, the mass daily emission estimates do not appear to consider emissions from early phases of the project that begin operation overlapping with ongoing construction phases. For example, Tables S4.6-9 through 54.6-11 on pages 4-371 through 4-373 of the Supplement present the operational and construction emissions data for each of the project alternatives as discrete non-overlapping phases for 2004, 2005, 2013 and 2015. These tables do not reflect the emissions that will be occurring during the overlapping phases. As a result, emission estimate may underestimate peak day emissions. It is recommended that the NEPA/CEQA lead agencies identify all overlapping phases, both construction and operation, and show the peak daily emissions for each of these overlapping.

Response:

Overlapping construction emissions are included in the emissions tables. Table S4.6-11 shows peak unmitigated construction emissions from all overlapping construction activities in each of the peak emission years. Table S4.6-21 shows peak mitigated construction emissions.

Please see Response to Comment AR00004-11 regarding overlapping phases.

SAR00004-7

Comment:

7. Ground Service Equipment: In Table S4.6-18 on page 4-389 of the Supplement, the lead agency claims that the conversion of the airport's ground service equipment to electric power or fuel cells will reduce NOx, VOC and CO emissions by up to 600 tons, 1,900 tons, and 2,800 tons respectively per year by 2015. Comparing these emissions reductions to the 2000 emissions inventory in Table S4.6-7 on page 4-368 shows very substantial reductions from the base year. To achieve these emissions reductions, the lead agency proposes to accelerate full conversion of the ground service equipment fleet through incentives or tenant lease requirements. The lead agency needs to describe some of these incentives and also demonstrate quantitatively how these very substantial emissions can be achieved. Further, on pages 35 and 40 of Appendix S-E, the lead agency refers to the non-binding memorandum of understanding (MOU) signed in December 2002 between California Air Resources Board and the major domestic air carriers to reduce NOx emissions from ground service equipment. Since the MOU is non-binding, the lead agency needs to demonstrate how it proposes to achieve those emission reductions and those beyond what is described in the MOU. If documentation already exists elsewhere in the Supplement, relating to how these emission reductions will be achieved, it is suggested that specific reference be made as part of the footnotes to the table to facilitate review.

Response:

The Draft EIS/EIR and the Supplement to the Draft EIS/EIR both properly assume that mitigation measures specifically identified, adopted, and implemented by FAA and LAWA to reduce or eliminate project-related impacts only apply to the build alternatives. In the absence of a discretionary action by FAA or the City of Los Angeles, such as would occur under the No Action/No Project Alternative, there is no mechanism that would trigger the need to adopt or implement mitigation measures.

While SCAQMD considers the GSE MOU to be non-binding, the agreement is essentially between CARB and the various airlines. The MOU is binding on the airlines to achieve emissions reductions, since the MOU describes a "compliance process" (Section IV.C. of MOU) and "remedies" (Section IV.D. of MOU) including liquidated damages payable to CARB in the event of failure to meet the conditions of the MOU.

Various measures will be specifically identified and referenced in FAA's Record of Decision, after the City Council decides on which alternative it wants to implement for LAX.

SAR00004-8

Comment:

8. Ongoing Measures to Improve Air Quality: Pages 34 through 37 in Appendix S-E list a number of programs, both regulatory and voluntary, implemented by LAWA to improve air quality. The SCAQMD is pleased that LAWA is maintaining its commitment to implement voluntary programs, in particular the energy saving measures, listed on page 36, such as the use of double-paned glass or accousti-glass tempered and shaded windows, high efficiency metal halide lights in parking areas, lighting controls and energy efficient lighting in indoor areas, energy efficient and automated controls for air conditioning, increased wall and ceiling insulation beyond existing regulatory requirements, alternative and low emission vehicles, etc, which could provide substantial air quality benefits. The SCAQMD is pleased that LAWA will be implementing a series of innovative mitigation measures such as incentives for SULEV/ZEV emission engines in commercial vehicles, electrical ground power and preconditioned air systems to existing aircraft at passenger gates, continued conversion of ground support equipment to alternative fuels, and specification of clean-fueled construction equipment to name a few. The SCAQMD also agrees that the NEPA/CEQA lead agencies should continue to implement the mitigation measures

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in Table S23 beginning on page 41 of Appendix S-E, even though emission reduction control efficiencies are not specifically identified for these measures. In addition, to the programs and mitigation measures identified in the Draft SEIS/R, it is also recommended that the NEPA/CEQA lead agencies also incorporate other programs such as the Leadership in Energy and Environmental Design (LEED) system developed by the U.S. Green Building Council into the list of mitigation measures identified in Table S4.6-18.

Other mitigation measures for consideration by the NEPA/CEQA lead agencies include the following:

- Provide temporary traffic control during all phases of construction activities to improve traffic flow, e.g., flag person;
- Suspend all grading when wind speeds exceed 25 miles per hour;
- Traffic speeds on all unpaved roads should be reduced to 15 miles per hour or less;
- Cover all haul trucks hauling dirt, sand, soil, or other loose materials;
- Sweep streets with AQMD Rule 1186-certified street sweepers whenever visible dust accumulates on roadways;
- Install wheel washers where vehicles enter and exit unpaved roads onto paved roads or wash off trucks and any equipment leaving the site each trip, etc.;
- Investigate using cleaner burning aircraft fuels, perhaps through a pilot program; and
- Use light-colored roofing materials, which reflect sunlight and, therefore, heat away from buildings.

The SCAQMD is willing to work with the NEPA/CEQA lead agencies to develop the above measures and other measures to mitigate air quality impacts from the proposed project.

Response:

Comment noted. Many of the measures suggested by the commentor will be implemented, but no emission reduction credit is claimed for mitigation because they are required under SCAQMD Rule 403. Grading will be suspended when winds exceed 25 mph. In addition, haul trucks will be covered, traffic personnel will be placed to improve traffic flow, vehicles will be washed prior to leaving the site, etc. Unpaved roads on the construction site will be paved at least 100 feet onto the site from the main road. A Dust Control Plan will be prepared and submitted to the SCAQMD as part of the permitting process for this project that will specify in greater detail the PM10 measures being implemented.

Please see Response to Comment AL00033-330 regarding heat island effects and Response to Comment AL00033-336 regarding energy conservation measures.

Please see Response to Comment SAL00013-125 regarding aircraft mitigation measures.

All feasible mitigation measures are included in the Final EIS/EIR and have been considered in the preparation of the air quality mitigation plan. As required by Section 15097 of the CEQA Guidelines, the Mitigation Monitoring and Reporting Program for the approved project provides the mechanism to ensure the implementation of mitigation measures.

SAR00004-9

Comment:

9. Control Efficiencies of Mitigation Measures: The SCAQMD previously commented on the Draft EIS/R that the NEPA/CEQA lead agencies were taking emission reduction credit for programs required by regulation that relied on future approvals, or were voluntary. In response the Draft SEIS/R has removed required or duplicative measures. Further, the NEPA/CEQA lead agencies are no longer claiming emission reduction credit for unquantified or voluntary programs. Table 4.6-16, however, identifies several mitigation measures with associated emission reductions. The Draft SEIS/R does not appear to provide any supporting documentation regarding the methodology used to calculate the range of

potential emission reductions, including assumptions, equations, emission factors, specific emission reduction control efficiencies by equipment, the source of the control efficiencies used, etc. The Final EIS/R should provide documentation to support the emission reductions shown in Table 4.6-16. Further, in some cases, emission reductions claimed may overestimate actual emission reductions that may result from applying the mitigation measure. For example, substantial emission reductions are identified for measures related to diesel powered construction equipment, such as catalytic oxidizers, particulate traps with exhaust gas recirculation, use of emulsified diesel fuels, etc. The NEPA/CEQA lead agencies should be aware that, with the exception of catalytic oxidizers certified at a control efficiency of 25 percent, these control technologies have not been certified for use on heavy-duty off-road mobile sources. The NEPA/CEQA lead agencies are encouraged to use these control technologies, but associated emission reductions may not be as great as claimed. Information certified control equipment for mobile sources can be found at the CARB website at the following internet address: <http://www.arb.ca.gov>.

Response:

Estimates of emission reductions for the use of Lubrizol fuel came from CARB certification testing. Other control efficiency percentages (for PM filter traps, catalytic oxidation, etc.) were taken from both CARB and SCAQMD test data.

While the combined control efficiencies of such measures would exceed 80 percent NO_x reductions, very conservative emission reduction assumptions were made for mitigation measures since the precise number of construction devices to be retrofitted is unclear at this time. The document assumes a 22 percent NO_x reduction and a 31 percent PM₁₀ reduction from the use of all proposed mitigation measures.

The Final EIS/EIR itemizes emission reductions, where quantification is feasible and supportable, for the recommended air quality mitigation measures.

SAR00004-10

Comment:

10. NO_x to NO₂ Conversion: Pollutant emissions are expressed as NO_x, i.e., the sum of NO and NO₂. However, the ambient air quality standards are for NO₂. So a method is required to convert the NO_x emissions into NO₂ concentrations. In the Draft SEIS/R two methods are used to estimate the maximum one-hour NO₂ concentrations, that is, the ozone limiting method (OLM) and the NO₂/NO_x ratio method. OLM, as described in Attachment P of Technical Report S-4, is an acceptable method for estimating 1-hour NO₂ impacts to demonstrate compliance to District Rules. The NO₂/NO_x ratio method, as described in Attachment Q of Technical Report S-4, is not an approved method to demonstrate compliance with SCAQMD Rules, in particular modeling requirements contained in SCAQMD Rule 1303. However, the method appears to be reasonable and conservative for the application of determining localized significance for CEQA environmental analyses.

Response:

Comment noted.

SAR00004-11

Comment:

11. Total One-Hour NO₂ Concentrations: In Attachment P of Technical Report S-4, it is stated that "the modeled NO₂ concentrations were assumed as the actual NO₂ ambient concentrations." In other words, the project impacts are not added to local background concentrations to determine the total NO₂ concentrations for comparisons to ambient air quality standards. The NO₂ concentrations from the proposed project must be added to the local background NO₂ concentrations and the resulting total concentration compared to the ambient air quality standard to determine project significance. Since the background concentrations are not included, the project impacts are underestimated.

3. Comments and Responses

Response:

The monitored ambient ozone concentrations were used for the ISC-OLM model. We believe that the corresponding NO₂ concentrations calculated by the model are the total concentrations in the ambient air, which include both background and newly generated NO₂ concentrations and, therefore, include background concentrations. If the local NO₂ background was added into the ISC-OLM modeled results, and a back calculation to ozone concentration was made, a higher ozone concentration would be produced at each ambient receptor. Please see Attachment P of Technical Report S-4 for additional information concerning the model calculations and algorithms.

SAR00004-12

Comment:

12. Calm Wind Processing: Based on the dispersion model input files provided as part of the review package, the calm wind processing option was applied in the model application. This has the effect of excluding many hours of light wind speeds and potentially high concentrations from dispersion modeling. This deviates from SCAQMD modeling procedures, which require that calm wind processing be turned off. The annual concentrations for all pollutants, including the cancer risks and the chronic non-cancer risks, may be underestimated.

Response:

Please see Response to Comment AR0004-15 regarding calm wind processing.

SAR00004-13

Comment:

13. Human Health Risk Assessment (HHRA): Based on the emission speciation profile in the HHRA, it is not clear whether the risk estimates include emissions from the future increase in the number of aircraft landing at LAX. Please clarify whether or not aircraft emissions are included in the HHRA and, if not, it is recommended that the HHRA be revised to include future aircraft emissions.

Response:

Aircraft emissions are included in the HHRA. Please refer to Section 4.6, Air Quality (subsection 4.6.2.1), of the Draft EIS/EIR and Section 4.6 in the Supplement to the Draft EIS/EIR for a description of the sources of emissions that were incorporated in the analysis. Nearly all of the non-cancer hazard is from acrolein released from aircraft emissions, although information suggests that the analysis presented for acrolein may substantially overestimate releases and thus may overestimate possible chronic and acute impacts to human health.

Please refer to Section 4.24.1, Human Health Risk Assessment (subsection 4.24.1.6, Environmental Consequences, and subsection 4.24.1.9, Level of Significance After Mitigation), of the Supplement to the Draft EIS/EIR for discussions of acute and chronic hazards for all build alternatives and the No Action/No Project Alternative. As described in these sections, health risks (cancer, non-cancer chronic and non-cancer acute) for the majority of nearby residents would be lower for Alternative D than for 1996 baseline, Year 2000 conditions and the No Action/No Project Alternative. Alternative D provides for airfield improvements that would enable aircraft to move more efficiently, thereby reducing air pollutant emissions from aircraft operating in taxi/idle mode, and provides substantial improvements to the on-airport and off-airport surface transportation systems, thereby reducing air pollutant emissions from motor vehicles. Additionally, Alternative D, unlike the No Action/No Project Alternative, includes Master Plan commitments and mitigation measures to reduce air pollutant emissions.

SAR00004-14

Comment:

14. Health Risk Assessment for Mobile Sources: Because heavy-duty truck trips do not appear to be specifically identified in the Draft SEIS/R, it is unclear whether or not operational emissions include a substantial increase in the number of heavy-duty truck trips to the airport, especially the container cargo portion of LAX. If there is a substantial increase in future heavy-duty truck trips to LAX, a health risk

assessment for mobile sources may be warranted. Guidance for such an analysis can be found on the SCAQMD's CEQA web pages at the following internet address: http://www.aqmd.gov/ceqa/handbook/diesel_analysis.doc.

Response:

Emissions from heavy duty truck trips were evaluated in Section 4.6, Air Quality, of the Draft EIS/EIR and the Supplement to the Draft EIS/EIR. Supporting technical data and analyses are provided in Appendix G and Technical Report 4 of the Draft EIS/EIR and Appendix S-E and Technical Report S-4 of the Supplement to the Draft EIS/EIR. Toxic air pollutants associated with heavy duty truck emissions were included in Section 4.24.1, Human Health Risk Assessment, in the Draft EIS/EIR and the Supplement to the Draft EIS/EIR. Supporting technical data and analyses are provided in Technical Report 14a of the Draft EIS/EIR and Technical Report S-9a of the Supplement to the Draft EIS/EIR.

SAR00004-15

Comment:

15. Program EIS/R and Subsequent Projects: It is understood that the EIS/R is a program document to analyze impacts from a long-term ongoing program to upgrade and enhance security at LAX. Further, it is understood that various components or phases of the proposed project will undergo subsequent project-specific environmental analyses under NEPA and CEQA. Please provide a list of the specific future projects that will undergo environmental analyses so that the SCAQMD can evaluate whether components of the proposed project that are not specifically analyzed in future documents are adequately analyzed in the program EIS/R.

Response:

Comment noted. After the City Council decides on which alternative it intends to implement, and the FAA issues the related Record of Decision, LAWA and FAA will conduct the appropriate environmental review of, and documentation for, individual projects encompassed within the Master Plan. As each project proposed under the selected alternative advances toward implementation, the environmental impacts of that project will be examined in light of the Final EIS/EIR for the LAX Master Plan to determine what, if any, additional environmental analysis is necessary to meet the requirements of NEPA and/or CEQA. The applicable notification and review procedures will be followed at that time, as appropriate.

It should be noted that, relative to air quality impacts associated with Alternative D as the preferred alternative, the Final General Conformity Determination will be published prior to publication of the Final EIS/EIR that will be approved by the FAA.

SAR00004-16

Comment:

16. Toxics Analysis: The SCAQMD has reviewed the air toxics analysis prepared by the NEPA/CEQA lead agencies and believes that the modeling approach used for the human health risk assessment is not consistent with the FAA's LIDAR study regarding plume heights during jet queuing and taxi periods. The assumed plume heights in the toxics modeling analysis are higher than those observed in the LIDAR study and, therefore, the impacts in the human health risk assessment may be underestimated. The SCAQMD recommends that the toxics analysis be revised to be consistent with the LIDAR study recommendations regarding the effective plume heights of the jet exhaust.

Response:

Sensitivity analyses that address the potential impact of modified plume height from aircraft will be included in the Final EIS/EIR.

SAR00005-3

Comment:

A. COMMENTS ON THE LAX MASTER PLAN ADDENDUM/PROJECT DESCRIPTION

1. Consistency with Adopted Aviation Plan in 2001 Regional Transportation Plan

- Consistency with adopted regional passenger and cargo forecasts: Alternative D is designed to accommodate 78.9 million annual air passengers (MAP) and 3.1 million tons of air cargo within the forecast period extending to 2015. These figures are generally consistent, but not specifically consistent, with the adopted forecast for LAX of 78.0 MAP and 3.0 million tons of air cargo by 2025 in the adopted aviation plan in SCAG's 2001 Regional Transportation Plan.

Response:

Given the forecast regional demand of 146.5 MAP in 2015, 167.3 MAP in 2025, and 170.1 MAP in 2030, the difference between 78.0 and 78.9 MAP at LAX appears insignificant. Likewise, the difference between 3.0 and 3.1 MAT of cargo at LAX appears insignificant.

SAR00005-4

Comment:

- Implementation of Proposed Capacity Constraint: The project proposes to maintain the passenger service at LAX to 78.9 MAP by extensively reconfiguring the existing passenger terminals and reducing the number of aircraft gates from the current 163 nominal gates to 153 nominal gates in Alternative D. However, the passenger carrying capacity of any particular terminal configuration cannot be exactly measured, since it is a function of the size of aircraft utilizing the gates and passenger load factors per aircraft. Also, remote aircraft parking positions would be eliminated by the alternative, which could always be reestablished as long as there is apron space to accommodate them. To maintain a 78 MAP constraint at LAX utilizing available gate capacity, an additional legally enforceable implementation mechanism would be needed to keep total passenger activity within the 78 MAP limitation. The mechanism would monitor passenger throughput at established gates, and adjust the number, size and configuration of gates as needed to keep local passenger activity within the 78 MAP limitation.

Response:

The passenger activity that would be expected in 2015 with Alternative D was determined based on the design of the Alternative D gate facilities and the projected airline response to the constrained facilities. Under 14 CFR Part 161, the FAA may permit local restrictions on access to airport. However, given that Congress is urging the FAA to permit capacity in major markets, such approval is improbable.

The north airfield modifications would eliminate the remote gates at the existing west pad facility and this area would be prohibited from use as a remote passenger boarding location. The new west satellite concourse would be constructed at one of the two location of the existing remote commuter gates. One of the two GRE facilities would be located on the existing Delta Air Lines maintenance apron adjacent to the existing United Express maintenance facility at the other remote commuter aircraft boarding area.

SAR00005-5

Comment:

- Consistency with adopted regional Maglev strategy: A key element of the 2001 adopted aviation plan is a proposed regional high-speed rail network utilizing magnetic levitation (Maglev) technology. The proposed Maglev system is a vital component of the plan's decentralization strategy of distributing passengers and cargo to underutilized suburban airports in the Inland Empire and North Los Angeles County. The system enables the region to meet forecast aviation demand and minimize the potential economic loss that could result from having highly constrained and encroached urban airports including LAX. The system forecasts a Maglev connection to LAX from West Los Angeles (with connections from

3. Comments and Responses

West Los Angeles running east to Ontario Airport, north to Palmdale Airport and south to Orange County), with the segment running down the median of I-405 and turning west along I-105 to access LAX. The segment is planned for completion within the 2010 to 2015 time period, which is within the forecast period for the LAX master plan process. SCAG's proposed Maglev system could provide significant potential mitigation of ground access impacts on local communities around LAX, since about 23% of total LAX passengers are estimated to access the airport via Maglev after a connection to LAX is completed. Maglev is also an essential component of SCAG's regional aviation strategy adopted for the 2001 RTP, and the Preferred Aviation Plan proposed for the Draft 2004 RTP. Alternative D is much more conducive to a potential Maglev connection than previously proposed master plan alternatives, by virtue of a proposed Intermodal Transfer Center (ITC) to be located north of Imperial Highway and the I-105 freeway, and east of Aviation Boulevard. The ITC will serve as a major transfer center for regional bus serve, and will be connected to a Green Line station located just south of Imperial Highway via an elevated walkway. The ITC is also a logical juncture for connecting with the SCAG's proposed Maglev segment that would follow the I-105 freeway alignment. However, Alternative D is silent on Maglev, and makes no specific mention of a potential Maglev connection to LAX within the forecast period.

Response:

The traffic study for the Supplement to the Draft EIS/EIR assumed that an inter-regional Maglev system would not be completed by the 2015 horizon year. If Maglev is implemented by 2015, then the traffic study in the Supplement to the Draft EIS/EIR has taken a conservative approach to the traffic impacts in the vicinity of LAX, particularly if it is assumed that SCAG's estimate of 23 percent of total LAX passengers would use Maglev to access the airport. Please see Topical Response TR-ST-5 and, in particular, Subtopical Response TR-ST-5.1, regarding high-speed rail connections to LAX.

SAR00005-6

Comment:

2. Regional Impact of LAX Master Plan Alternative D

- Available regional airport capacity: On page 1-12 of the Master Plan Addendum it should be noted that NAS Point Mugu is no longer available for possible joint use of that facility. On page 1-15 it should be noted that SCAG has updated its estimate of existing available capacity at existing urban air carrier airports in region (i.e., LAX, Burbank, John Wayne and Ontario airports) which totals about 132 MAP. This new figure reflects a recalculation of the runway capacity of Ontario Airport (to 30 MAP) and the recent renewal of John Wayne airport's settlement agreement from 8.4 MAP to 10.8 MAP.

Response:

At the time that the Draft Master Plan Addendum was prepared, NAS Point Mugu was believed to be a potential joint use facility. Page 1-15 cites the SCAG estimate of existing regional airport capacity as of 1995.

SAR00005-7

Comment:

- Potential of Palmdale Airport: On page 1-16, recent modeling of SCAG Preferred Aviation Plan for the 2004 indicates that Palmdale Airport has the potential to serve a high level of passenger demand. This modeling allocated 12.8 MAP to Palmdale Airport in 2030, including international demand, given a high-speed Maglev connection and brokering/coordination between LAWA and airlines. Table 1.3-3 should be revised to indicate that Palmdale Airport has more service potential than just a commuter airport within the 2015 time period.

Response:

The airlines will only provide service from Palmdale when sufficient demand can be demonstrated. Until Palmdale area demand increases, the most likely result of a high-speed (Maglev) rail line would be for Palmdale residents to take the train to LAX, rather than LAX passengers riding to Palmdale Regional Airport for their flights. LAWA has no authority to develop Maglev technology between LAX and Palmdale. As a responsible public agency, LAWA will only develop Palmdale when demand can be demonstrated. Even then, Palmdale will be a supplemental airport to LAX and the other regional

airports, not a replacement for LAX. Please see Topical Responses TR-RC-1 and TR-RC-5 regarding LAWA's efforts to encourage operations at Palmdale, planned improvements at the airport and nearby roadways by LAWA and Caltrans, expected use of Palmdale through 2015 and beyond, and the Master Plan update that is currently underway.

SAR00005-8

Comment:

- Secondary airports: On page 1-17 it is stated that "A sensitivity analysis conducted by SCAG in 1998 found that if LAX capacity was constrained in an effort to force demand to other regional airports, much of the traffic would relocate to other airports outside the region such as San Francisco, Denver and Dallas rather than to secondary regional airports within the region." This sentence should be qualified by noting that more recent modeling conducted by SCAG with a regional Maglev system assumed indicates that Ontario and Palmdale airports have the potential to serve long-haul and international demand, and help minimize the potential loss of demand to airports outside the region.

Response:

The statement on page 1-17 was true at the time the Draft Master Plan Addendum was prepared.

SAR00005-9

Comment:

- Concentration of Travel Demand: Figure 1.3-2, which shows the distribution of domestic O&D passenger demand throughout the region, appears to be in error. The figure shows that most of Orange County generates lower passenger demand per square mile than central Los Angeles County, which conflicts with SCAG regional demand data. The figure should be qualified by saying that it is based on partial data taken from LAX and Ontario O&D surveys.

Response:

Comment noted. The figure is accurate as presented.

SAR00005-10

Comment:

- Airline deregulation and competition: On page 1-26, it should be noted that after the events of September 11, 2001, many passengers now find secondary airports to be much more convenient and easier to access than a primary airport such as LAX. This is the primary reason why passenger growth at secondary airports in the region has largely rebounded over the last two years, as opposed to passenger levels at LAX.

Response:

Comment noted.

SAR00005-11

Comment:

3. Alternative D Development and Refinement

- Design capacity of Alternative D: On page 2-1 it is stated that "Alternative D would be designed to serve approximately 78 MAP, which is similar to the scenario adopted by SCAG for LAX." It should be noted that the specific activity level that Alternative D would be designed for is 78.9 MAP, not 78.0 MAP.

Response:

Comment noted.

3. Comments and Responses

SAR00005-12

Comment:

- Regional approach of Alternative D: On page 2-1 it is stated that Alternative D "would be developed to offer a regional development alternative to LAX." It is also stated that "The Alternative D design would encourage other airports in the region to develop facilities to accommodate regional demand beyond the level served by LAX." This language is similar to language on page 1-2 of the Supplemental Draft EIS/EIR (Chapter 1, Introduction) that describes the regional approach inherent in Alternative D: "whereby growth at LAX would be planned so as to place greater pressure on other regional airports to accommodate unmet future air travel demands." Also, on page 2-1 of the Supplemental Draft EIS/EIR (Chapter 2, Purpose and Need for the Proposed Action) it is stated that "Alternative D would respond to future demand for air transportation by encouraging, but not requiring, other airports in the Los Angeles area to increase capacity to make up for the limitations of LAX."

However, nowhere in the Master Plan Addendum or the EIS/EIR is it described how Alternative D would encourage other airports in the region to make up for the limitations of LAX. It is assumed that the design of Alternative D itself would encourage other airports to make appropriate capacity expansions. This is not a regional approach in that it is entirely passive, and does not actively involve other affected airports in the region in its implementation. A much more proactive regional approach is needed (see recommendations in Section C below). It should be noted that the impacts on other airports from the implementation of Alternative D could be significant. For example, Alternative D proposes to reduce the number of narrow body (short haul) aircraft gates from the current 51 to 40. This proposed sharp reduction in short haul capacity at LAX could have a significant impact on nearby urban airports to serve the short-haul market of Los Angeles County, particularly Burbank and Long Beach airports. These airports are as encroached and constrained as LAX, and have limited expansion opportunities.

Response:

The City of Los Angeles and LAWA can only control the development of LAX, Ontario, Palmdale, and Van Nuys airports. Other jurisdictions are responsible for planning and developing the other regional airports. The decision to develop an airport is the responsibility of the local airport proprietor. There is no single federal or local government or similar organization that has the authority to make and implement decisions for the further development of all the various airports in Southern California.

Alternative D for LAX emphasizes safety and security improvements, rather than capacity increases. By not increasing the capacity of LAX, it is incumbent on the other airports in the region to serve a larger percentage of the regional demand. LAWA is currently preparing Master Plan updates for both Ontario and Palmdale, in order for them to play their part in addressing the anticipated regional demand. Expansion at Ontario, Palmdale, or any of the other regional airports will not negate the need for modernization of LAX. Please see Topical Responses TR-RC-1 and TR-RC-5 for more detail on the relationship between LAWA's planning for its three commercial service airports and the plans of other airport jurisdictions in the region.

SAR00005-13

Comment:

B. COMMENTS ON SUPPLEMENTAL TO DRAFT LAX MASTER PLAN EIS/EIR

1. Economic Impacts of Alternative D

- Mitigation costs: On page 9 of the Supplemental Economic Report, Table S5, the cost of proposed environmental mitigation projects including off-airport ground access improvements should be itemized and added to the total \$7.4 billion estimate for construction of Alternative D facilities and improvements.

Response:

Comment noted. The preliminary cost estimate for construction of Alternative D that was included in Technical Report S3 to the Supplement to the Draft EIS/EIR is considered adequate for estimating potential construction-related employment and economic output in Los Angeles County, and in a way

that the impacts related to Alternative D can be directly compared with those for the other Draft EIS/EIR alternatives.

SAR00005-14

Comment:

- Total economic impact: On page 12, Table S10, it shows that the total economic output impact of Alternative D only exceeds that of the No Action/No Project Alternative by \$32 million. This is a very meager return on the \$7.4 billion estimated to construct Alternative D, not including mitigation projects. It is suggested that this section should include the non-quantifiable benefits that would accrue from implementing Alternative D, including its safety and security benefits. Opportunity costs should also be identified, including projects at other LAWA-owned airports that could be funded if Alternative D was scaled down to a lesser expense.

Response:

This comment is essentially the same as comment SAR00005-22; please see Response to Comment SAR00005-22.

SAR00005-15

Comment:

2. Off-airport Ground Access Improvements

- Cost data: Alternative D has significantly lower estimated ground access impacts compared to previously proposed master plan alternatives. This is mainly because it is designed for a lower service level (i.e., 78 MAP) and places a markedly greater emphasis on transit access through the planning of an off-airport intermodal transfer center and five new off-airport FlyAway facilities (i.e., park-and-ride facilities for air passengers). However, significant off-airport ground access projects would still be needed to mitigate forecast traffic impacts, as listed in Technical Report 2b (Off-airport Surface Transportation). These include a new freeway interchange at I-405 and Lennox Boulevard, new freeway ramps off I-105 between Aviation Boulevard and La Cienega Boulevard, and a variety of intersection improvements and upgraded signal systems.

However, there is no cost or funding detail, including estimated costs and potential funding sources, accompanying these proposed mitigation projects, including the proposed new Flyaway facilities. This detail is necessary for the projects to be included in SCAG's 2004 RTP financial plan, and future Regional Transportation Improvement Plans (RTIPs). Without identification of their costs and funding sources, these projects are not enforceable as mitigation strategies. A schedule for the implementation of these projects is also needed, including time needed to plan, engineer, clear and construct each project within the 2015 horizon. As previously noted, the implementation of SCAG's inter-regional Maglev system with a connection to LAX could provide significant potential mitigation of airport ground access impacts on local communities around LAX, since it would carry about 23% of total LAX passengers.

Response:

A specific funding plan has not yet been prepared for the Master Plan; however, it is anticipated that a joint funding effort will be pursued, involving Federal and State grants and other efforts. Much of the project will likely be funded with airport-generated revenues, such as concession fees, landing fees, revenue bonds, leases, and passenger facility charges (PFCs). It is not anticipated that any local tax revenue would be used for this project.

LAWA does not intend to request that proposed ground access improvements and transportation mitigation projects from Alternative D be included in SCAG's RTIP until a Record of Decision is granted by the Federal Aviation Administration. Additional detail of the transportation improvement projects, including a phasing schedule, will be developed during the design stage of the project.

The traffic study for the Supplement to the Draft EIS/EIR assumed that an inter-regional Maglev system would not be completed by the 2015 horizon year. Please see Topical Response TR-ST-5 and, in particular, Subtopical Response TR-ST-5.1 regarding high-speed rail connections to LAX.

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SAR00005-16

Comment:

- Fair share contributions: Report 2b states that "fair-share financial contributions to regional highway improvements and/or regional transit improvements will mitigate 17 intersections." The amount of these "fair share" contributions should be specified, and the mechanism for implementing this funding arrangement should be defined.

Response:

It is premature to develop the specific costs for these fair-share contributions. Cost estimates are not necessary for a program-level document. However, correspondence was sent to LADOT and the Los Angeles County Department of Public Works in August 2003 seeking comment on a LAWA-proposed methodology to determine LAWA's future fair-share contribution toward LA County's extension of SR-90.

Please see Response to Comment AL00008-6 regarding project funding.

SAR00005-17

Comment:

C. CONCLUSIONS AND RECOMMENDATIONS

1. The proposed LAX master plan project (Alternative D) is generally consistent, but not specifically consistent, with the SCAG's adopted regional forecast for LAX.

Response:

Given the forecast regional demand of 146.5 MAP in 2015, 167.3 MAP in 2025, and 170.1 MAP in 2030, the difference between 78.0 and 78.9 MAP at LAX appears insignificant. Likewise, the difference between 3.0 and 3.1 MAT of cargo at LAX appears insignificant.

SAR00005-18

Comment:

2. Alternative D would be held to about 78 MAP through passenger terminal reconfigurations and a reduction in the overall number of aircraft gates. To maintain a 78 MAP constraint at LAX utilizing available gate capacity, an additional legally enforceable implementation mechanism should be developed.

Response:

As stated on page 3-25, in Section 3.3.2, Alternative D - Enhanced Safety and Security Plan, of the Supplement to the Draft EIS/EIR, Alternative D emphasizes encouraging a long-term regional approach to serving air traffic demand in the Los Angeles basin by designing facilities at LAX to accommodate passenger activity level as projected in regional plans, such as the SCAG RTP. LAWA determined that constraining the aircraft gate frontage at the terminals is a component of the airport system that is fully within its control. LAWA can constrain the development of this frontage and believes that this will, in turn, place an effective constraint on total passenger activity at LAX. However, as explained in detail in Section 3.3 in the Draft EIS/EIR, "it is important to understand that the levels of passengers that each alternative is designed to accommodate are not finite limits where the airport would somehow be closed or where aircraft would be redirected to some other facility when this number is reached. These levels are an indication of the number of passengers that can be accommodated at a reasonable level of service."

Please see Response to Comment SAR00005-4 regarding the possibility of local restrictions on access to airport.

SAR00005-19

Comment:

- Alternative D is more compatible than previously proposed LAX master plan alternatives with a proposed Maglev high-speed rail connection to LAX, planned for the 2010-2015 time period in SCAG's adopted regional Maglev strategy. The implementation of SCAG's inter- regional Maglev system with a connection to LAX could provide significant potential mitigation of airport ground access impacts on local communities around LAX, since it would carry about 23% of total LAX passengers. Maglev is also an essential component of SCAG's regional aviation strategy adopted for the 2001 RTP, and the Preferred Aviation Plan proposed for the Draft 2004 RTP. However, the project description for Alternative D is silent on Maglev, and does not specifically mention or address a potential Maglev connection. An appropriate discussion of such a potential connection should be included in the final Master Plan Addendum and EIS/EIR.

Response:

This comment is similar to comment SAR00005-5. Please see Response to Comment SAR00005-5.

SAR00005-20

Comment:

3. The project description for Alternative D outlines a proposed regional approach that would encourage alternate airports in the region to develop their capacities to accommodate regional demand that cannot be served at LAX. However, no description is given of any active approach to encourage these airports to take appropriate actions to enhance their capacities. Alternate urban airports in the region such as Burbank and Long Beach are as constrained and encroached as LAX, and have very limited expansion opportunities.

Response:

Please see Response to Comment SAR00005-12 regarding the responsibility of other jurisdictions.

SAR00005-21

Comment:

4. SCAG's Draft 2004 Regional Transportation Plan proposes a Preferred Regional Aviation Plan that does contain a proactive regional approach to establishing increased coordination between LAX and alternate airports in the region. It is recommended that elements of the Preferred Regional Aviation Plan in the SCAG's Draft 2004 RTP be considered for inclusion in the Final LAX Master Plan and EIS/EIR. Elements of the decentralization strategy in this plan include:

- Methods to increase Maglev passenger ridership to suburban airports, such as integrated pricing that would combine airfares with Maglev fares.

- A wider range of flight offerings made available at suburban airports including Palmdale and Ontario airports. More point-to-point long haul and international service was assumed, using a new generation of highly efficient aircraft. Attractive financial packages would be offered to airlines to induce them to initiate and expand service at suburban airports. Airline "brokering" would also be implemented, to achieve coordination between airlines and between airlines and airports to achieve the greatest service efficiencies in combination with the provision of high-speed Maglev access to suburban airports.

- LAWAA would play a key role in implementing the plan by integrating master planning and brokering service between LAX, Palmdale and Ontario airports. It would also enter into contractual agreements and memoranda of understanding with other airports in the region, to establish a common framework for coordinating all airport master planning and facility construction consistent with an adopted Regional Aviation Plan.

3. Comments and Responses

- Based on these contractual agreements and memoranda of understanding, an airport consortium would be formed that would define complementary roles and market niches between all airports in the regional system.

- An implementation plan that outlines the basic steps and timeline for implementing the Preferred Regional Aviation Plan.

Response:

Since the passage of the Airline Deregulation Act, airlines have been free to choose which domestic airports to serve and what fares to charge. It is beyond the scope of the LAX Master Plan and EIS/EIR to assume an integrated pricing agreement between multiple municipalities, governmental agencies, and commercial airlines, which is not yet part of any official plan. The jurisdictions that control the other regional airports may choose to offer financial incentives to initiate or expand service at the airport each controls, but these possible incentives have no impact on the planning and environmental review and approval processes of LAX Alternative D.

LAWA already has initiated master planning processes at Ontario and Palmdale with the aim of planning for expanded facilities and operations at those airports in the future. LAWA also will coordinate its future planning with relevant future plans for other airports in the region once the jurisdictions responsible for those airports initiate such plans. Further, when and if any government authority begins to plan a specific Maglev system for the region, LAWA will cooperate in planning appropriate access arrangements for the Maglev system to LAWA's airports. Still, expansion of Ontario, Palmdale, or any of the other regional airports, or establishment of a Maglev system in the region, will not negate the need for the modernization of LAX under Alternative D. Please see Topical Response TR-RC-1 for more detail about planning for LAX and for other regional airports, and Topical Responses TR-RC-3 and TR-ST-5 regarding Maglev and projected demand for LAX and Palmdale. In addition, please see Topical Responses TR-RC-1 and TR-RC-5 regarding LAWA's planning for Ontario and Palmdale.

SAR00005-22

Comment:

5. The economic impacts of Alternative D, compared to the No Project/No Action Alternative, totals only \$32 million. This is a very meager return on the estimated \$7.4 billion facility cost of Alternative D, that do not including the cost of mitigation projects. More justification should be included in support of this expenditure, including non-quantifiable benefits. Opportunity costs should also be identified, including projects at other LAWA-owned airports that could be funded if Alternative D was scaled down to a lesser expense.

Response:

Comment noted. The potential benefits of Alternative D were presented in Chapter 2, Purpose and Need for the Proposed Action, and Chapter 3, Alternatives, of the Supplement to the Draft EIS/EIR. The Supplement to the Draft EIS/EIR is intended to analyze only the impacts of Alternative D, as described in Section 3.3.2 (Alternative D - Enhanced Safety and Security Plan) of the Supplement to the Draft EIS/EIR.

SAR00005-23

Comment:

6. No cost or funding detail is included in the estimated costs and potential funding sources for off-airport ground access mitigation projects. Such detail should be included in the final master plan and EIR/EIS documents, since it is necessary for these projects to be included in SCAG's 2004 RTP Financial Plan and future Regional Transportation Improvement Plans (RTIPS) so that they can be enforceable as mitigation strategies.

Response:

This comment is similar to comment SAR00005-15. Please see Response to Comment SAR00005-15.

3. Comments and Responses

will not exceed 78 MAP and we offer our support for actions that will encourage the development of a system of truly regional airports and support services.

Response:

Please see Responses to Comments SAR00005-4 and SAR00005-18 regarding the possibility of local restrictions on access to airport and Topical Response TR-RC-6 regarding the passenger and cargo capacity of Alternative D within a regional context.

SAR00006-3

Comment:

2. Supplemental EIR Is Not In Compliance With CEQA

The SBCCOG has concluded that the Alternative D project should have been reviewed through the preparation of a subsequent EIS/EIR. This would have provided the full record of information and potential impact since 2001.

The proposed Alternative D is a substantial change to the airport's configuration with a significant impact on all areas in, at and near the facility. The new central terminal area, a major automated people mover system (train), major new facilities near the freeways, new traffic patterns and a new intermodal transportation center are just some of the changes that will impact airport operations.

Response:

Please see Response to Comment SAL00013-31 regarding the suitability and appropriateness of using the Supplement to the Draft EIS/EIR for addressing Alternative D. As detailed therein, the Supplement to the Draft EIS/EIR was prepared in accordance with NEPA implementing regulations found at 40 CFR 1500-1508 and CEQA Guidelines found in California Code of Regulations, Title 14, Chapter 3, Section 15000-15387.

The Supplement to the Draft EIS/EIR addressed surface transportation impacts associated with Alternative D in Section 4.3, Surface Transportation, including impacts related to modifications to the Central Terminal Area, the Automated People Mover system, the Intermodal Transportation Center and the Ground Transportation System, and the interlinking of the on-airport roadway system, and recommended improvements at the I-105 and I-405 freeways. Supporting technical data and analyses are provided in Technical Reports S-2a and S-2b of the Supplement to the Draft EIS/EIR.

SAR00006-4

Comment:

3. Baseline Year Not Adequate Or Consistent

The Baseline Year of 1996 is not adequate for a 2003 assessment. In addition, it appears that there has been an update of the baseline year in those instances where new practices, e.g., the implementation of Stage III noise mitigation measures, have reduced impacts. This raises the question of not only inconsistent baseline years, but also whether those areas where the impacts might have gotten worse have been intentionally left out.

Response:

Please see Topical Response TR-GEN-1 regarding baseline issues, including the adequacy of the 1996 baseline and the presentation of Year 2000 conditions in the Supplement to the Draft EIS/EIR. Please also see Response to Comment SAL00023-6.

SAR00006-5

Comment:

4. Assumes All Proposed Projects Will Be Completed

SBCCOG shares the concerns expressed by others that the Supplemental Draft should acknowledge that some of the planned mitigations may not be implemented or even feasible. Measures such as the construction of an off ramp at the 405 Freeway and Lennox Boulevard, improvements adjacent to the Marina Freeway and numerous local traffic signal coordination and intersection improvements do not have assured funding. Given the budget situation, especially at the State level, it is a risky assumption to conclude that funding will remain available from traditional sources. Available revenue sources should be more clearly defined and conceptual approval for identified improvements should be obtained by the appropriate agencies before feasibility can be assured.

Response:

Please see Response to Comment SAS00003-9.

SAR00006-6

Comment:

5. Safety and Security at the Airport

The main purpose for the changes proposed in Alternative D has been presented as a way to enhance security at the airport. The SBCCOG is not convinced that the measures proposed will achieve this goal. SBCCOG shares the concerns expressed in the independent RAND Corporation study of the security measures proposed in the Plan which found that the proposed changes would not increase security compared to the current LAX configuration.

Planned centralized functions such as passenger check-in create a single point of possible disruption that would be more catastrophic than the current decentralized LAX terminal configuration. The same holds true for the proposed People Mover

Alternative D focuses on security of public entry to the airport terminal, but only lightly treats "backdoor" entry by the hundreds of vehicles (primarily trucks) required on airport property for aircraft services, maintenance/fuel farm, and cargo activities.

Response:

As stated in Chapter 2, Alternative D Development and Refinement, of the Draft LAX Master Plan Addendum, Alternative D would protect all airport users and critical airport infrastructure from security threats, incorporate TSA recommendations, avoid concentrations of people in public areas, enhance on-airport law enforcement presence and surveillance capabilities, and enhance emergency response. The objective of Alternative D is to provide a facility that can continue to operate under the highest security levels with minimal impacts to the passenger processing experience. Please refer to Appendix I of the Draft LAX Master Plan Addendum for a detailed assessment of the security and safety features of Alternative D. In addition, please see Topical Response TR-SEC-1 regarding the RAND Corporation issue paper.

SAR00006-7

Comment:

The realignment of the innermost runway north of the airport (24L) and the new location for the Rental Car facility at the end of that runway are also of concern. In light of the fact that past LAX runway incursions appear associated with causes other than runway configuration, SBCCOG asks that LAWA explain the reason for the proposed changes to the runway as well as the major causes for past runway incursions. While SBCCOG does not have the expertise to fully evaluate these safety issues, we remain concerned over the disagreements that have been expressed by those who do have such knowledge.

Response:

The public garage portion of the new Consolidated Rental Car facility is outside of the Runway Protection Zones for Runways 24L and 24R. Runway Protection Zones define trapezoidal areas of land centered on the extended centerline of runways where the use of land is restricted. FAA Advisory Circular 150/5300-13 Change 6 (Paragraph 212.b.2.a) states: "While it is desirable to clear all objects from the RPZ, some uses are permitted, provided they do not attract wildlife (see paragraph 202.g.,

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Wildlife Hazards), are outside of the Runway OFA, and do not interfere with navigation aids. Automobile parking facilities, although discouraged, may be permitted, provided the parking facilities and any associated appurtenances, in addition to meeting all of the preceding conditions, are located outside of the object free area extension. Fuel storage facilities should not be located in the RPZ".

The portion of the new rental car facility that is within the Runway Protection Zone meets the FAA definition of a permitted use. LAWA intends to assure that uses within the RPZ do not interfere with the operation of navigation aids and that parking will only occur outside the extended object free areas. Further, this portion of the facility will not be open to the general public and will only be used for the long-term storage of rental cars.

The purpose of moving the innermost runway in the north airfield complex is to gain enough separation for constructing a center taxiway between the two parallel runways. The purpose of the center taxiway is to enhance safe aircraft operations and reduce the potential for runway incursions. Providing a center taxiway between the two parallel runways will also allow aircraft to queue and maneuver without blocking runway operations.

Other than existing runway configuration, existing non-standard safety area, unimpeded high-speed taxiway exits directly linking parallel runways and other airfield components contribute in certain degree to runway incursions at LAX. The airfield modifications proposed under Alternative D present a physical solution that would reduce the risk of runway incursions. Please also Response to Comment SAL00023-3.

LAWA has already implemented improvements to airfield lighting, taxiway marking, runway signage, and has sponsored on-going seminars on airfield familiarization with airport users. For example, in September 2001, the FAA commissioned the Airport Movement Area Safety System (AMASS) at LAX. AMASS increases the safety of aircraft and vehicles operating on the surface of the airport.

SAR00006-8

Comment:

6. Ground Access To And From The Facilities

Under Alternative D, traffic patterns will change on the freeways and on South Bay arterial streets. While the Draft Supplement states that drivers will be inclined to remain on the freeway for longer periods of time to get to the airport, moving the major vehicle transportation centers closer to the freeways will serve to add to the congestion on those freeways. The I-405 and I-105 freeways are already congested during both peak and non-peak hours and the construction of new freeway to airport interchanges which are included as mitigation measures will not address the freeway congestion that exists today and will only be worse in the future.

Furthermore, because of the freeway congestion, it is erroneous to think that drivers won't seek relief on arterial streets. Analysis of the changes proposed does not include the impact of the freeway congestion on the arterials and how the additional traffic coming to the new passenger processing locations will be mitigated. It is not clear that new off ramps and enhanced local traffic signal coordination and intersection improvements will provide the mitigation required and no other highway improvements are included. The SBCCOG is concerned that additional mitigation measures that are fully funded need to be identified to mitigate airport related traffic in the South Bay.

Because of the significant effect of freeway congestion on arterials, the SBCCOG has recently completed the I-405 Arterial Improvements Initiative. This study identified improvements to the Manchester/Florence/La Cienega access and egress to the I-405 which the SBCCOG believes should be included in the airport ground access mitigation since traffic in this area will be further exacerbated as passengers leave the freeway to access the airport. We formally request that the projects identified in this analysis - all relatively low cost yet extremely beneficial to traffic flow on and off the freeway - be added to the project mitigations.

Additionally, system preservation and pavement maintenance costs need to be included for the added traffic to major boulevards accessing the new terminals.

Response:

Figure S6 in Technical Report S-2b, Supplemental Off-Airport Surface Transportation Technical Report, shows the changes to total traffic volumes due to the addition of the interchanges on the I-405 and I-105 freeways in the PM peak hour for 2015. The traffic model results indicate that the I-405 Freeway will carry more vehicle trips with the addition of these new freeway connectors. The proposed Lennox Boulevard interchange will encourage airport traffic to use the freeway over the surface streets. Airport passengers will be able to travel from the freeway to the GTC or ITC without stopping at any traffic signals. In general, the traffic model indicates that as airport-related traffic increases on the I-405 Freeway, non-airport related traffic shifts to the parallel surface streets. However, the impact of these interchanges on surface streets is limited to a small area. The project also calls for widening surface streets in the vicinity of the GTC and ITC, including Aviation Boulevard, La Cienega Boulevard, Arbor Vitae Street, and 111th Street to improve the movement of traffic on surface streets. It is not the responsibility of the project to mitigate existing freeway congestion.

The proposed traffic mitigation plan includes improvements to the intersections of Florence and La Cienega; and La Cienega and Manchester. However, LAWA will review the I-405 Arterial Improvements Initiative to identify potential alternative mitigations to those proposed in the Supplement to the Draft EIS/EIR.

Please also see Response to Comment AL00008-6 regarding funding. Federal law regarding airport revenue diversion would preclude the airport from spending its funds on maintenance of streets not exclusively for airport traffic.

SAR00006-9

Comment:

7. Green Line Extensions

The Metro Green Line is an important transportation artery for the South Bay. SBCCOG would like the airport to ensure that no improvements made under Alternative D preclude any future extensions to the Green Line going further into the South Bay and to the North.

Additionally, more attention should be given to the final placement of the Green Line as an airport feeder. The route should be more clearly delineated. Minimally, the costs for the Green Line routing design and preliminary engineering should be included as part of the implementation of the Master Plan project.

Response:

Alternative D would not preclude the extension of the Green Line northerly in its right-of-way along the west side of Aviation Boulevard or to the south.

Alternative D does not propose any realignment to the existing Green Line. Therefore, there is no need to include cost estimates for a routing design or preliminary engineering.

SAR00006-10

Comment:

8. Noise

The Supplemental Draft EIS/EIR indicates that aircraft noise impacts will be significant, affecting 2,250 residents, 780 dwellings, 5 schools, 3 churches, 2 hospitals, and 3 parks. Additionally, new larger aircraft that the airport is being designed to accommodate will be louder affecting a wider area.

The SBCCOG is concerned that noise impacts not be shifted from one community to another.

Response:

The commentor appears to be referencing Table S4.1-27 in Section 4.1, Noise of the Supplement to the Draft EIS/EIR. However, these impacts are not additive, since some noise-sensitive uses newly exposed to 65 CNEL or greater noise levels may also experience a 1.5 CNEL increase above the 65

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CNEL. The exposure of some noise-sensitive parcels to both noise thresholds was shown on Figure S4.2-17 of the Supplement to the Draft EIS/EIR and would generally occur east of Sepulveda Boulevard and south of La Tijera Boulevard. Non-residential noise-sensitive uses exposed to both noise thresholds under Alternative D compared to the No Action/No Project Alternative are also listed on Table S56 in Technical Report S-1, Supplemental Land Use Technical Report, of the Supplement to the Draft EIS/EIR. Please also see Topical Response TR-LU-5 regarding noise thresholds and noise mitigation.

New larger aircraft (NLA) were included in the fleet mix assumptions presented in Appendix D, Aircraft Noise Technical Report of the Draft EIS/EIR and Appendix S-C1, Supplemental Aircraft Noise Technical Report of the Supplement to the Draft EIS/EIR. The NLA were represented in the INM database as aircraft type 747400 as recommended by the FAA Office of Environment and Energy. See Subtopical Response TR-N-6.3, regarding noise associated with new larger aircraft affecting a wider area. As stated in Subtopical Response TR-N-6.3, many of the new larger aircraft are designed to be less noisy than earlier models.

While it is true that the Master Plan alternatives would result in shifts in the noise contours and some areas being newly exposed to high noise levels, noise impacts would affect the same communities that have historically been exposed to high noise levels from LAX operations. LAWA Staff's preferred Alternative D has been designed to limit airfield improvements and aviation activity levels comparable to that of the No Action/No Project Alternative. Therefore, Alternative D would result in the least amount of noise-sensitive uses that would be newly exposed to high noise levels and would result in a decrease in the overall area exposed to high noise levels compared to 1996 baseline, Year 2000, and the No Action/No Project Alternative. Furthermore, as described in Section 4.1, Noise of the Supplement to the Draft EIS/EIR, there would be little difference between the noise exposure patterns of Alternative D and those that would occur under the No Action/No Project Alternative.

SAR00006-11

Comment:

Furthermore, more attention should be given to single event noise. The single events are very disturbing to the affected areas and mitigation measures should extend to them.

Response:

Comment noted. The Supplement to the Draft EIS/EIR addressed single-event noise impacts and mitigation measures in Section 4.1, Noise, and Section 4.2, Land Use. Supporting technical data and analyses are provided in Appendix S-C and Technical Report S-1 of the Supplement to the Draft EIS/EIR.

SAR00006-12

Comment:

And, areas farther afield from the airport site, such as the Beach cities and Palos Verdes Peninsula experience noise impacts now. The report does not address impacts to these communities under the new plan.

Response:

The Supplement to the Draft EIS/EIR addressed noise impacts associated with Alternative D in Section 4.1, Noise, and Section 4.2, Land Use. Supporting technical data and analyses are provided in Appendix S-C and Technical Report S-1 of the Supplement to the Draft EIS/EIR. As more fully analyzed therein, potential impacts associated with Alternative D would not extend to the Palos Verdes Peninsula and the beach cities. See Response to Comment PC00611-2 regarding potential impacts on Palos Verdes Peninsula and the beach communities, Topical Response TR-N-3.1 regarding South Bay overflights, Response to Comment PHM00014-2 regarding nighttime easterly departures circling the South Bay area, Response to Comment PC01377-9 regarding noise impacts on the City of El Segundo, Response to Comment AL00006-2 regarding current measures underway to address existing high aircraft noise levels, and Topical Response TR-N-2.3 regarding CNEL noise levels below 65.

SAR00006-13**Comment:**

The Automated People Mover (APM) operation will impose undesirable noise on all 10 existing hotels in the Century Boulevard/98th Street area. The draft EIS/EIR does not define how the noise from the high activity APM (about 2 passages per minute) will be mitigated.

Response:

Please see Response to Comment SPC00236-30 regarding the mitigation of APM noise.

SAR00006-14**Comment:**

Also, the documentation in the report appears to credit road traffic noise reductions that will come from increased congestion. This is an unacceptable noise mitigation measure.

Response:

Traffic noise is highly dependent on the speed of vehicles. Noise increases as traffic reaches LOS C, and decreases as it becomes more congested. To ensure accuracy, noise analysis must account for this. It should also be noted that a reduction in the associated roadway noise levels due to slower vehicle speeds is a product of roadway traffic flow conditions and was not provided as a mitigation measure.

SAR00006-15**Comment:**

9. Cost

The cost of this project is very large for the benefit to the public. It will be extremely important that funds not run out before all of the mitigations can be put in place.

Also, significant off-airport ground access projects are identified to mitigate forecasted traffic impacts yet there is no cost or funding detail including estimated costs for identified projects, both within the South Bay and for the proposed new Flyaway facilities. Potential funding sources also need to be identified.

The SBCCOG further wants to be sure that the transportation mitigations called for do not use regional transportation funds that have been dedicated for other purposes (e.g. MTA Call for Projects) and do not modify funding priorities that have been established.

And, since the plan is to be funded through airport revenues, it does not appear to take into account the disruption that will be caused by construction on revenues that the airport generates, therefore calling into question the integrity of the funding plan through airport fees and charges.

Response:

Please see Response to Comment AL00008-6 regarding funding.

SAR00006-16**Comment:**

10. Impacts to Local Communities

As an organization of South Bay city governments, we are extremely concerned about the impacts to local schools, homes and other institutions. Air quality impacts of increased congestion and activity in and around the airport are also important. Furthermore, most of the negative impacts do not significantly

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Response:

Comment noted. LAWA and FAA extended the public comment period on the Supplement to the Draft EIS/EIR to a total of 120 days, closing on November 7, 2003. In addition to nine public hearings held in August, three public hearings were held in October, 2003.

SAL00001-2

Comment:

Additionally, please note that we have experienced some delay in obtaining a paper copy of the SDEIS/DEIR for review. Although we ordered a paper copy of the SDEIS/DEIR immediately when its availability was announced, we did not receive it until today, nearly two weeks after the availability announcement.

Thank you for your consideration of this request. I would appreciate receiving a response at your earliest convenience.

Response:

Comment noted. Please see Response to Comment AL00033-255 regarding the content, structure, and availability of the Draft EIS/EIR and Supplement to the Draft EIS/EIR for public review. As noted in Response to Comment AL00033-255, the Supplement to the Draft EIS/EIR is available for purchase on CD ROMs and in hard copy format. The printing distributor typically ships CD ROMs the next business day. Paper copies usually take 5-6 business days to reach the requester. All shipments are contingent upon the printing distributor's available inventory at the time an individual order is place.

Please note that our records indicate that CD ROMs containing a copy of the Supplement to the Draft EIS/EIR and Draft Master Plan were mailed to your office on July 11, 2003. Further, a hard copy of the Supplement to the Draft EIS/EIR and Draft Master Plan was sent to Shute, Mihaly & Weinberger LLP on July 18, 2003. Finally, our records also indicate that these materials also were mailed to the City of El Segundo's City Clerk and Mayor on July 9, 2003.

SAL00002 Napolitano, Steve City of Manhattan Beach 7/21/2003

SAL00002-1

Comment:

The City of Manhattan Beach has received the Supplement to the Draft EIS/EIR for the proposed master plan development of LAX. Due to the fact that we are within such close proximity to the airport and have such a potential for impacts to our community, we are vitally interested in any proposed expansion plan. To that end, the City Council has authorized me to write urging that LAWA approve a 90-day comment period on this supplement to the draft EIR/EIS.

The completed document is very large and complex and as such, we do not feel it is appropriate to expect that interested persons could review the material and have sufficient time to offer informed comment. It is our belief that all parties would benefit from an expanded comment period. Interested parties, such as the City of Manhattan Beach, need sufficient time to review the document thoroughly and comment on items of significance to our residents. In addition, all of the public hearings that have been set are scheduled for the month of August, a month when vacations normally occur, meaning many interested parties may not be available to attend these valuable hearings.

In closing, we urge strongly that LAWA approve a 90-day comment period for the Supplemental LAX Master Plan EIR/EIS. We appreciate your consideration of our request.

Response:

Comment noted. LAWA and FAA extended the public comment period on the Supplement to the Draft EIS/EIR to a total of 120 days closing on November 7, 2003. In addition to nine public hearings held in August, three public hearings were held in October, 2003.

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SAL00003 Oren, Jay City of Los Angeles 7/16/2003

SAL00003-1

Comment:

Thank you for the opportunity to comment on the above-referenced environmental document. The Cultural Heritage Commission is concerned that the two locally designated buildings on airport property, namely the Airport Theme Building and Hangar Number One, have their building fabric and view sheds preserved in the Masterplan. The draft document correctly identifies and acknowledges these resources and the Commission looks forward to a successful completion of the LAWA Masterplan.

Response:

Comment noted. Also see Master Plan Commitment HR-1 Preservation of Historic Resources (Alternatives A, B, C, and D) on page 4-435, in Section 4.9.1 Historic/Architectural and Archaeological/Cultural Resources, of the Supplement to the Draft EIS/EIR. As indicated in the Master Plan Commitment, LAWA is committed to careful review of design and development adjacent to identified significant historic/architectural resources.

SAL00004 Janssen, David County of Los Angeles 8/19/2003

SAL00004-1

Comment:

The following is a summary of preliminary comments from A.C. Lazzaretto & Associates and the Department of Public Works regarding the Draft SEIS/SEIR:

- The proposed Master Plan Alternative D may not constrain growth at LAX.
- Airport security may not be fully achieved by Alternative D.
- Environmental Justice may not be well served by Alternative D.
- The Baseline Year of 1996 is not adequate for a 2003 assessment.
- The No Project Alternative does not offer a consistent yardstick for measuring project impacts.
- Traffic, noise, and air quality impacts have been shifted eastward.
- Major changes in the project may call for preparation of a subsequent EIR.
- Growth-inducing impacts may be significantly greater than stated.
- A new interchange for the I-405 Freeway at Lennox Blvd is recommended if Alternative D is chosen.
- Document is lacking in mitigation measures due to inadequate analysis/information of traffic/transportation projects, enhancements, and improvements.

Response:

Please see Responses to Comments below.

SAL00004-2

Comment:

INTRODUCTION

The Federal Aviation Administration (FAA) and Los Angeles World Airports (LAWA) made available for public comment in early 2001 a Draft Environmental Impact Statement/Environmental Impact Report (EIS/EIR) addressing three build alternatives, a no-build alternative, and the existing setting for the Los Angeles International Airport (LAX) Master Plan. In response to considerable public comment and the terrorist attacks that occurred on September 11, 2001, a fourth alternative -- Alternative D, the Enhanced Safety and Security Plan -- has been added to the LAX Master Plan. A Supplemental EIS/EIR was made available for public comment in July of 2003 to update information presented in the Draft EIS/EIR and to integrate Alternative D into the environmental review process.

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Alternative D includes a number of airfield facility modifications. Although LAX would continue to operate with 4 runways, 2 of the existing runways would be moved, two would be lengthened, and all would be further separated from one another. The existing parking structures would be relocated and replaced by new centralized passenger terminals. The existing Terminals 1 through 7 would be reconfigured, including a new north/south linear concourse at the Tom Bradley International Terminal, flanked on the west by a new satellite concourse. A new ground transportation center and intermodal transportation center to be built east of Aviation Blvd. would serve as the primary access for all passenger drop-off and pick-up and vehicle parking. Some cargo facilities would be modified, although overall square footage would be equivalent to the No Action/No Project Alternative.

A brief preliminary review of the Supplemental EIS/EIR for the LAX Master Plan has been conducted to assess changes between the Draft and Supplemental EIS/EIR, consistency of information within the documents, and accuracy of the Supplemental EIS/EIR. The initial review points to several issues requiring further comment and discussion.

One of these issues was central to County comments on the earlier LAX Master Plan review, and remains an area of potential concern for the current document: although LAWA indicates that its goal is to limit growth, improvements proposed as part of Alternative D would in reality serve to reinforce LAX as the preeminent airport of the southern California region, and may undermine attempts to strengthen the role of outlying airports. In addition to this thematic concern, there are a number of additional points that merit further consideration. The preliminary findings are outlined briefly in the discussion below.

Response:

Comment noted. Please see Responses to Comments SAL00004-3 through SAL00004-11 below.

SAL00004-3

Comment:

DISCUSSION

1. The Proposed Master Plan Alternative D May Not Constrain Growth at LAX

The stated goal of Alternative D is to limit growth at LAX to 78 Million Annual Passengers (MAP) and induce growth at other regional airports. The primary means to accomplish this is to limit aircraft gates to 153 which is the same number of gates that exist in the No Project Alternative (NPA). However, the NPA includes 48 remote gates that are simply aircraft parking spaces on concrete. Alternative D provides 153 fully functional and high capacity gates and does not remove the concrete which will remain available for aircraft parking. The true number of gates is therefore over 200. Furthermore, the design of the new gates is a linear configuration as opposed to the existing cul-de-sac configuration. The linear configuration is more flexible and has more capacity. Also, space in the western portion of the airport will remain available for future consideration of a new west terminal, as proposed in Alternatives A, B and C. Therefore, the gate limitation is not an effective constraint on passenger levels.

Alternative D includes other improvements that would support growth beyond the 78 MAP level. In particular, the new remote terminal in the Manchester Square area provides 6.5 million square feet of terminal space -- more that 50% greater than the 4 million square feet proposed in the 98 MAP Alternatives A, B and C. Further, many of the proposed improvements to the north airfield are designed to accommodate the new generation of larger aircraft.

Orientation of new LAX facilities to the new larger aircraft could have long-term, pervasive effects. Because the new larger aircraft require many smaller connecting flights to fill its 600 seats, these improvements will strengthen the "confluence of connections" that reinforce LAX as the preeminent airport of the southern California region, and at the same time reduce the incentive for airlines to utilize other regional facilities. A true constraint on the growth of LAX would be to make it inhospitable towards the new larger aircraft, coupled with improvements to serve new larger aircraft at another regional airport, and transit links to join the two facilities.

Response:

The content of this comment is identical to Comment SAL00010-3. Please see Response to Comment SAL00010-3.

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SAL00004-4

Comment:

2. Airport Security May Not be Fully Achieved by Alternative D

Preliminary review suggests that the Supplemental EIS/EIR may fall short of an adequate review of airport security issues. Although the Executive Summary to the Addendum refers the reader to Appendix I 'for a detailed assessment of the security and safety features of Alternative D,' Appendix I offers a heavily conceptual and theoretical document that falls significantly short on detail. Anomalies include contradictory content and a lack of clarity expected of a public information document.

Response:

Comment noted. This comment does not raise or pertain to any environmental issues that are subject to NEPA or CEQA review requirements. Notwithstanding, please see Topical Response TR-SEC-1, which addresses the most frequently raised security-related issues pertaining to the design and ability of Alternative D to enhance existing safety and security at LAX.

SAL00004-5

Comment:

3. Environmental Justice May Not be Well Served by Alternative D

Presidential Executive Order 12898, issued in February 1994, requires all federal agencies to analyze environmental justice impacts when proposing public projects. The analysis is intended to determine whether minority and low-income communities are unfairly burdened by project impacts, with the goal of using mitigation measures to create a level playing field. In 1999, Senate Bill 115 was passed making environmental justice a requirement of CEQA as well.

Despite the importance of this subject, the original Draft EIS/EIR was found to lack even the most elementary NEPA requirements for environmental justice. Preliminary review suggests that the Supplemental EIS/EIR has corrected some but not all of the earlier deficiencies. In particular, the Supplemental EIS/EIR again limits the area of analysis (reviewing only those census tracts surrounding LAX), improperly omits assessment of many effects due to the preparers' inability to quantify or analyze the impacts, and defers a determination of significance pending completion of the mitigation program.

The assessment does not appear to consider the trade-offs between environmental protection and environmental justice pertaining to the placement and length of LAX runways: runway extension to the west would have significant adverse impacts on biological resources (particularly the El Segundo Blue Butterfly), but would serve environmental justice through a significant lessening of noise, air quality and traffic impacts on Lennox, Inglewood and other disadvantaged communities around LAX. Nor does the assessment apply rigorous standards in assessing the proportionality of impacts and mitigation measures between the wealthier northside area and communities east of LAX including Lennox and Inglewood. These relevant issues require further review as part of the Supplemental EIS/EIR.

Response:

Considerable attention has been paid to the topic of environmental justice. The Draft EIS/EIR and Supplement to the Draft EIS/EIR addressed environmental justice in Section 4.4.3, Environmental Justice, with supporting technical data and analyses provided in Appendix F of the Draft EIS/EIR and Appendix S-D of the Supplement to the Draft EIS/EIR. The analysis provided is extensive, with over 125 pages of narrative, maps, and tabular data. The analysis followed relevant guidance for addressing environmental justice and was prepared after a comprehensive review of other analyses prepared for large projects across the country in order to give the issue full and careful consideration. LAWA and the FAA's recognition of the importance of the issue is also demonstrated by their having convened an Environmental Justice Task Force, and by a community outreach program that involved among other efforts, seven workshops in surrounding communities specifically focused on the issue. This program is further described in Topical Response TR-EJ-2. LAWA and the FAA have made a strong effort and believe that the assessment of environmental justice presented in the Draft EIS/EIR and Supplement to the Draft EIS/EIR is fair and complete.

Regarding geographic limits to the area of analysis, as stated on page 4-402, in Section 4.4.3, Environmental Justice, of the Draft EIS/EIR, the study area for the analysis was defined as the area in which the collective environmental effects of the Master Plan alternatives would be likely to occur, extending beyond the areas adjacent to LAX to include those areas potentially affected by aircraft noise (defined by the future 65 dB CNEL noise contours) and aircraft or airport-related emissions, as well as airport-related traffic impacts, including congestion, noise and air pollution. Although specific analyses of environmental justice concerns in areas more remote to LAX is outside of the scope of the LAX Master Plan EIS/EIR, see pages 1-3 of Appendix S-D of the Supplement to the Draft EIS/EIR for a discussion of regional environmental justice issues as appropriately analyzed in the Southern California Association of Government (SCAG) Regional Transportation Plan and Regional Aviation Plan, including issues associated with airport improvement projects and LAX. These documents indicate that limiting expansion at LAX is the best possible outcome from an environmental justice perspective given the high concentration of minority and low-income populations in the LAX vicinity. Also note that LAWA Staff's new preferred alternative, Alternative D, limits future (2015) growth at LAX to levels similar to what would occur with existing facilities if the LAX Master Plan were not approved. Alternative D reduces growth at LAX compared to the other build alternatives, potentially shifting the burden of airport expansion to other regional airports, including airports in the Inland Empire. To the extent that other regional airports undertake expansion plans, these plans would be subject to environmental review and would address environmental justice issues pursuant to NEPA and/or CEQA as applicable. Also see Topical Response TR-EJ-3 regarding environmental justice and regional context.

Regarding the claim that assessment of effects was improperly omitted, please see Topical Response TR-EJ-1 regarding potential air quality and health risk impacts on low-income and minority communities.

Regarding deferral of a determination of significance and completion of the mitigation program, note that extensive mitigation measures were provided in the Draft EIS/EIR and Supplement to the Draft EIS/EIR, as found throughout Chapter 4, Affected Environment, Consequences, and Mitigation Measures, and as provided in the Executive Summary, and in Chapter 5, Environmental Action Plan. Many of these measures apply to minority and low-income communities, as well as other potentially effected communities. While a number of these mitigation measures were accounted for and discussed in Section 4.4.3, Environmental Justice, the reason the section did not include a set of measures and benefits considered final and definitive, was because additional public outreach was seen as essential to furthering development of the Environmental Justice Program. It was appropriate, and a clearly stated intent in Section 4.4.3, Environmental Justice (page 4-433), of the Draft EIS/EIR and Supplement to the Draft EIS/EIR, that the Environmental Justice Program would be further developed and implemented in coordination with affected minority and low-income communities and their representatives in order to ensure that their unique issues and needs would be fully accounted for. See Topical Response TR-EJ-2 regarding environmental justice-related benefits and mitigation. Section 4.4.3, Environmental Justice, of the Final EIS/EIR, presents mitigation measures and offsetting benefits revised and refined based on public input received in writing and at environmental justice workshops and public hearings during the circulation period for the Supplement to the Draft EIS/EIR.

Regarding the comment that Alternative D appears to shift the burden of airport improvements away from wealthier communities to the north and south toward the more disadvantaged communities to the east, the physical improvements to the airport are generally concentrated along its existing boundaries in areas to the west of the I-405 in predominately non-minority/low-income communities. These communities would be most affected by construction impacts and operational impacts associated with traffic. It is true that Alternative D would have a disproportionate and adverse effect on minority and low-income communities due to aircraft noise, similar to the other build alternatives. Under Alternative D, 87 to 93 percent of the population newly exposed to high noise levels would be located in disadvantaged communities to the east, based on the 1990 and 2000 Census, respectively. However, Alternative D would result in the fewest minority and low-income residents being newly exposed to high noise levels of the build alternatives. Furthermore, compared to Year 2000 conditions, implementation of Alternative D would result in a greater reduction in the overall population exposed to high noise levels than if the project were not approved, as represented under the No Action/No Project Alternative.

Regarding runway extensions to the east favoring biological resources over residents, all of the build alternatives have set a priority to avoid the El Segundo Blue Butterfly Habitat Reserve. As further described in Chapter 3, Alternatives, of the Draft EIS/EIR, several alternatives were considered and rejected during the process that led to selection of the current set of alternatives. Concepts that involved runways further to the west were rejected due to environmental concerns and objections

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voiced by the U.S. Fish and Wildlife Service in order to protect habitat for the El Segundo blue butterfly, a federally listed endangered species. This area is formally recognized and designated by both the City and County of Los Angeles for preservation in recognition of its importance as unique habitat for an endangered species. While the loss of habitat for an endangered species would be permanent, the shifting of the runways to the west would result in negligible benefits in noise reduction to communities to the east, since the basic approach and departure patterns to the east would not substantially change and there would be other physical constraints that would substantially restrict the extent of a runway shift to the west. In addition, improvements in technology over time would continue to reduce the noise-generating characteristics of aircraft operations. It is also important to note that the general western limit of the runways and avoidance of the dunes is consistent with existing airport conditions and is not a unique feature of Alternative D. As previously noted, the overall population in minority and low-income areas to the east that would be exposed to high noise levels with implementation of Alternative D would be reduced compared to conditions without approval of the project as represented under the No Action/No Project Alternative. Also see Response to Comment SAL00004-9.

SAL00004-6

Comment:

4. The Baseline Year of 1996 is Not Adequate for a 2003 Impact Assessment

It appears that the Supplemental Draft EIS/EIR continues to use 1996 data to establish baseline conditions for a number of topical issues. This outdated reference point was considered inadequate for the original EIS/EIR, and remains unsuitable for use in the current Supplemental EIS/EIR.

Response:

Please see Topical Response TR-GEN-1 regarding baseline issues and, specifically, the appropriate baseline year. As indicated in the topical response, in accordance with the State CEQA Guidelines, conclusions regarding the significance of impacts under CEQA for all the build alternatives are based on the 1996 baseline or, for certain disciplines, the adjusted environmental baseline. Nevertheless, the Supplement to the Draft EIS/EIR identifies project impacts compared to Year 2000 conditions. In instances where the environmental setting under Year 2000 conditions is materially different from that of 1996 baseline conditions, such differences were described, as were any material differences in the impacts that would result by using the Year 2000 conditions instead of 1996 baseline conditions. Appendix S-B, Existing Baseline Comparison Issues - 1996 to 2000, of the Supplement to the Draft EIS/EIR includes a discussion of the nature of and purpose for providing updated information pertaining to the environmental setting in the Supplement.

SAL00004-7

Comment:

5. The No Project Alternative Does Not Offer a Consistent Yardstick for Measuring Project Impacts

The original EIS/EIR provided an incomplete discussion of the No Project Alternative by incorporating improvements that were then only in the "planning stages" and overstating the service levels and capacity of the existing facilities. This approach made it difficult to draw meaningful comparisons with project alternatives. Preliminary review indicates that the Supplemental EIS/EIR may also provide an incomplete picture of impacts associated with the No Project Alternative. In particular, the Supplemental EIS/EIR appears to substantially overstate passenger and cargo handling capacity under the no-build scenario, while understating both for the build scenarios.

Additionally, the No Project Alternative has not represented passenger capacity in a consistent manner. In the original 1997 Notice of Preparation, the No Project Alternative was linked to a range of 68-72 MAP whereas the 2001 and 2003 EIS/EIR documents increased this estimate to 71.2-78.7 MAP. Based on communications provided by LAWA at the Environmental Justice Workshop held in Inglewood, the increase between 1997 and 2001 reflected actual increases in passenger demand during that period. However, there was no equivalent adjustment for the period from 2001-2003, when passenger demand has fallen by almost one-third.

Response:

Please see Topical Response TR-GEN-2 regarding No Action/No Project Alternative assumptions. Please see Response to Comment AL00033-42 regarding changes in the projected capacity of the No Action/No Project Alternative between the publication of the original Notice of Preparation in 1997 and the publication of the Draft EIS/EIR in January, 2001. As indicated in that comment, the increase between 1997 and 2001 was based on changes in the rules governing the CEQA definition of the No Project Alternative, not in actual increases in passenger demand during that period. It should be noted that, while passenger demand has declined between 2001 and 2003, as of November, 2003, the decline was approximately 11 percent, not one-third.

SAL00004-8

Comment:

The Supplemental EIS/EIR states that the No Project Alternative is provided as a benchmark for comparison of the four build alternatives. However, use of a higher baseline passenger number minimizes the extent of the difference between existing and future conditions at LAX, which in turn affects comparative impact assessments throughout the EIS/EIR. Use of a worst-case scenario, in which the baseline was based on a low estimate of existing passenger demand, would have better served the goals of CEQA and NEPA, and given a more realistic picture of the changes between current and future conditions at LAX. The County believes that LAWA should revisit key impact findings in light of actual 2003 passenger demand, instead of the estimates developed for 2001.

Response:

Although the No Action/No Project Alternative provides a benchmark for comparison of the four build alternatives, in accordance with the State CEQA Guidelines, conclusions regarding the significance of impacts for all the build alternatives are based on the 1996 baseline or, for certain environmental disciplines, the adjusted environmental baseline. Passenger activity in the 1996 baseline year was 58 MAP, considerably lower than that associated with the No Action/No Project Alternative.

Regarding use of 2003 passenger data, in the summer of 2001, LAWA initiated the development of a new alternative (Alternative D) at the direction of Mayor James Hahn. In the summer of 2002, preparation of the Supplement to the Draft EIS/EIR began. The Supplement to the Draft EIS/EIR was published in July, 2003. Providing 2003 data in a document published in that same year was not possible, and would subject the EIS/EIR to an indefinite number of updates, which would defeat the public disclosure purposes of NEPA and CEQA. Year 2002 conditions were not included because the analysis began midway through that year, and Year 2001 conditions were substantially skewed by the short-term impacts of the events of September 11, 2001. Instead, Year 2000 conditions were evaluated in the Supplement to the Draft EIS/EIR.

Please see Response to Comment SAL00004-6 above regarding the Year 2000 analysis included in the Supplement to the Draft EIS/EIR, and Appendix S-B , Existing Baseline Comparison Issues - 1996 to 2000, of the Supplement to the Draft EIS/EIR for a discussion of trends post-2001. In the long term, air traffic at LAX is projected to recover from the effects of September 11, 2001. Please also see Topical Response TR-GEN-1 regarding baseline issues.

SAL00004-9

Comment:

6. Traffic, Noise and Air Quality Impacts have been Shifted Eastward

The revised Master Plan represents a major shift of improvements away from neighboring areas north and south of LAX and toward communities to the east. The unincorporated community of Lennox and the City of Inglewood now appear to bear the brunt of added traffic, while Manchester will be the primary location for passenger processing. This shift heightens the need for close scrutiny of the proposed mitigation plan and the analysis of Environmental Justice.

Response:

Alternative D does not shift improvements away from areas to the north and south toward communities to the east. Similar to the other build alternatives, the physical improvements to the airport are

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generally concentrated along the airport's existing boundaries in areas that are west of the I-405 freeway. Although the other build alternatives did include improvements to the east of the I-405 associated with the LAX Expressway, this feature is not proposed under Alternative D. Furthermore, Alternative D reduces property acquisition by 139 acres compared to Alternative C, LAWA Staff's previously preferred alternative.

While it is true that communities to the east of LAX are disproportionately effected by aircraft noise under all of the alternatives, Alternative D does not have a disproportionately high and adverse effect on these communities due to traffic and the location of the Ground Transportation Center. As further described in Section 4.4.3, Environmental Justice, of the Supplement to the Draft EIS/EIR, the majority of impacted intersections would be located to the west of the I-405 in areas that are predominantly non-minority/low-income.

SAL00004-10

Comment:

7. Major Changes in the Project Call for Preparation of a Subsequent EIS/EIR

CEQA Guidelines require that a Subsequent EIR for a project must be completed if the Lead Agency determines that changes in a project will require major revisions to the previous EIR; a Supplemental EIR may be prepared if the changes in the proposed project are not considered major (§15162(a)). Both Subsequent and Supplemental EIRs are subject to the same notice and public review requirements as the original EIR, but Subsequent EIRs must make available all the information in the environmental evaluation, whereas Supplemental EIRs only need circulate new or revised information.

Preliminary review of the Supplemental EIS/EIR indicates that changes to the proposed project are major. Thus, the project should have been addressed through preparation of a Subsequent EIS/EIR in which the full record of information was consolidated in an effort to facilitate public review.

Public review and lead agency decision-making would also have been better served by providing copies of the comment letters submitted during public review of the original EIS/EIR. Instead, the Supplemental EIS/EIR makes no effort to present or even summarize the earlier comment letters. This approach creates a process that is confusing and cumbersome for reviewing agencies and organizations, and thwarts an opportunity to advance public participation.

Response:

The essence of the comment is similar to that of Comment SAL00013-31; please see Response to Comment SAL00013-31.

SAL00004-11

Comment:

8. Growth-Inducing Impacts May Be Significantly Greater than Stated

The Supplemental EIS/EIR bases its analysis of growth inducement on projected cargo and passenger activity. It concludes that by 2015, Alternative D would yield a direct economic output of \$63.7 billion and 350,500 jobs, plus an indirect economic output of \$93.8 billion and 629,000 jobs through a multiplier effect of 1.5. The EIS/EIR assumes that all of the jobs would be within the 5-County SCAG region, 78% of the jobs would be within a 20-mile radius, and 40% within a 10-mile radius of LAX. Finally, it concludes that Alternative D would be similar in terms of job formation to the No Action/No Project Alternative, differing by an increase of about 1%. With respect to collateral development, the EIS/EIR finds Alternative D impacts equivalent to the No Project Alternative for LAX Northside1, Westchester Southside and Belford, and less than the No Project Alternative for Continental City and Manchester South.

In taking this approach, the document ignores the synergistic effects that would result if LAX Northside is constructed in tandem with the LAX improvements. The increase in cargo will create corresponding increases in off-airport services and place extraordinary pressures on commercial and residential land uses in the immediate neighborhood. The Growth-Inducing Analysis does not appear to address these

more localized impacts at all, even though the past history of LAX shows them to be potentially significant.

1 LAX Northside is approximately 330-acres of land located on the north side of LAX (bisected by Westchester Parkway) and owned by LAWA. Tentative Map #34836, approved for this site during the mid-1980s, would allow development of about 4.5 million square feet of office, hotel, restaurant, retail, research and airport-related land uses.

Response:

Please see Response to Comment SPHPD00004-7 regarding the analysis of induced socio-economic impacts associated with Alternative D. As discussed therein, socio-economic growth was estimated based on projections of total economic output from the econometric forecasting model of the Los Angeles region developed by Regional Econometric Models, Inc. (REMI). Output from the REMI model was largely based on annual passengers and air cargo tonnage associated with the alternative. Methodologies for determining employment and population numbers were presented fully in Technical Report 5, Economic Impacts Technical Report, of the Draft EIS/EIR.

As acknowledged in Section 4.5, Induced Socio-Economic Impacts (Growth Inducement), of the Supplement to the Draft EIS/EIR, the anticipated increase in cargo processed through LAX under Alternative D has the potential for growth-inducing effects for warehousing and industrial uses in the surrounding area. Such increased demand could result in the redevelopment and intensification of existing industrial properties or the recycling of other existing uses. It is expected that much of this demand could be met in nearby areas targeted for expanded industrial development. Since development of LAX Northside is defined as a component of Alternative D, the growth inducement analysis inherently considers the cumulative effects of improvements on the airport and at LAX Northside.

SAL00004-12

Comment:

LOS ANGELES COUNTY DEPARTMENT OF PUBLIC WORKS

LAX MASTER PLAN DRAFT EIS/EIR COMMENTS FOR ON-AIRPORT AND OFF-AIRPORT SURFACE TRANSPORTATION JULY 2003

The supplement to the Draft EIS/EIR serves to integrate Alternative D into the existing environmental review process for the LAX Master Plan, providing a level of analysis comparable to that which was previously prepared for the other alternatives addressed in the January 2001 Draft EIS/EIR.

Under the new plan, the projected passenger activity in the planning year of 2015 is 78.9 million annual passengers (MAP), which is reduced from the previous alternatives. The 78.9 MAP would be substantially the same as the No Action/No Project alternative and the passenger ground access trips would also be similar to the No Action/No Project alternative.

Alternative D, also known as "The Enhanced Safety and Security Plan," is in response to public comments received during the review period for the Draft EIS/EIR in January 2001. Its lower MAP aims to encourage a long-term regional approach to serving air traffic demand in the Los Angeles basin. The lowered MAP is designed to encourage other airports to accommodate future air travel demand in the region. The report indicates Alternative D would enhance security by limiting access by private vehicles to the main airport infrastructure to reduce the risk to airport users.

Response:

Comment noted.

SAL00004-13

Comment:

Alternative D significantly changes surface transportation access to LAX. Vehicular access is planned on the east and south sides of airport property via La Cienega Boulevard and the I-105

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Freeway/Imperial Highway, respectively. Public Works staff conceived and advanced a proposal for new interchange for the I-405 Freeway at Lennox Boulevard and install a cul-de-sac on Lennox Boulevard just east of the freeway. The interchange would provide direct access between the I-405 Freeway and LAX. It would help mitigate the traffic impact at several intersections in the unincorporated Lennox community, reduce the amount of airport-related traffic in the Lennox community, and significantly reduce the travel time for airport-related traffic. Public Works coordinated the proposal with Supervisorial Districts 2 and 4 and presented it to the Lennox Coordinating Council. The Board offices and the Lennox Coordinating Council strongly support the new interchange for the I-405 Freeway at Lennox Boulevard should Alternative D be chosen for LAX.

Response:

Comment noted.

SAL00004-14

Comment:

The following comments are generic and apply to various mitigation measures recommended in the Draft EIS/EIR:

Response:

Please see Responses to Comments SAL00004-15 through SAL00004-18 below.

SAL00004-15

Comment:

The document indicated mitigation measures may include fair-share contributions to certain projects, such as the Marina Expressway (SR 90) Connector Road to Admiralty Way project. The document should indicate which transportation projects have committed funds programmed and which projects, such as the SR 90 project, have not yet completed the EIR process and have not been funded.

Response:

A footnote has been added to the Year 2015 Alternative D Mitigation Plan (Adjusted Environmental Baseline Comparison) table in the Final EIS/EIR stating that "LA County's Marina Expressway (SR-90) Connector Road to Admiralty Way project is currently under environmental review and project funding has not been determined. Date of project completion is targeted for 2011.

SAL00004-16

Comment:

The document should indicate that if a transportation project does not get approved and constructed, mitigation may not be feasible and the LAX Master Plan would have to be approved by overriding considerations.

Response:

Comment noted. As required under the CEQA Guidelines Section 15091 regarding Findings and Section 15093 regarding Statement of Overriding Consideration approval of the proposed project will require acknowledgement of any significant impact for which there are no feasible mitigation measures to reduce the impact to a level less than significant, and relative to such impacts, a statement of overriding considerations would need to be adopted by the Los Angeles City Council.

SAL00004-17

Comment:

The document should indicate that the Lincoln Corridor Task Force (LCTF) is studying transportation enhancements and aesthetic improvements along the Lincoln Boulevard corridor from the Santa Monica Freeway to Manchester Boulevard. It should indicate that the LAX project should pay its fair share of

traffic mitigation measures recommended by the LCTF in order to mitigate project impacts that are not otherwise able to be mitigated.

Response:

Comment noted. LAWA will review the LCTF recommendations to determine which may be appropriate for contribution. If the LCTF recommendations are more appropriate to mitigate project impacts than the mitigations included in the mitigation plan, LAWA will consider supporting specific LCTF recommendations as substitutes.

SAL00004-18

Comment:

A traffic impact analysis was not conducted per the Caltrans Guide for the Preparation for the Traffic Impact Studies. The Guide indicates that a traffic impact study should be performed when a project adds one or more vehicle trips during the peak hour for a freeway segment that is operating at level of service (LOS) E or F.

Response:

The analysis was conducted under the authority of the City of Los Angeles, which does not require the type of analysis suggested by the commentor. In addition, Caltrans' personnel has also informed LAWA that the type of analysis to which the Commentor is referring is not required for this project. However, LAWA has been working closely with Caltrans in the preparation of feasibility studies for the proposed freeway interchanges on the I-105 and I-405 Freeways.

SAL00004-19

Comment:

The following comments pertain to specific information pertaining to traffic and transportation in the Draft EIS/EIR:

Response:

Please see Responses to Comments SAL00004-20 through SAL00004-30 below.

SAL00004-20

Comment:

Executive Summary

4-282 At the intersection of Lincoln Boulevard/Washington Boulevard, improvements for 2015 indicates mitigation is performed in 2008. The County's Marina Expressway (SR 90) Connector Road to Admiralty Way project is targeted for completion in 2011, pending approval by all jurisdictions and funds (\$15 million) are in place. A footnote should be placed by this and all other transportation projects specified as mitigation not approved and funded.

Response:

Use of a fair-share contribution to LA County's project as a mitigation for the intersection of Lincoln Boulevard and Washington Boulevard has been removed from the Year 2008 Alternative D Mitigation Plan (Adjusted Environmental Baseline Comparison) table in the Final EIS/EIR. The intersection of Lincoln Boulevard and Washington Boulevard will have unavoidable but temporary project impacts in 2008.

SAL00004-21

Comment:

4-288 The document states "Y Lennox Boulevard will terminate east of I-405 at Redfern Avenue, resulting in the elimination of access to Lennox Boulevard from La Cienega Boulevard." It should state

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that pedestrian access between Lennox Boulevard and La Cienega Boulevard will be maintained and sufficient right of way will be made available for community needs in the vicinity.

Response:

Comment noted. Mitigation Measure MM-ST-13 in Section 4.3.2, Off-Airport Surface Transportation, of the Final EIS/EIR has been revised.

SAL00004-22

Comment:

4-290 The document indicates signal synchronization (ATSAC, ATCS, or equivalent) for segments of La Cienega Boulevard in the County's jurisdiction is recommended as a mitigation. Since the County does not participate in the City of Los Angeles=ATSAC program, the possible traffic signal synchronization improvements should be to integrate the intersections into the County Traffic Control System (TCS) as part of the Traffic Management Center (TMC).

Response:

LAWA recognizes that jurisdictions outside the City of Los Angeles may wish to substitute a proposed traffic mitigation for another improvement. Such substitutions would be discussed between LAWA, LDOT and the affected jurisdictions to determine the appropriate mitigation credit that LAWA would receive for the substituted mitigation. The commentor's proposal to mitigate the Los Angeles County's project-impacted intersections by integrating the traffic signals into the County's Traffic Control System/Traffic Management Center is an example of the types of substitute mitigation measure that can be discussed between the affected agencies. This alternative mitigation would be negotiated prior to the implementation of the traffic mitigation plan.

SAL00004-23

Comment:

4-293 We agree with the statement "Along the northbound side of I-405 near Lennox Boulevard, elevated roadways would extend from the I-405 interchange to Lennox Boulevard. These roadways would run adjacent to two local schools and along residences. Sound walls would need to be placed along these stretches of the roadway to reduce the amount of noise impact to the schools and residences."

Response:

Comment noted.

SAL00004-24

Comment:

Technical Report S-2a: On-Airport Surface Transportation

11 The capacity for main access roads (Century Boulevard and Sepulveda Boulevard) assumed in the study of 1,500 to 1,700 vehicles per hour per lane (vphpl) appears to be high. HCM 2000 (page 10-10) suggests around 1,140 for these types of roadways which are classified as Class I Urban Streets. For transitions from main access roads to curb approaches, a capacity of approximately 850 vphpl is suggested in HCM 2000. The capacities for other road types appear to be on the high side as well. Justifications for these capacity assumptions should be provided or reduced to a more realistic capacities suggested in HCM 2000.

Response:

In order to remain consistent with past analyses (i.e., existing conditions and Alternatives A, B, and C) roadway capacities reflect the guidelines provided in an earlier version of the HCM and in FAA Advisory Circular No. 150/5360-13, unless actual traffic count data was available which showed that the road currently is successfully accommodating more vehicles than specified in the HCM.

SAL00004-25

Comment:

Technical Report 2b: Off-Airport Surface Transportation

4 Figure S1 shows the study area and key study locations. Figure S4 shows increase in traffic due to the airport expansion project along Lincoln Boulevard and La Cienega Boulevard, north of the 1-405. Also, traffic in the Lincoln Boulevard corridor uses Admiralty Way as an alternate to Lincoln Boulevard. Approximately 35 to 40 percent of traffic on Admiralty Way is bypass traffic, some of which is from Lincoln Boulevard. Therefore, the traffic analysis should include all the intersections along Admiralty Way and the Washington Boulevard/Via Marina intersection. In addition, the following intersections in the unincorporated Baldwin Hills area should be analyzed:

- La Cienega Boulevard at Stocker Street
- La Cienega Boulevard at Slauson Avenue ramps
- Stocker Street at La Brea Avenue
- Slauson Avenue at La Brea Avenue

Response:

Please see Topical Response TR-ST-2, Sub-Topic Responses TR-ST-2.2 and TR-ST-2.3 regarding the selection of traffic facilities for analysis.

SAL00004-26

Comment:

30 Figure S3, Differences in LAX Passenger Trips B 2015 PM Peak Hour B Alternative D B Adjusted Environmental Baseline, shows decrease in traffic along Pershing Drive with the project. This does not make sense since employee parking structure for 12,400 stalls is proposed east of Pershing Drive north of Imperial Hwy. There should be an increase in airport traffic due to the proposed parking structure.

Response:

Figure S3 illustrates only air passenger trips. As expected, there would be fewer air passenger trips on Pershing since Alternative D moves the primary passenger processing center from the CTA farther east to the GTC. Figure S4 illustrates total airport trips, including employees. As expected, that figure shows an increase in total trips, resulting from the employee parking garage that the commentor discusses.

SAL00004-27

Comment:

35 Additional Fly-Away sites are proposed and assumed in the traffic impact analysis. Specific locations should be identified and some level of commitment must be made to ensure these additional sites will be implemented. It should also state that a separate environmental impact analysis will be conducted for any additional sites.

Response:

Additional FlyAways are currently being studied at various locations throughout Los Angeles County, including at Union Station, in the City of Long Beach along the I-710 Freeway near Artesia Boulevard, at the transportation center in Norwalk/Santa Fe Springs, and a second location in the San Fernando Valley. LAWA is committed to expanding the FlyAway program to best serve its airport passengers and employees. A traffic impact analysis will be prepared as needed for each location to ensure that any traffic-related impacts would be mitigated. Furthermore, LAWA will coordinate with the appropriate jurisdictional agencies to ensure that their specific concerns are addressed. Provisions in the Mitigation

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and Monitoring Plan will detail monitoring and enforcement mechanisms regarding the development of these stations.

Please see Topical Response TR-ST-5 and, in particular, Subtopical Response TR-ST-5.5 regarding analysis of additional FlyAway locations.

SAL00004-28

Comment:

36 Sufficient capacity should be provided for the intersection of the ITC and GTC connector road and the new access road proposed with the Lennox Boulevard/I-405 interchange. Free right-turn lanes should be provided to ensure sufficient turning movement capacity. The level of service should be conducted to ensure that adequate capacity exists.

Response:

It is unclear as to which intersection the Commentor is referring. In general, the facilities will be designed to meet the criteria suggested. The Lennox Boulevard interchange on the I-405 Freeway will be designed with continuous flow (i.e., no traffic signals) between the freeway and the on-airport roadways that lead to the GTC and ITC.

SAL00004-29

Comment:

47 Project fair share estimates for the impacted Congestion Management Program (CMP) routes and intersections are based on the growth between 1996 (Environmental Baseline) and 2015. This seems inconsistent with the impact analysis since the project impact was evaluated based on comparing to the 2015 Adjusted Environmental Baseline.

Response:

This is incorrect. As stated in section 6 of Chapter 4.3.2 of the Supplement to the Draft EIS/EIR, the CMP analysis was conducted based on the difference between year 2015 Alternative D conditions and the Adjusted Environmental Baseline conditions. This was done to maximize the number of CMP impacts identified.

SAL00004-30

Comment:

62 The haul and detour routes for any airport construction near the unincorporated areas should also be submitted to the County of Los Angeles Department of Public Works for review.

Response:

Comment noted.

SAL00005

Knabe, Don

County of Los Angeles

7/8/2003

SAL00005-1

Comment:

Enclosed is a copy of a recent news article from the June 12, 2003 Argonaut titled "Airport will build taxiway before LAX master plan okayed because of FAA pressure, LAX officials says."

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In an effort to dispel community concerns that the airport is attempting fragmented development outside of the master plan, I would appreciate copies of correspondence from the Federal Aviation Administration (FAA) to support this action.

Response:

The subject new article pertains to the center taxiway improvements proposed for the south airfield complex (i.e., between runways 7L/25R and 25L/7R). Those taxiway improvements are included as part of the Runway 25L improvements proposed under Alternatives C and D of the LAX Master Plan. LAWA proposes to implement those improvements as one of the first projects under the Master Plan. In the event that the Master Plan is not approved, LAWA would pursue the necessary approvals from FAA to allow these improvements to occur as an independent project, based on the need for, and desire of, LAWA to address the runway incursion issue that exists at the south airfield complex.

SAL00006 Yorke, Carla County of Los Angeles 7/17/2003

SAL00006-1

Comment:

Please note that Chairman Pro-Tem Knabe's office is resending this letter, along with the enclosed article, as the original letter did not have the article.

Response:

Comment noted.

SAL00006-2

The attachment included as part of this comment letter is identical to comment letter SAL00005; please refer to the response to comment letter SAL00005.

SAL00007 Unternabrer, Deanna City of Inglewood 8/18/2003

SAL00007-1

Comment:

The City of Inglewood, California ("Inglewood") has learned that the Federal Aviation Administration ("FAA") has not yet approved the Airport Commission's extension of time to submit comments on the Supplement to the LAX Master Plan Draft EIR ("DEIR Supplement"). Inglewood hereby gives notice of its intent to submit comments on the DEIR Supplement, and reserves its right to submit such comments following approval or modification by the FAA of the Airport Commission's extension.

Response:

Comment noted. LAWA and FAA extended the public comment period on the Supplement to the Draft EIS/EIR to a total of 120 days closing on November 7, 2003. In addition to nine public hearings held in August, three public hearings were held in October, 2003.

SAL00008 None Provided County of Los Angeles 7/24/2003

The content of this comment letter is identical to Attachment II of SAL00004; please refer to Responses to Comments SAL00004-12 through SAL00004-30.

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SAL00009 Wienberg, Mark City of Inglewood 8/15/2003

The content of this comment letter is identical to comment letter SAL00007; please refer to the response to comment letter SAL00007.

SAL00010 Janssen, David County of Los Angeles 8/21/2003

SAL00010-1

Comment:

COUNTY OF LOS ANGELES BOARD OF SUPERVISORS: PRELIMINARY COMMENTS ON LAX MASTER PLAN DRAFT SUPPLEMENTAL EIS/EIR

On behalf of the Los Angeles County Board of Supervisors, I am submitting preliminary comments on the Supplement to the Draft Environmental Impact Statement/Environmental Impact Report (Supplemental Draft EIS/EIR) for the Los Angeles International Airport Master Plan. The Board of Supervisors approved these comments for submission at their meeting of August 19, 2003. In addition, Board Chair Yvonne Brathwaite Burke and Supervisor Don Knabe along with representatives of the County's airport consultants, A. C. Lazzaretto and Associates, will appear at the public hearing scheduled for August 23, 2003, to verbally enter the Board of Supervisors' comments into the record.

The Board of Supervisors commends Mayor Hahn and the Board of Airport Commissioners for their decision to extend the public comment period on the Supplemental Draft EIS/EIR to November 7, 2003. The County of Los Angeles reserves the right to augment and/or supercede any of the comments transmitted herewith prior to the close of the public comment period.

Response:

Comment noted. Please see Responses to Comments below. In addition, please see responses to comment letters SPHF00003, SPHF00004, and SPHF00010 for responses to comments and verbal testimony provided by Supervisors Burke and Knabe and Ms. Sandra Bauer in association with A.C. Lazzaretto & Associates at the August 23, 2003 public hearing at the Furama Hotel.

SAL00010-2

Comment:

INTRODUCTION

The Federal Aviation Administration (FAA) and Los Angeles World Airports (LAWA) made available for public comment in early 2001 a Draft Environmental Impact Statement/Environmental Impact Report (EIS/EIR) addressing three build alternatives, a no- build alternative, and the existing setting for the Los Angeles International Airport (LAX) Master Plan. In response to considerable public comment and the terrorist attacks that occurred on September 11, 2001, a fourth alternative -- Alternative D, the Enhanced Safety and Security Plan -- has been added to the LAX Master Plan. A Supplement to the Draft EIS/EIR was made available for public comment in July of 2003 to update information presented in the Draft EIS/EIR and to integrate Alternative D into the environmental review process.

Alternative D includes a number airfield facility modifications. Although LAX would continue to operate with 4 runways, 2 of the existing runways would be moved, two would be lengthened, and all would be further separated from one another. The existing parking structures would be relocated and replaced by new centralized passenger terminals. The existing Terminals 1 through 7 would be reconfigured, including a new north/south linear concourse at the Tom Bradley International Terminal, flanked on the west by a new satellite concourse. A new ground transportation center and intermodal transportation center to be built east of Aviation Blvd. would serve as the primary access for all passenger drop-off and pick-up and vehicle parking. Some cargo facilities would be modified, although overall square footage would be equivalent to the No Action/No Project Alternative.

A brief preliminary review has been conducted to assess changes between the original Draft EIS/EIR and the 2003 Supplement to the Draft EIS/EIR for the LAX Master Plan, as well as consistency and accuracy of information within the documents. The initial review points to several issues requiring further comment and discussion.

One of these issues was central to County comments on the earlier LAX Master Plan review, and remains an area of potential concern for the current document: although LAWA indicates that its goal is to limit growth, improvements proposed as part of Alternative D would in reality serve to reinforce LAX as the preeminent airport of the southern California region, and may undermine attempts to strengthen the role of outlying airports. In addition to this thematic concern, there are a number of additional points that merit further consideration. The preliminary findings are outlined briefly in the discussion below.

Response:

Comment noted. Please see Responses to Comments SAL00010-3 through SAL00010-11 below.

SAL00010-3

Comment:

DISCUSSION

1. The Proposed Master Plan Alternative D May Not Constrain Growth at LAX

The stated goal of Alternative D is to limit growth at LAX to 78 Million Annual Passengers (MAP) and induce growth at other regional airports. The primary means to accomplish this is to limit aircraft gates to 153 which is the same number of gates that exist in the No Project Alternative (NPA). However, the NPA includes 48 remote gates that are simply aircraft parking spaces on concrete. Alternative D provides 153 fully functional and high capacity gates and does not remove the concrete which will remain available for aircraft parking. The true number of gates is therefore over 200. Furthermore, the design of the new gates is a linear configuration as opposed to the existing cul-de-sac configuration. The linear configuration is more flexible and has more capacity. Also, space in the western portion of the airport will remain available for future consideration of a new west terminal, as proposed in Alternatives A, B and C. Therefore, the gate limitation is not an effective constraint on passenger levels.

Alternative D includes other improvements that would support growth beyond the 78 MAP level. In particular, the new remote terminal in the Manchester Square area provides 6.5 million square feet of terminal space -- more that 50% greater than the 4 million square feet proposed in the 98 MAP Alternatives A, B and C. Further, many of the proposed improvements to the north airfield are designed to accommodate the new generation of larger aircraft.

Orientation of new LAX facilities to the new larger aircraft could have long-term, pervasive effects. Because the new larger aircraft require many smaller connecting flights to fill its 600 seats, these improvements will strengthen the "confluence of connections" that reinforce LAX as the preeminent airport of the southern California region, and at the same time reduce the incentive for airlines to utilize other regional facilities. A true constraint on the growth of LAX would be to make it inhospitable towards the new larger aircraft, coupled with improvements to serve new larger aircraft at another regional airport, and transit links to join the two facilities.

Response:

As described on Page 3-2 of the Supplement to the Draft EIS/EIR, Alternative D is designed to accommodate passenger and cargo activity levels at LAX that would approximate those of the No Action/No Project Alternative, have fewer environmental impacts than the No Action/No Project Alternative and, in light of the events of September 11, 2001, would be designed to enhance airport safety and security. Please see Response to Comment SPHF00038-4.

The No Action/No Project Alternative would have 163 total gates including 48 remote gates while Alternative D would have 153 total gates including no remote gates in 2015.

3. Comments and Responses

As described on Page 3-45 of the Supplement to the Draft EIS/EIR the existing remote gates at the west pad facility would be eliminated in Alternative D and this area would be prohibited from use as a remote passenger boarding location.

The proposed west satellite concourse and relocated Taxiways S & Q would be constructed on the existing site of American Eagle's remote commuter gates eliminating these positions from future use.

United Express' existing commuter gates would be replaced by a GRE facility eliminating these remote gates from future use.

The capacity of a given terminal is not solely dependent on whether it has a linear or pier configuration as the commentor states. An equal number of gates with an equal amount of square footage in the terminal facility would provide equal capacity in either configuration. Fleet mix, airline use patterns, airport design, airport passenger types, O&D versus hub, and adjacent facilities are some of the variables that influence the capacity of a given terminal facility.

Alternative D does not include construction of terminal facilities in the western portion of LAX that would increase the airport's gate capacity.

The environmental analyses in the Draft EIS/EIR and Supplement to the Draft EIS/EIR, including noise and air quality, have addressed the potential impacts under the most practical and most likely activity level for each alternative including Alternative D. The Draft EIS/EIR and Supplement to the Draft EIS/EIR evaluated a reasonable range of alternatives as required by the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA).

Table S3-2, Summary of Facilities by Alternative - 2015, in Chapter 3 of the Supplement to the Draft EIS/EIR, identifies Total Square Feet of Terminal Building Space for each alternative. Alternative D includes a total of 6.8 Million Square Feet, which is less than Alternative A (10.4 Million Square Feet), Alternative B (9.7 Million Square Feet) and Alternative C (7.3 Million Square Feet). Table S3-2 identifies that the GTC would encompass 200,000 square feet.

As described in Chapter 3 of the Supplement to the Draft EIS/EIR, one of Alternative D's design goals is to maintain LAX as the international gateway to Southern California. Reconstructing portions of the LAX airfield to accommodate the Airbus A380 and other NLA aircraft anticipated in the future fleet mix would help LAX meet this goal while remaining safe and efficient. More than six existing LAX airlines have committed to operate the A380 and have publicly identified LAX as a desirable airport to and from which the A380 would be flown. The lower operating cost of the A380 versus today's largest passenger aircraft would allow airlines to maximize their economic efficiency potentially lowering passenger airfares. Six of the 153 aircraft gates proposed as part of Alternative D are designed to accommodate the A380 at all times.

LAX is the preeminent international trans-oceanic airport in Southern California. The A380 would likely be exclusively operated on these routes. The specialized facilities that exist at LAX that allow the Airport to accommodate these unique long haul flights are not easily or inexpensively duplicated at other airports. Alternative D would allow LAX to remain the region's premier international gateway while encouraging other regional airports to meet the demand for domestic air service that would not be able to be accommodated by LAX's constrained gate facilities.

SAL00010-4

Comment:

2. Airport Security May Not be Fully Achieved by Alternative D

Preliminary review suggests that the Supplement to the Draft EIS/EIR may fall short of an adequate review of airport security issues. Although the Executive Summary to the Addendum refers the reader to Appendix I 'for a detailed assessment of the security and safety features of Alternative D,' Appendix I offers a heavily conceptual and theoretical document that falls significantly short on detail. Anomalies include contradictory content and a lack of clarity expected of a public information document.

Response:

The content of this comment is identical to comment SAL00004-4; please refer to Response to Comment SAL00004-4.

SAL00010-5

Comment:

3. Environmental Justice May Not be Well Served by Alternative D

Presidential Executive Order 12898, issued in February 1994, requires all federal agencies to analyze environmental justice impacts when proposing public projects. The analysis is intended to determine whether minority and low-income communities are unfairly burdened by project impacts, with the goal of using mitigation measures to create a level playing field. In 1999, Senate Bill 115 was passed making environmental justice a requirement of CEQA as well.

Despite the importance of this subject, the original Draft EIS/EIR was found to lack even the most elementary NEPA requirements for environmental justice. Preliminary review suggests that the Supplement to the Draft EIS/EIR has corrected some but not all of the earlier deficiencies. In particular, the Supplement to the Draft EIS/EIR again limits the area of analysis (reviewing only those census tracts surrounding LAX), improperly omits assessment of many effects due to the preparers' inability to quantify or analyze the impacts, and defers a determination of significance pending completion of the mitigation program.

The assessment does not appear to consider the trade-offs between environmental protection and environmental justice pertaining to the placement and length of LAX runways: runway extension to the west would have significant adverse impacts on biological resources (particularly the El Segundo Blue Butterfly), but would serve environmental justice through a significant lessening of noise, air quality and traffic impacts on Lennox, Inglewood and other disadvantaged communities around LAX. Nor does the assessment apply rigorous standards in assessing the proportionality of impacts and mitigation measures between the wealthier northside area and communities east of LAX including Lennox and Inglewood. These relevant issues require further review as part of the Supplement to the Draft EIS/EIR.

Response:

The content of this comment is essentially the same as comment SAL00004-5; please refer to Response to Comment SAL00004-5.

SAL00010-6

Comment:

4. The Baseline Year of 1996 is Not Adequate for a 2003 Impact Assessment

It appears that the Supplement to the Draft EIS/EIR continues to use 1996 data to establish baseline conditions for a number of topical issues. This outdated reference point was considered inadequate for the original EIS/EIR, and remains unsuitable for use in the current Supplement to the Draft EIS/EIR.

Response:

This comment is essentially the same as comment SAL00004-6; please see Response to Comment SAL00004-6.

SAL00010-7

Comment:

5. The No Project Alternative does not offer a Consistent Yardstick for Measuring Project Impacts

The original EIS/EIR provided an incomplete discussion of the No Project Alternative by incorporating improvements that were then only in the "planning stages" and overstating the service levels and capacity of the existing facilities. This approach made it difficult to draw meaningful comparisons with

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project alternatives. Preliminary review indicates that the Supplement to the Draft EIS/EIR may also provide an incomplete picture of impacts associated with the No Project Alternative. In particular, the Supplement to the Draft EIS/EIR appears to substantially overstate passenger and cargo handling capacity under the no-build scenario, while understating both for the build scenarios.

Additionally, the No Project Alternative has not represented passenger capacity in a consistent manner. In the original 1997 Notice of Preparation, the No Project Alternative was linked to a range of 68-72 MAP whereas the 2001 and 2003 EIS/EIR documents increased this estimate to 71.2-78.7 MAP. Based on communications provided by LAWA at the Environmental Justice Workshop held in Inglewood, the increase between 1997 and 2001 reflected actual increases in passenger demand during that period. However, there was no equivalent adjustment for the period from 2001- 2003, when passenger demand has fallen by almost one-third.

Response:

This content of this comment is essentially the same as comment SAL00004-7; please refer to Response to Comment SAL00004-7.

SAL00010-8

Comment:

The Supplement to the Draft EIS/EIR states that the No Project Alternative is provided as a benchmark for comparison of the four build alternatives. However, use of a higher baseline passenger number minimizes the extent of the difference between existing and future conditions at LAX, which in turn affects comparative impact assessments throughout the EIS/EIR. Use of a worst-case scenario, in which the baseline was based on a low estimate of existing passenger demand, would have better served the goals of CEQA and NEPA, and given a more realistic picture of the changes between current and future conditions at LAX. The County believes that LAWA should revisit key impact findings in light of actual 2003 passenger demand, instead of the estimates developed for 2001.

Response:

This comment is essentially the same as comment SAL00004-8; please see Response to Comment SAL00004-8.

SAL00010-9

Comment:

6. Traffic, Noise and Air Quality Impacts have been Shifted Eastward

The revised Master Plan represents a major shift of improvements away from neighboring areas north and south of LAX and toward communities to the east. The unincorporated community of Lennox and the City of Inglewood now appear to bear the brunt of added traffic, while Manchester will be the primary location for passenger processing. This shift heightens the need for close scrutiny of the proposed mitigation plan and the analysis of Environmental Justice.

Response:

The content of this comment is identical to Comment SAL00004-9; please see Response to Comment SAL00004-9.

SAL00010-10

Comment:

7. Major Changes in the Project Call for Preparation of a Comprehensive Revised Draft EIS/EIR

CEQA Guidelines require that a Subsequent EIR for a project must be completed if the Lead Agency determines that changes in a project will require major revisions to a previous EIR; a Supplement to an EIR may be prepared if changes in the project are not considered major (§15162(a)). Both Subsequent and Supplemental EIRs are subject to the same notice and public review requirements as the original

EIR, but Subsequent EIRs must make available all the information in the environmental evaluation, whereas Supplemental EIRs only need circulate new or revised information. Discussion provided in the CEQA Guidelines indicates that both types of review are intended for use in connection with previously certified or approved environmental documents.

In the present case, there is no previously certified or approved document. Furthermore, preliminary review of the Supplement to the Draft EIS/EIR indicates that changes to the proposed project are major. Thus, even an adaptation of the Guidelines (i.e., to encompass a document that has not been previously certified or approved) would indicate the project should have been addressed through preparation of a comprehensive revised Draft EIS/EIR, in which the full record of information was consolidated in an effort to facilitate public review.

Public review and lead agency decision-making would also have been better served by providing copies of the comment letters submitted during public review of the original EIS/EIR. Instead, the Supplement to the Draft EIS/EIR makes no effort to present or even summarize the earlier comment letters. This approach creates a process that is confusing and cumbersome for reviewing agencies and organizations, and thwarts an opportunity to advance public participation.

Response:

The content of this comment is similar to Comment SAL00013-31; please see Response to Comment SAL00013-31.

SAL00010-11

Comment:

8. Growth-Inducing Impacts May Be Significantly Greater than Stated

The Supplement to the Draft EIS/EIR bases its analysis of growth inducement on projected cargo and passenger activity. It concludes that by 2015, Alternative D would yield a direct economic output of \$63.7 billion and 350,500 jobs, plus an indirect economic output of \$93.8 billion and 629,000 jobs through a multiplier effect of 1.5. The EIS/EIR assumes that all of the jobs would be within the 5-County SCAG region, 78% of the jobs would be within a 20-mile radius, and 40% within a 10-mile radius of LAX. Finally, it concludes that Alternative D would be similar in terms of job formation to the No Action/No Project Alternative, differing by an increase of about 1%. With respect to collateral development, the EIS/EIR finds Alternative D impacts equivalent to the No Project Alternative for LAX Northside¹, Westchester Southside and Belford, and less than the No Project Alternative for Continental City and Manchester South.

In taking this approach, the document ignores the cumulative synergistic effects that would result if LAX Northside is constructed in tandem with the LAX improvements. The increase in cargo will create corresponding increases in off-airport services and place extraordinary pressures on commercial and residential land uses in the immediate neighborhood. The Growth-Inducing Impact Analysis does not appear to address these more localized impacts at all, even though the past history of LAX shows them to be potentially significant.

¹ LAX Northside is approximately 330-acres of land located on the north side of LAX (bisected by Westchester Parkway) and owned by LAWA. Tentative Map #34836, approved for this site during the mid-1980s, would allow development of about 4.5 million square feet of office, hotel, restaurant, retail, research and airport-related land uses.

Response:

The content of this comment is identical to Comment SAL00004-11; please refer to Response to Comment SAL00004-11. Please also see Response to Comment SPHPD00004-7 regarding the analysis of induced socio-economic impacts associated with Alternative D.

3. Comments and Responses

SAL00010-12

The remainder of this comment letter is identical to Attachment II of comment letter SAL00004; please refer to Responses to Comments SAL00004-12 through SAL00004-30.

SAL00011 Janssen, David County of Los Angeles 8/21/2003

The content of this comment letter is identical to comment letter SAL00010; please refer to the response to comment letter SAL00010.

SAL00012 Sanchez-Owens, City of Los Angeles 9/29/2003
Yvette

SAL00012-1

Comment:

The Supplement to the Draft Environmental Impact Statement/Environmental Impact Report (EIS/EIR) has been reviewed by the Facilities Management Division of the Los Angeles Police Department. In response to your request for public review and comment, the following questions and comments were compiled:

Response:

Comment noted. Please see Responses to Comments below.

SAL00012-2

Comment:

- Who will provide law-enforcement services to the people mover?
- Is the people mover to be constructed above ground, below ground or at ground level?

Response:

Airport Police are the law enforcement arm of the LAPD at LAX. They will continue to provide these services for all of the airport property and facilities including the Automated People Mover system that would be used to connect the landside and terminal facilities in Alternative D. Please see Appendix I of the Draft LAX Master Plan Addendum for more detailed discussion on security related to the APM. As stated in Section 2.4, Automated People Mover - Alternative D, of the Draft LAX Master Plan Addendum, the APM would run above ground between the ITC, RAC and the CTA, as well as between the GTC and the CTA. A separate APM system would run below ground between the CTA, TBIT and the West Satellite Concourse.

SAL00012-3

Comment:

- Where will the LAPD Substation be located? What size facility is planned for the Substation?

Response:

A number of Airport Police substations would be located in each of the primary passenger facilities similar to the way substations are provided around the airport today. The exact size and location of

3. Comments and Responses

these substations has not yet been determined but will be programmed in close coordination with LAPD and Airport Police representatives during the facility design process.

SAL00012-4

Comment:

- The Supplemental Draft Book 1 states that "Law-enforcement will need to increase, traffic may impede response times, and law-enforcement facilities need to change for the future." There were no actual plans to address these issues, except a referral to "work with concerned entities as the process moves forward." Is there any plan in place to begin to address these issues? When will this occur?

Response:

Although the LAWAPD and LAPD LAX Detail routinely evaluate and adjust their staffing levels based on need, the Master Plan Commitments or plans to address increased demand on these agencies associated with implementation of the LAX Master Plan, as described on page 4-746, in Section 4.26.2, Law Enforcement (CEQA), of the Supplement to the Draft EIS/EIR, would be implemented following approval of the proposed project. If the LAX Master Plan is approved, the Master Plan commitments would be implemented through a mitigation monitoring and reporting program.

SAL00012-5

Comment:

- Who will provide staff for the Traffic Operations Center?

Response:

LAX's existing Traffic Operations Center is staffed by airport personnel. The Ground Transportation Construction Coordination Office, proposed as Master Plan Commitment C-1 and expanded as proposed in Mitigation Measure MM-ST-14, would also be staffed with airport personnel, with the involvement and assistance of other area transportation agency staff as needed.

SAL00012-6

Comment:

- What are the specific duties and roles of TSA, LAPD, and LAXPD?

Response:

The Draft EIS/EIR and Supplement to the Draft EIS/EIR addressed police services in Section 4.26.2, Law Enforcement (CEQA), with supporting technical data and analyses provided in Technical Report 16b of the Draft EIS/EIR. The Draft EIS/EIR addressed the roles of the LAPD and the LAWAPD or LAXPD in Subsection 4.26.2.3. The role of the Transportation Security Administration (TSA) at LAX is described in the Supplement to the Draft EIS/EIR in Section 4.26.2, Law Enforcement (CEQA), Subsection 4.26.2.3, under the heading - Other Agencies Providing Law Enforcement Services at LAX.

SAL00012-7

Comment:

Supplemental Draft Book 2 states that "LAPD should increase staff from 72 to 84 to maintain staff to passenger ratios." Does the project specify any funding for this increase? Will the new positions be budgeted into the project?

Response:

As was stated on page 4-749, in Section 4.26.2, Law Enforcement (CEQA) of the Supplement to the Draft EIS/EIR, approximately 84 staff would be needed to maintain current staff to passenger ratios. This represents a potential incremental increase of 12 LAPD staff by the year 2015. This estimated increase in LAPD staff is the same as what is forecasted if the LAX Master Plan were not approved as was described for the No Action/No Project Alternative on page 4-747 of the same document. Funding

3. Comments and Responses

of additional law enforcement positions for LAPD and LAWAPD would continue to depend on traditional or current sources of revenue for the agencies. No changes in funding sources for law enforcement positions are anticipated as a result of the proposed project.

SAL00012-8

Comment:

- Are the comments on entitlements available for review?

Response:

It is believed that the comment pertains to the status of interdepartmental review of the application for entitlement actions (i.e., general plan amendment, zone change, etc.). Such review and the processing of interdepartmental review comments is being coordinated through Mr. Herb Glasgow in the planning division of LAWA.

SAL00013

Janssen, David

County of Los Angeles

10/28/2003

SAL00013-1

Comment:

FINAL REPORT ON THE SUPPLEMENTAL TO THE DRAFT ENVIRONMENTAL IMPACT STATEMENT/ENVIRONMENTAL IMPACT REPORT FOR PROPOSED MASTER PLAN IMPROVEMENTS AT LAX (ALL DISTRICTS AFFECTED) (3 VOTES)
IT IS RECOMMENDED THAT YOUR BOARD:

1. Approve the final report on the Supplement to the Draft Environmental Impact Statement/Environmental Impact Report (SDEIS/EIR) for the proposed Safety and Security Alternative (Alternative D) for the Proposed Master Plan improvements at Los Angeles International Airport (LAX) submitted by A.C. Lazzaretto & Associates as the County's official comments.
2. Authorize the Chief Administrative Officer to transmit the final report to the Los Angeles World Airports (LAWA) and Federal Aviation Administration (FAA) as the Board's final comments on the SDEIS/EIR for Alternative D.

PURPOSE/JUSTIFICATION OF RECOMMENDED ACTION

The purpose of this recommended action is to accept the attached final report as the County's official response to the SDEIS/EIR for Alternative D and present it to LAWA and FAA prior to the November 7, 2003 comment period deadline. Submission of the County's official response allows for the concerns and suggestions detailed in the final report to be addressed by LAWA and FAA. If the County's concerns and suggestions are not adequately addressed and/or incorporated into the Final EIS/EIR, the County retains the ability and opportunity to challenge the LAX Master Plan Improvements project based on those issues discussed in the final report.

Implementation of Strategic Plan Goals

These recommendations are consistent with the following Strategic Plan Goal:

Goal: Organizational Effectiveness: Ensure that service delivery systems are efficient, effective, and goal-oriented.

The County is seeking to ensure that any air service expansion plan is environmentally, economically, and socially beneficial to the residents of Los Angeles County.

FISCAL IMPACT/FINANCING

Not applicable.

FACTS AND PROVISIONS/LEGAL REQUIREMENTS

On July 10, 2001, your Board approved the final report on the Draft EIS/EIR for the Proposed Master Plan Improvements at LAX submitted by A.C. Lazzaretto & Associates as the County's official comments on the Draft EIS/EIR. Due to the events of September 11, 2001, newly elected Los Angeles Mayor James Hahn directed LAWA to develop a new alternative focused on safety and security. On January 21, 2003, your Board instructed this office to negotiate a delegated authority contract with A.C. Lazzaretto & Associates to conduct a review and analysis of the anticipated Supplement to the Draft EIS/EIR for the new alternative.

On July 9, 2003, the SDEIS/EIR for the Safety and Security Alternative to the Proposed Master Plan Improvements (Alternative D) was released and a public review and comment period commenced. On July 15, 2003, this office entered into agreement with A.C. Lazzaretto & Associates to conduct the requested review. The consultant assembled a team of environmental and security experts to review the documents for consistency and accuracy, with special attention to the major areas of noise, traffic, security, air quality, and environmental justice. On August 19, 2003, your Board approved preliminary comments regarding the SDEIS/EIR developed by the consultant and the Department of Public Works.

Consistent with their contract, the consultant is presenting the attached final report to your Board commenting on the SDEIS/EIR for Alternative D which incorporates comments by the Departments of Public Works, County Counsel, and Regional Planning, and the Chief Administrative Office. The consultant concludes there is an obvious and pressing need for improvements at LAX, mostly to ensure the safety and security of air travel. However, the consultant believes LAWA is proposing to implement a flawed project, and that the process is further compromised by an inadequate environmental review. Moreover, the problems with the SDEIS/EIR are so serious, pervasive, and universal that the only practical remedy is to start the process over again and prepare a truly comprehensive revised EIS/EIR. The following are key findings supporting the conclusion:

- Alternative D will not constrain growth at LAX.
- Alternative D will not adequately serve the security goals for which it was formulated.
- The security plan relies heavily on technologies, some of which have been discredited, and does not address serious security exposures.
- Use of a Supplement to the 2001 Draft EIS/EIR was improper under the guidelines of California Environmental Quality Act.
- Scoping outreach did not include input from Los Angeles County to the public at large regarding either Alternative C (the 2001 preferred project) or Alternative D (the 2003 preferred project) and thus fails to meet National Environmental Policy Act requirements.
- The baseline year used in the SDEIS/EIR is 7 years old and does not offer a reasonable yardstick against which to measure the impacts of Alternative D or any other project alternative, especially since the events of September 11 changed the baseline so fundamentally.
- The SDEIS/EIR contains numerous comments and statements that create an appearance of project advocacy.
- Alternative D shifts many impacts toward the more economically disadvantaged communities east and northeast of LAX, and appears to protect biological resources at the expense of residents in Lennox, Inglewood, and Manchester.
- The noise assessment contains significant discrepancies.
- The 2001 Draft EIS/EIR acknowledged that it omitted quantitative assessment of toxic air pollutant exposure due to lack of time; the 2003 document also omitted the assessment, but did not so note.
- Additional environmental documentation is lacking and LAWA decision makers will be unable to make an informed project determination until inadequacies in the SDEIS/EIR are remedied.

IMPACT ON CURRENT SERVICES

3. Comments and Responses

This action will not have a direct impact on current County services. County involvement is important to ensure that any improvements at LAX meet and enhance air service for the region at the same time protecting the quality of life of impacted communities and the County as a whole.

Response:

Comment noted. Please see Responses to Comments SAL00013-3 through SAL00013-167 below.

SAL00013-2

Comment:

1.0 BACKGROUND AND EXECUTIVE SUMMARY

1.1 BACKGROUND

During 2001, A.C. Lazzaretto & Associates was retained by the Los Angeles County Chief Administrative Office to review and comment on the Draft Environmental Impact Statement/Environmental Impact Report (DEIS/EIR) prepared for Los Angeles World Airport's (LAWA) Proposed Los Angeles International Airport (LAX) Master Plan. The 2001 Draft EIS/EIR addressed three build alternatives, a no-build alternative, and the existing setting for the Los Angeles International Airport (LAX) Master Plan.

A.C. Lazzaretto & Associates assembled a team of environmental review experts to review the document for consistency and accuracy. Working in collaboration with County staff, a detailed comment letter was prepared and submitted to LAWA on 28 June 2001. Thereafter, in response to considerable public comment and the terrorist attacks that occurred on September 11, 2001, LAWA suspended work on the earlier EIS/EIR to develop a fourth alternative -- Alternative D, the Enhanced Safety and Security Plan. LAWA made a Supplement to the Draft EIS/EIR (SDEIS/EIR) available for public comment in July of 2003 to update information presented in the Draft EIS/EIR and to integrate Alternative D into the environmental review process. The Supplement offered no response to comments submitted on the 2001 DEIS/EIR.

Alternative D includes a number of airfield facility modifications. Although LAX would continue to operate with 4 runways, 2 of the existing runways would be moved, two would be lengthened, and all would be further separated from one another. New centralized passenger terminals would replace the existing parking structures. The existing Terminals 1 through 7 would be reconfigured, including a new north/south linear concourse at the Tom Bradley International Terminal, flanked on the west by a new satellite concourse. A new ground transportation center and intermodal transportation center to be built east of Aviation Blvd. would serve as the primary access for all passenger drop-off and pick-up and vehicle parking. Some cargo facilities would be modified, although overall square footage would be equivalent to the No Action/No Project Alternative.

Following publication of the SDEIS/EIR, the Los Angeles County Chief Administrative Office again retained A.C. Lazzaretto & Associates to review and comment on the revised document. A.C. Lazzaretto & Associates in turn assembled the team of environmental review experts that had reviewed the 2001 document, in order to assess the 2003 Supplement for consistency, accuracy, and changes since the original Draft EIS/EIR was prepared. The information has been evaluated using the following criteria: reasonableness of input data and assumptions, appropriateness and accuracy of analyses and mitigation measures, and conformity with requirements of the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA).

Results of the current review indicate that many of the concerns expressed in our earlier comment letter still remain, including one that was central to County comments on the earlier LAX Master Plan review: although LAWA indicates that its goal is to limit growth, improvements proposed as part of Alternative D would in reality serve to reinforce LAX as the preeminent airport of the southern California region, and may undermine attempts to strengthen the role of outlying airports. There are a number of points, in addition to this thematic concern, that merit further consideration and discussion before LAWA considers certification of the Supplement to the EIS/EIR and approval of the preferred alternative.

To facilitate LAWA's review and response, the County has revised and updated the comment letter originally submitted in June of 2001. The current comment letter incorporates all issues for which a response is sought from LAWA. As before, the review team has paid special attention to the major issues of noise, traffic, environmental justice, and air quality, and the team has again made every attempt to offer objective, constructive comments concerning the major elements of the Supplement to the DEIS/EIR.

1.2 EXECUTIVE SUMMARY

A.C. Lazzaretto & Associates has been retained by the Los Angeles County Chief Administrative Office to review and update comments on the 2001 Draft DEIS/EIR prepared for LAWA's Proposed LAX Master Plan, consistent with changes in the current 2003 Supplement to the Draft EIS/EIR. The 2001 Draft EIS/EIR addressed three build alternatives, a no-build alternative, and the existing setting for the Los Angeles International Airport (LAX) Master Plan. The 2003 Supplement incorporates a new Alternative D (the "enhanced safety and security plan") that LAWA has designated as the preferred project option. To address safety issues, the review team has been expanded to include participation by BoydForbes, Inc., a renowned airport safety consulting firm based in Denver.

The County has a special responsibility in this process, since it represents the unincorporated communities that are most directly impacted by LAX operations. It is for this reason that the County has taken a highly active stance during 2001 and 2003, and in both instances we have focused on issues of greatest concern to our constituents. During 2001, we submitted comments to LAWA in which we expressed a number of serious concerns. With publication of the 2003 Supplement we find that most of our earlier concerns remain unaddressed and new issues have been identified that are of even greater potential concern for Los Angeles County constituents. The County has twice sought to meet with LAWA's consulting team to discuss these issues, and on both occasions has been rebuffed. In so doing, LAWA has bypassed an opportunity for identification of joint solutions that could facilitate improvements at LAX while minimizing impacts on LAX's neighbors in Manchester, Lennox, Westchester and other adjoining communities.

Fundamentally, the County of Los Angeles believes that LAWA is proposing to implement a flawed project, and that LAWA has developed an inadequate environmental document to review the project. The following report covers a wide range of issues, many in considerable detail. While all of these issues are important, we would like to call special attention to the following key points:

Response:

Comment noted. Please see Responses to Comments SAL00013-3 through SAL00013-167 below. With respect to the issue of requesting a meeting between LAWA's consulting team and A.C. Lazzaretto & Associates to discuss issues, concerns, and comments pertaining to the Supplement to the Draft EIS/EIR, a representative of LAWA requested such a meeting at the Los Angeles Board of Supervisors meeting on August 19, 2003, but was declined.

SAL00013-3

Comment:

- Contrary to statements made throughout the SDEIS/EIR, our review clearly shows that Alternative D will not constrain growth at LAX. LAWA has misrepresented this alternative, to the jeopardy of the environmental analysis.

Response:

Comment noted. As described in Chapter 3 of the Supplement to the Draft EIS/EIR, the facilities that comprise Alternative D are designed to serve approximately 78.9 MAP and 3.1 MAT of air cargo activity. Please refer to the Alternative D Constrained Activity Forecast section on page 3-26 of Chapter 3 of the Supplement to the Draft EIS/EIR for information on the passenger capacity analysis results.

3. Comments and Responses

SAL00013-4

Comment:

-Alternative D will also not serve the security goals for which it was formulated. The Plan focuses on hardening security for the east-side entry to LAX but largely ignores the perimeter, maintenance/fuel farm, and cargo areas -- leaving the back door wide open.

Response:

Comment noted. Please see Topical Response TR-SEC-1 regarding security issues.

SAL00013-5

Comment:

-The separation concept is diminished in value by the expensive and vulnerable mass transit link proposed between the Central Terminal Area and remote landside ground facilities. It is further diminished by the lack of Flow Process Mapping data; the consequential risk of task overload and failure to achieve target reduction; and by the potential alienation of a public that may perceive screening requirements as excessive.

Response:

This comment does not raise or pertain to any environmental issues that are subject to NEPA or CEQA review requirements. Notwithstanding, please see Topical Response TR-SEC-1, which addresses the most frequently raised security-related issues pertaining to the design and ability of Alternative D to enhance existing safety and security at LAX.

SAL00013-6

Comment:

- The Security plan relies heavily on technologies, some of which have been discredited (e.g., facial recognition surveillance). Additionally, greater thought must be given to the risk of data saturation. Over-dependence on security technology may lead to higher risk of error and, ironically, diminished protection.

Response:

This comment does not raise or pertain to any environmental issues that are subject to NEPA or CEQA review requirements. Notwithstanding, please see Topical Response TR-SEC-1, which addresses the most frequently raised security-related issues pertaining to the design and ability of Alternative D to enhance existing safety and security at LAX.

SAL00013-7

Comment:

- There are a number of existing, unexplained security exposures at LAX, including several areas characterized by extreme weakness in access control, that should be remedied as soon as possible; it is recommended that LAWA take steps to close Pershing Drive to public traffic as soon as practicable.

Response:

This comment does not raise or pertain to any environmental issues that are subject to NEPA or CEQA review requirements. Notwithstanding, please see Topical Response TR-SEC-1, which addresses the most frequently raised security-related issues pertaining to the design and ability of Alternative D to enhance existing safety and security at LAX. In addition, Pershing Drive needs to remain open for traffic to and from surrounding communities, such as El Segundo and Westchester. Closing of Pershing Drive would create inadequate north-south traffic flow around the airport.

SAL00013-8**Comment:**

- Use of a Supplement to the 2001 Draft EIS/EIR was improper under guidelines for CEQA. LAWA should have addressed Alternative D in a comprehensive revised draft EIS/EIR in which the full record of information was available for public review and agency decision-making.

Response:

The essence of the comment is similar to that of Comment SAL00013-31; please see Response to Comment SAL00013-31.

SAL00013-9**Comment:**

- The Purpose & Need statement emphasizes LAX's role in meeting regional growth, investment return, and international trade, and claims that Alternative D will fill these objectives. Yet the EIS/EIR asserts that Alternative D has the same socioeconomic characteristics as No Action, but for construction jobs, and finds that No Action would fail to meet project purpose and need. Either Alternative D fails to meet the stated goals, or Alternative D has not been described in accordance with full disclosure requirements.

Response:

Comment noted. Alternative D provides for substantial improvements to the existing airside and landside facilities at LAX, resulting in improved efficiencies and enhanced safety and security. The No Action/No Project Alternative does not provide for such improvements. The improvements under Alternative D include better accommodations for larger aircraft associated with international travel as well as related terminal improvements, which is consistent with the objective to sustain and advance international trade. These improvements would not occur under the No Action/No Project Alternative. Alternative D would accomplish the aforementioned improvements while serving the same level of future airport activity as that of the No Action/No Project Alternative, which is consistent with SCAG regional aviation plan calling for no expansion of LAX. Overall, Alternative D is considered to be responsive to the Master Plan project objectives, while the No Action/No Project Alternative is not.

SAL00013-10**Comment:**

- The environmental assessment does not offer a reasonable range of Alternatives that would feasibly meet most objectives, but would avoid or lessen significant effects of the project, and thus the SDEIS/EIR fails to fulfill the "Rule of Reason."

Response:

Please see Topical Response TR-ALT-1 regarding the range of alternatives analyzed in the Draft EIS/EIR and the Supplement to the Draft EIS/EIR.

SAL00013-11**Comment:**

- Scoping Outreach did not include input from Los Angeles County Government or the public at large regarding either Alternative C (the 2001 preferred project) or Alternative D (the 2003 preferred project) and thus fails to meet basic NEPA requirements.

Response:

LAWA met all requirements under CEQA and NEPA pertaining to scoping. In June 1997, a Notice of Intent and Notice of Preparation were published, which identified four build alternatives. Three public scoping meetings and one agency scoping meeting were held. In response to these efforts, letters

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were received from Los Angeles County Supervisor Don Knabe, the Los Angeles County Department of Public Works, and the Los Angeles County West Vector Control District. Copies of these letters are provided in Appendix A, Scoping and Agency Coordination, of the Draft EIS/EIR.

In response to input from the community obtained through the public scoping process as well as other outreach efforts by LAWA, three of the four original build alternatives were eliminated from consideration and two new build alternatives (subsequently referred to as Alternatives B and C) were proposed. A Supplemental Notice regarding the preparation of an EIS/EIR for the LAX Master Plan was circulated identifying the new alternatives. Following input from the public on the Draft EIS/EIR, and the events of September 11, 2001, a fourth build alternative (Alternative D) was proposed.

SAL00013-12

Comment:

- The SDEIS/EIR offers a baseline now 7 years old: conditions in 1996 do not represent the baseline of 2003. The events of 9/11 changed the baseline so fundamentally that LAWA withdrew its 2001 documents to formulate an entirely new preferred project. The 1996 baseline does not offer a reasonable yardstick against which to measure the impacts of Alternative D or any other project alternative (including No Action).

Response:

Please see Response to Comment SAL00004-8 regarding the 1996 baseline and the analysis of updated conditions provided in the Supplement to the Draft EIS/EIR. Contrary to the commentator's statement, FAA and the City of Los Angeles did not withdraw the 2001 Draft EIS/EIR. In fact, that document continues to be an important part of the environmental analysis and, together with the Supplement to the Draft EIS/EIR, provides a comprehensive evaluation of potential impacts associated with the No Action/No Project Alternative and the four build alternatives currently under consideration. Moreover, the Supplement to the Draft EIS/EIR was not prepared because of changes to the baseline resulting from the events of September 11, 2001. Rather, FAA and the City of Los Angeles prepared the Supplement to the Draft EIS/EIR to evaluate the impacts of a new build alternative, Alternative D. Alternative D was formulated to provide a build alternative designed to serve a level of future (2015) airport activity comparable to that of the No Action/No Project Alternative.

SAL00013-13

Comment:

- Piecemeal efforts to remedy the outdated baseline have further obscured understanding. The frequent shifting from one baseline nomenclature and timeframe to another is, at best, confusing. At worst, it conceals the underlying impacts that this 2003 Supplemental Draft EIS/EIR is intended to illuminate.

Response:

This comment is similar to comment AL00022-12; please see Response to Comment AL00022-12.

SAL00013-14

Comment:

- The most pressing problems at LAX are lack of adequate runway length on the north complex, the security threat of private autos near the terminals, and lack of international gates. Yet the Phase One construction plan addresses none of these for many years and instead concentrates on the airport fringes (the GTC and ITC) and on demolishing and rebuilding perfectly useable terminals to accommodate New Large Aircraft. This sequence does not match the environmental and congestion priorities evident at LAX.

Response:

The content of this comment is similar to Comment SAL00013-45. Please see Response to Comment SAL00013-45.

SAL00013-15

Comment:

- The SDEIS/EIR contains numerous comments and statements that create an appearance of project advocacy. Even the appearance of advocacy is inappropriate given the policy guidelines contained in CEQA and NEPA and it seriously undermines confidence in the objectivity of the Draft EIS/EIR and its commitment to full disclosure.

Response:

Comment noted.

SAL00013-16

Comment:

- The 2001 DEIS/EIR was found to lack even the most elementary NEPA requirements for Environmental Justice; many deficiencies remain in the 2003 SDEIS/EIR. In particular, Alternative D shifts many impacts toward the more economically disadvantaged communities east and northeast of LAX, and appears to protect biological resources at the expense of residents in Lennox, Inglewood & Manchester.

Response:

Considerable attention has been paid to the topic of environmental justice. The Draft EIS/EIR and Supplement to the Draft EIS/EIR addressed environmental justice in Section 4.4.3, Environmental Justice, with supporting technical data and analyses provided in Appendix F of the Draft EIS/EIR and Appendix S-D of the Supplement to the Draft EIS/EIR. The analysis provided is extensive, with over 125 pages of narrative, maps, and tabular data. The analysis followed relevant guidance for addressing environment justice and was prepared after a comprehensive review of other analyses prepared for large projects across the country in order to give the issue full and careful consideration. LAWA and the FAA's recognition of the importance of the issue is also demonstrated by their having convened an Environmental Justice Task Force, and by a community outreach program that involved among other efforts, seven workshops in surrounding communities specifically focused on the issue. This program is further described in Topical Response TR-EJ-2. LAWA and the FAA have made a strong effort and believe that the assessment of environmental justice presented in the Draft EIS/EIR, Supplement to the Draft EIS/EIR, and Final EIS/EIR is fair and complete.

Regarding the comment that Alternative D appears to shift the burden of airport improvements away from wealthier communities on the north and south toward the more disadvantaged communities to the east, physical improvements to the airport are generally concentrated along its existing boundaries in areas to the west of the I-405 in predominately non-minority/low-income communities. These communities would be most effected by construction impacts and operational impacts associated with traffic. It is true that Alternative D would have a disproportionate and adverse effect on minority and low-income communities due to aircraft noise, similar to the other build alternatives. Under Alternative D, 87 to 93 percent of the population newly exposed to high noise levels would be located in disadvantaged communities to the east, based on the 1990 and 2000 Census, respectively. However, Alternative D would result in the fewest minority and low-income residents being newly exposed to high noise levels of the build alternatives. Furthermore, compared to Year 2000 conditions, implementation of Alternative D would result in a greater reduction in the overall population exposed to high noise levels than if the project were not approved, as represented under the No Action/No Project Alternative.

Regarding run-way extensions to the east favoring biological resources over residents, all of the build alternatives have set a priority to avoid the El Segundo Blue Butterfly Habitat Reserve. As further described in Chapter 3, Alternatives, of the Draft EIS/EIR, several alternatives were considered and rejected during the process that led to selection of the current set of alternatives. Concepts that involved runways further to the west were rejected due to environmental concerns and objections voiced by the U.S. Fish and Wildlife Service in order to protect habitat for the El Segundo blue butterfly, a federally listed endangered species. This area is formally recognized and designated by both the City and County of Los Angeles for preservation in recognition of its importance as unique habitat for an endangered species. While the loss of habitat for an endangered species would be permanent, the

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shifting of runways to the west would result in negligible benefits in noise reduction to communities to the east, since the basic approach and departure patterns to the east would not substantially change and there would be other physical constraints that would substantially restrict the extent of a runway shift to the west. In addition, improvements in technology over time would continue to reduce the noise generating characteristics of aircraft. It is also important to note that the general western limit of the runways and avoidance of the dunes is consistent with existing airport conditions and is not a unique feature of Alternative D. As previously noted, the overall population in minority and low-income areas to the east that would be exposed to high noise levels with implementation of Alternative D would be reduced compared to conditions without approval of the project as represented under the No Action/No Project Alternative.

SAL00013-17

Comment:

- The document fails to disclose issues and concerns raised in Environmental Justice (EJ) workshops, defers evaluation of critical environmental justice impacts (including Air Quality and Health Effects) due to lack of data, offers ill-defined mitigations, and offers a preferred project that protects butterflies at the expense of residents and schoolchildren.

Response:

Regarding disclosure of issues and concerns raised in environmental justice workshops, please see Response to Comment SAL00013-55 below. Regarding environmental justice impacts and lack of data concerning air quality and health effects see Topical Response TR-EJ-1. The comment regarding ill-defined mitigation measures is not clear, however, see Response to Comment SAL00013-61 below, and the full set of mitigation measures reflecting changes based on comments received on the Supplement to the Draft EIS/EIR is provided in Chapter 5, Environmental Action Plan, of the Final EIS/EIR. Regarding butterflies at the expense of residents please see Response to Comment SAL00013-16.

SAL00013-18

Comment:

-The noise assessment contains significant discrepancies in the number of dwelling units and population impacted between the baseline year and the data published by LAWA. Additionally, there is an unexplained discrepancy in the year 2000 noise contours shown in the 2001 and the 2003 documents.

Response:

Please see Response to Comment SAL00013-69 regarding measurement versus modeling discrepancies between baseline and quarterly noise reports. The comment does not identify the unexplained discrepancy in adequate detail for it to be addressed.

SAL00013-19

Comment:

- The 2001 EIS/EIR acknowledged that it omitted quantitative assessment of toxic air pollutant exposure due to lack of time; the 2003 document also omitted this assessment, but did not so note. Completion of such studies independent of the environmental review, as proposed, would preclude establishment of baseline conditions. LAWA decision-makers will be unable to make an informed project determination until this data is developed and disclosed.

Response:

Contrary to the statement made in the comment, both the Draft EIS/EIR and the Supplement to the Draft EIS/EIR provide detailed quantitative assessment of exposure to toxic air pollutants (TAPs). Human health impacts are addressed in Section 4.24.1, Human Health Risk Assessment, of the Draft EIS/EIR and Supplement to the Draft EIS/EIR, with supporting technical data and analyses provided in

Technical Report 14a and 14c of the Draft EIS/EIR and Technical Report S-9a and S-9b of the Supplement to the Draft EIS/EIR. The objective of the Human Health Risk Assessment presented in the Draft EIS/EIR and the Supplement to the Draft EIS/EIR was to determine the potential for increased incremental health risk, if any, associated with the implementation of Master Plan alternatives for people working at the airport and for people living, working, or attending school in communities near the airport.

The Supplement to the Draft EIS/EIR was prepared to integrate a new alternative, Alternative D, into the existing environmental review process and to incorporate supplemental information and analysis for the LAX Master Plan. In response to public comment on the Draft EIS/EIR, additional human health risk assessment analyses are presented in Section 4.24.1, Human Health Risk Assessment, of the Supplement to the Draft EIS/EIR and was summarized in the Executive Summary of the Supplement to the Draft EIS/EIR.

In addition, please see Response to Comment SAL00013-56 regarding the level of analytic detail in the Draft EIS/EIR and the Supplement to the Draft EIS/EIR with regards to synergistic health effects of multiple air pollutants and cumulative health risks among minority and low-income populations.

The California Air Resources Board (ARB) released a Neighborhood Assessment Program Work Plan in June 2000. This document recognized that, "from an air quality perspective, evaluating environmental justice issues and identifying differences in impacts among communities will require determining cumulative exposures, which is a technically difficult task." As stated in the work plan, no clear guidance exists as to how to assess air pollution impacts at the neighborhood-scale. One of the objectives of ARB's work plan is to develop guidelines, including technical protocols and methodologies, for conducting neighborhood impact assessments.

In addition, ARB released its "Policies and Actions for Environmental Justice" in December 2001. This document highlights the need to develop technical tools for performing assessments of cumulative emissions, exposure, and health risk on a neighborhood scale. The California EPA Advisory Committee on Environmental Justice met in June 2002 to discuss elements of its Environmental Justice Strategy. One of the elements discussed was the need for research and data collection on cumulative impact assessments.

Given the recognized difficulties with evaluation of cumulative risk, both within groups of chemicals that have common mechanisms of toxicity and within populations with differential health status and health care availability, the approach provided in the Draft EIS/EIR and the Supplement to the Draft EIS/EIR is appropriate. "LAWA will work in cooperation with the affected communities and appropriate regulatory agencies to support and participate in long-term studies that would contribute to an understanding of these types of environmental impacts." In addition, toxicity criteria used in the Draft EIS/EIR and the Supplement to the Draft EIS/EIR incorporated conservative assumptions designed to protect the most sensitive individuals. The Supplement to the Draft EIS/EIR included maps showing risk ranges by census tracts. In addition, please see Topical Response TR-EJ-1 regarding potential health risk impacts on minority and low-income communities.

The Draft EIS/EIR presented an analysis of cumulative health risks for cancer using results of the South Coast Air Quality Management District (SCAQMD) Multiple Air Toxics Exposure Study (MATES-II Study). This study provided estimates of cancer risks due to toxic air pollutants in ambient air for the entire South Coast Air Basin. Thirty toxic air pollutants were monitored and evaluated in the MATES-II Study for their contribution to excess lifetime cancer risk within the general population living in the South Coast Air Basin. Risks calculated in the study were based on data collected from April 1998 through March 1999. This study integrated impacts from freeway systems along with all other sources of toxic air pollutants in the region. The study concludes that the current excess population cancer risk resulting from exposure to toxic air pollutants is about 1,400 in one million (1.4×10^{-3}) in the South Coast Air Basin. Particulate matter from diesel-fueled engine exhaust (PM₁₀) was found to be the dominant pollutant, contributing approximately 70 percent of the total risk. The dominant source for diesel-related PM₁₀ within the Basin is mobile sources such as trucks, buses, automobiles and locomotives. The results of the MATES-II study were used as estimates of background cancer risk in the Draft EIS/EIR. Estimated risks associated with LAX operations are compared to risks associated with other sources to determine the impact of LAX operations on cumulative risks (risks associated with LAX operations plus background risks) for people living in the South Coast Air Basin in Section 6.7, Cumulative Risks Associated with LAX Operations, of Technical Report 14a of the Draft EIS/EIR.

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An analysis of cumulative health hazards for impacts other than cancer was not provided in the Draft EIS/EIR, but is included in the Supplement to the Draft EIS/EIR. Cumulative impacts were evaluated for chronic and acute non-cancer health hazards using data from the U.S. Environmental Protection Agency (USEPA). These data can be used in a general way to illustrate the possible range of relative impacts among the build alternatives, but lack resolution to make predictions of impacts for specific locations around the airport. USEPA provides estimates of non-cancer hazards for toxic air pollutants based on information from the Toxics Release Inventory and other sources, and air dispersion modeling. USEPA predictions were used as estimates of current total impacts from all sources in the vicinity of LAX and thus provided the baseline for assessment of cumulative impacts. Additional detail was provided in Technical Report S-9a of the Supplement to the Draft EIS/EIR.

EPA. 2002. Organophosphate Pesticides: Revised OP Cumulative Risk Assessment. Web site URL: <http://www.epa.gov/pesticides/cumulative/rra-op/>

SAL00013-20

Comment:

The noise modeling results were based on inadequate flight track data.

Response:

Comment noted. LAWA's Environmental Management Division - Noise Bureau's computer program based on FAA ARTS data was used to automatically assign flight traffic data. This computer program is also used in developing LAWA's Quarterly Noise Reports that are reviewed and approved by the County of Los Angeles. Please see Section 2.1.3, Flight Tracks, of Appendix S-C1, Supplemental Aircraft Noise Technical Report of the Supplement to the Draft EIS/EIR. Please also see Topical Response TR-N-1 regarding the noise modeling approach, in particular Subtopical Response TR-N-1.4 regarding simplified line drawing flight tracks vs. track dispersion.

SAL00013-21

Comment:

- Nitrogen oxides were determined to have significant impacts before and after mitigation, but would be reduced the least under the proposed mitigation measures. The proposed mitigation measures do not appear to successfully address nitrogen oxides.

Response:

Comment noted. The proposed mitigation measures would reduce NOx emissions to the extent feasible from construction and on-airport impacts. Extremely conservative emission estimates were used as the baseline from which mitigation measure emission reduction credit was taken. No emissions credits were assumed for any regulatory requirements or City of Los Angeles-sponsored ordinances. A Mitigation Monitoring and Reporting Plan will be prepared and implemented upon project initiation to ensure that measures for which emission reduction credit was taken will be enforced. If NOx emissions are significant (even with mitigation), a Statement of Overriding Considerations would be adopted.

SAL00013-22

Comment:

- The 'ratioing' technique used to update the analyses of airport pollutant sources for Alternatives A, B and C, and No Action, makes it difficult to fairly compare the alternatives.

Response:

Please see Response to Comment SAL00013-120 regarding the ratioing technique.

SAL00013-23

Comment:

- LAWA Decision-Makers will not be adequately informed until the environmental documentation provides thorough review of the following alternatives:
- Relocation of New Large Aircraft Facilities to Another Airport
- Major Shift of Airport Facility Improvements from East (Human Habitat) to West (Butterfly Habitat)
- Development of a Minimum Airport Improvement Plan incorporating only High Priority elements

Response:

Comment noted. Please see Responses to Comments SAL00013-36, SAL00013-39, and SAL00013-40 below.

SAL00013-24

Comment:

The County looks forward to reviewing LAWA's responses, particularly with respect to the additional commitments requested throughout this comment letter. At the same time, the County believes that LAWA's interests would be best served through preparation of a comprehensive revised Draft EIS/EIR in which the full record of information is consolidated in a manner that facilitates public review and agency decision-making.

Response:

Comment noted. The Final EIS/EIR consolidates the information contained in the 2001 Draft EIS/EIR and the 2003 Supplement to the Draft EIS/EIR.

SAL00013-25

Comment:

2.0 INTRODUCTION TO THE COMMENT LETTER AND REPORT ORGANIZATION

A.C. Lazzaretto & Associates has again been retained by the Los Angeles County Chief Administrative Office to review and comment on a Supplement to the Draft Environmental Impact Statement/Environmental Impact Report (SDEIS/EIR) prepared by Los Angeles World Airport (LAWA) to address the impacts of a proposed Master Plan for Los Angeles International Airport (LAX). The SDEIS/EIS was issued in response to considerable public comment on the Draft EIS/EIR and Master Plan presented during 2001 and in response to the terrorist attacks that occurred on September 11th of that year. The SDEIS/EIR introduces a new preferred alternative -- Alternative D, the Enhanced Safety and Security Plan. In reviewing the Supplement, we have again noted the high quality of writing, and the thoughtful organization and presentation of materials that is evident in many of the technical reports. We again conclude, however, that the documents are substantially compromised by significant errors, omissions, and biases. We submit that LAWA has used improper procedures -- under CEQA and NEPA -- to introduce the new preferred Alternative D, and we conclude that LAWA has offered misleading statements concerning the potential for further growth at LAX.

The review team assembled by A.C. Lazzaretto & Associates includes all firms who contributed to the 2001 review, as well as a new firm -- BoydForbes, Inc. -- that was brought in to review the highly technical, and critically important issues pertaining to airport safety and security. Based in Colorado, BoydForbes, Inc. is one of a handful of firms that specialize in airport security and have the ability to critically review the environmental documentation pertaining to this topical issue. Team members who also participated in the earlier effort include Michael Brandman Associates, Bauer Environmental Services, Austin-Foust Associates, and Mestre Greve Associates. Each of these firms is a leader in the field of environmental review and key members have extensive experience working with the environmental review of airport projects.

3. Comments and Responses

In performing the task of reviewing the Draft EIS/EIR, the County has made every attempt to offer objective, constructive comments concerning the major elements of the Draft EIS/EIR. We have made note as appropriate where issues may involve diverse views among experts.

The following report is organized to facilitate LAWA's review and response to the issues raised. As such, the general flow of this review document follows the topic pattern of the Supplement to the DEIS/EIR; however, there are many sections that have been rearranged in order to emphasize a particular point or to clarify the issue at hand. This is particularly true in the following discussion (§3.0 below) which deals with general issues that are evident throughout the SDEIS/EIR document and are not specific to any single section.

This document focuses only on issues of concern to the County from a legal standpoint, and does not attempt to identify or discuss those sections in the SDEIS/EIR that appear to meet State or Federal guidelines. This is not to say that sections not mentioned in this document can be assumed adequate; rather, the sections are omitted from this document in order to focus on areas of greatest concern to the Los Angeles County Board of Supervisors.

3.0 GENERAL ISSUES

This section identifies issues that are evident throughout the entire Supplement to the DEIS/EIR document. Typically, the issues raised in this section deal with the backbone of the SDEIS/EIR and, therefore, the errors, omissions, and faulty conclusions identified herein are those that compromise the validity of the Supplement to the Draft EIS/EIR as a whole.

Response:

Comment noted. Please see Responses to Comments SAL00013-26 through SAL00013-49 below.

SAL00013-26

Comment:

3.1 ALTERNATIVE "D" DOES NOT CONSTRAIN GROWTH AT LAX

3.1.1 Airside Gate Frontage Far Exceeds Stated Levels

The SDEIS/EIR claims that Alternative D would serve, in the year 2015, no more passengers than would be expected with current airport facilities (approximately 78 Million Annual Passengers [MAP]). Despite massive improvements to the capacity of the runways and terminals, the SDEIS/EIR also claims that passenger limits will be assured by limiting "airside gate frontage." These assertions do not hold up to scrutiny. In fact, Alternative D increases "airside gate frontage", increases the number of aircraft gates, and increases aircraft gate efficiency beyond the levels contained in the No Project Alternative. The Master Plan states that:

"Alternative D is described as constrained because...facilities would not be designed to accommodate the unconstrained aviation demand forecast profile. Specifically, the terminal frontage available in Alternative D to park aircraft side-by-side is less than the equivalent terminal frontage available in the No Action/No Project Alternative." (emphasis added)

Further, the Supplement to the EIS/EIR states:

"The net effect of these terminal changes would be a reduction in the total airside gate frontage available for aircraft gates and in the number of available aircraft gates to match the peak gate requirements identified in the Alternative D design day schedule."

Neither the Supplement to the Master Plan nor the Supplement to the Draft EIS/EIR provides any further explanation, data or calculations to substantiate those statements. On the contrary, as shown on the attached table, Aircraft Gate Comparison, various graphics in the Master Plan provide evidence directly contravening those statements.

Table 1
AIRCRAFT GATE COMPARISON

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EXISTING, NO PROJECT & ALTERNATIVE "D"1

	1996 Existing			2015 No Project		Alternative D		
Air Carrier Parking Length (ft.)	Commuter Contact	Frontage Gates	Air Carrier Parking	Commuter Contact	Air Carrier Parking Length (ft.)	Commuter Contact	Frontage Contact	Gates
Terminal								
1	14	6	1,740	16	0	0	0	0
2	10	0	1,201	10	0	0	0	0
3	12	3	2,104	12	0	0	0	0
4	10	10	n/a	13	0	16	0	n/a
5	16	0	n/a	16	0	16	0	n/a
6	10	14	n/a	13	0	13	0	n/a
7	12	0	n/a	12	0	15	0	n/a
8	8	0	n/a	8	0	0	19	n/a
TBIT	12	0	2,111	12	0	19	0	3,184
Remote	0	0	0	19	33	0	0	0
New West	0	0	0	0	0	27	13	4,148
New North	0	0	0	0	0	15	0	3,416
TOTAL	104	33	7,156	131	33	121	32	10,748

The amount of "airside gate frontage available for aircraft gates" is easily calculated using scaled drawings contained in the Master Plan. As shown on the attached Table 1, Alternative D includes an increase of nearly 3,600 linear feet of terminal frontage: Terminals 1, 2 and 3 will be replaced by the New North Terminal; Tom Bradley International Terminal will be reconfigured; and a New West Terminal will be built. No changes will be made to Terminals 4 thru 8. The total existing frontage of the terminals being modified is thus 7,156 feet; following proposed modifications, the terminals will encompass 10,748 feet -- an increase of 3,592 feet. To substantiate its claim concerning existing conditions, the Master Plan must be including the "remote gates" that are little more than apron area where aircraft are parked. These areas with their low efficiency are not a suitable comparison to actual aircraft gates with jetways linked to a terminal. To suggest differently is to ignore well-established planning factors for passenger processing.

The number of aircraft gates also increases with Alternative D. The Master Plan Supplement uses figures in its summary tables to indicate that the No Project Alternative has 163 gates and that Alternative D has 153 gates -- indicating a reduction. However, these figures do not correspond to other figures in the Master Plan. For example, Table ES-2 in the Master Plan Supplement indicates 115 contact gates and 48 remote gates for an existing total of 163. However, Figure II-3.2 of the Existing Conditions Working Paper (Chapter 2 of the Draft Master Plan), provides a detailed accounting of all existing gates and aircraft parking spaces, and it shows quite clearly that there are only 104 contact air carrier gates at present. Additionally, it shows 33 parking places for commuter aircraft located adjacent to terminals 1, 3, 4 and 6 and accessed via stairways. Except for one passing reference to 36 Narrow Body Equivalent Gates with access to the Bradley Terminal, Chapter Two makes no mention of the 19 remote gates in the northwest corner.

In the No Project Alternative, some of the parking spaces used for commuter flights have been converted to parking spaces for air carriers, and those spaces are now counted among the air carrier gates in the No Project Alternative. Furthermore, the 19 remote aircraft parking spaces have become prominent in the SDEIS/EIR No Project Alternative, implying that there are now 131 "gates" for air carriers and 32 "gates" for commuters. In reality, there are no more true contact gates today than there were in 1997. It is only that some existing concrete apron space formerly used for maintenance and other uses is now being used on a regular basis to park scheduled aircraft. This practice requires that passengers are bussed to the terminals, in a manner that the Master Plan admits is costly and inefficient. In simpler terms, there are now 112 air carrier parking spaces adjacent to the terminals, 19 remote air carrier parking spaces in the northwest corner, and areas for parking approximately 32 commuter aircraft at two remote locations.

Aircraft gates for Alternative D are depicted very clearly on Figure 2.2-4 Gate Layout and Utilization in the Supplement to the Master Plan. This Figure shows 121 air carrier contact gates and 32 parking spaces for commuter aircraft and/or regional jets. Alternative D also includes the conversion of 8 existing air carrier contact gates in Terminal 8 to spaces to park 19 commuter turbo props/regional jets.

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The evidence is quite clear that Alternative D provides 8 more air carrier contact gates than the No Project Alternative, and in a configuration that is more efficient.³ Additionally, under Alternative D LAWA retains the flexibility to create remote gates on available apron space. As the historical evidence shows, LAWA has not prepared environmental documentation for similar operational modifications at LAX in past years. Furthermore, LAWA could easily retain the eight contact gates in Terminal 8, thereby boosting the total for Alternative D to 129 contact gates - 15% more than the existing LAX layout. Accordingly, under Alternative D LAWA has the potential to increase the number aircraft gates, increase airside terminal front footage, replace inefficient aircraft gates with more efficient ones and create additional remote gates.

1 '1996 Existing' data obtained from Master Plan Figure II-3.2; '2015 No Project' data obtained from Figure ES-1; 'Alternative D' data obtained from Figure 2.2-4.

2 A "contact gate" includes traditional numbered gates in the terminal and a jet way to a waiting aircraft.

3 Linear configurations offer more flexibility than the current cul-de-sac design; the Construction Phasing Plan notes that the reconstruction of terminals 1,2, & 3 into a linear configuration will create a "continuous Group VI flightline."

Response:

Comment noted. The Draft LAX Master Plan, the Draft LAX Master Plan Addendum, the Draft EIS/EIR, and the Supplement to the Draft EIS/EIR correctly state the number of gates for each alternative including Alternative D and the No Action/No Project Alternative. As described in Table S3-2 in Chapter 3 of the Supplement to the Draft EIS/EIR, LAX would have 153 gates (all contact) with implementation of Alternative D while LAX would have 163 gates (115 contact and 48 remote) under the No Action/No Project Alternative. The number of existing gates was reduced from 165 (Table 2.2-1 Existing 1996) to 163 (Table 2.2-2 Existing 2002) due to the consolidation of four narrowbody domestic gates into two Group V international gates as described in Section 2.2, Aircraft Gates (subsection 2.2.7), of the Draft LAX Master Plan Addendum.

The existing remote gates are used on a daily basis and the remote jet gates are located at the west pad facility at the west end of the airport north of World Way West. The west pad facility is a complex of 19 aircraft parking positions, 9 of which have remote boarding gate structures. These facilities are used primarily for international flights and are scheduled for use on a regular basis. The existing remote gates are factored into the calculation of gate frontage in the baseline figure.

Alternative D would constrain the passenger activity by providing less gate frontage and fewer total gates than the No Action/No Project Alternative. As presented on page 3-22, in Table S3-2, Summary of Facilities by Alternative -2015, of Chapter 3 of the Supplement to the Draft EIS/EIR, the total nominal gates for Alternative D is 153, which equates to 178.9 narrow body equivalent gates in 2015. The No Action/No Project Alternative would provide 163 nominal gates, which equates to 194.2 narrow body equivalent gates, higher than the 178.9 narrow body equivalent gates in Alternative D. The narrow body equivalent gate conversion factor provides consistent methodology for evaluating gate apron utilization. This index converts the gate requirements of diverse aircraft fleets from the smallest to the largest aircraft so they are equivalent to the capacity of a typical narrow body aircraft gate. The amount of space each aircraft requires is based on wingspan.

The remote gate positions are regularly used; therefore they are included in the total gate count for No Action/No Project Alternative. Alternative D includes 121 total air carrier contact gate while the No Action/No Project Alternative includes 115. However, the total 121 air carrier gate positions in Alternative D is less than the total 134 air carrier gate positions in No Action/No Project Alternative. Please see Table 2.2.3, Number of Gates by Aircraft Group, in Section 2.2, Aircraft Gates (subsection 2.2.7), of the Draft LAX Master Plan Addendum.

The commentor incorrectly understated the design approach of Alternative D. Alternative D would eliminate the remote gates at the existing west pad facility and this area would be prohibited from use as a remote passenger boarding location as stated on page 3-45, in Section 3.3.2, Alternative D - Enhanced Safety and Security Plan, of the Supplement to the Draft EIS/EIR. The new west satellite concourse would be constructed at one of the two location of the existing remote commuter gates. One of the two ground run-up enclosure (GRE) facilities would be located on the existing Delta Airlines maintenance apron adjacent to the existing United Express maintenance facility at the other remote commuter aircraft boarding area.

The environmental analyses in the Draft EIS/EIR and Supplement to the Draft EIS/EIR, including noise and air quality, have addressed the potential impacts under the most practical and most likely activity level for each alternative including Alternative D. The Draft EIS/EIR and Supplement to the Draft EIS/EIR evaluated a reasonable range of alternatives as required by the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA).

SAL00013-27

Comment:

3.1.2 Runway Design Capacity is Understated

The preferred alternative will also serve future growth through the proposed runway design: the runway configuration for Alternative D has the same or higher capacity as Alternative C -- 90 MAP. Alternative D, in the same manner as Alternative C, addresses existing runway constraints by lengthening both of the north complex runways and by increasing the separation distance between them. The fact that the new four runway system can handle more than 78 MAP is stated very clearly in the Master Plan addendum on page 3-4: "Alternative C's projected annual passenger activity level served is limited by the capacity of the four-runway system and is forecast to be approximately 89.6 million (air passengers)" Given that Alternative D uses the same 4-runway configuration as Alternative C, and Alternative D extends RW 6L/24R an additional 1,000 feet farther than does Alternative C, it can be concluded that the capacity of the runways under Alternative D is the same or more than Alternative C - - approximately 90 MAP.

Response:

Alternative D does not increase runway capacity. As described in the Supplement to the Draft EIS/EIR, the Alternative D runway system would have a runway capacity approximately equal to that of Alternative C runway system. The No Action/No Project Alternative, Alternative C and Alternative D each feature four-runway airfield's with approximately the same runway capacity. Please see SPHF00021-3 regarding runway operations. The passenger activity that would be expected in 2015 with Alternative D was determined based on the design of the Alternative D gate facilities and the projected airline response to the constrained facilities.

SAL00013-28

Comment:

3.1.3 Passenger Levels will be Much Higher than Forecast for Alternative D

Alternative D will allow unconstrained growth through the year 2015. Unlike the most recent FAA forecasts, the "unconstrained forecast" of 98 MAP in the Master Plan has not been updated to reflect changes in the air industry that have occurred following the events of 9/11. The most recent FAA Terminal Area Forecasts for LAX indicate that service levels at LAX will not reach the year 2000 levels (64 MAP) until the year 2008 and that service levels in 2015 will be approximately 81.6 MAP. Using those figures, Alternative D provides little if any constraint on growth.

Alternative D understates the passengers per operation. Alternative D accommodates the new Super Jumbo A380 (referred to in the Master Plan as the New Large Aircraft by creating a separation of 1040 feet between the two northern runways and by demolishing terminals 1, 2 and 3 and reconstructing a "continuous Group VI flightline."⁴ The arrival of the New Large Aircraft, with almost 600 seats, will increase the passenger handling capacity of the runways and airspace by increasing the number of passengers per aircraft operation. Nevertheless, the Master Plan forecasts that Alternative D will have a lower number of passengers per operation than Alternative C and in fact forecasts a lower number than currently exists. As indicated on Table 3.3-1 of the Master Plan Addendum, Alternative D is forecast to have only 121.06 passengers per air carrier operation, while Alternative C is forecast to have 124.95. The table fails to include the actual numbers for the years 1996 and 2000. However, information from the LAWA web site indicates that passengers per air carrier operation totaled 109.5 in 1996, 119.65 in 2000, 116.62 in 2001, 123.18 in 2002, and 125.4 thru July of 2003. The number of passengers per operation is expected to continue to increase as airlines increase the size of aircraft and increase their load factors (percentage of sold seats.) Furthermore, there is a large and unexplained increase in the number of commuter flights (from 109,000 in Alternative C to 183,000 in Alternative D). Commuter

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flights average only about 20 passengers per aircraft. If some of the capacity used for commuter operations was used instead for air carrier operations, the number of passengers would again increase. There is thus abundant evidence that the runway capacity proposed under Alternative D is much greater than 78 MAP.

4 In contrast, the south runways will be separated only by 795 feet which is sufficient for aircraft such as the B747.

Response:

Alternative D would not allow unconstrained growth through 2015. According to FAA's 2002 TAF, LAX would expect 81.6 MAP in 2015. However, Alternative D is designed to serve approximately 78.9 MAP, approximately the same number of passengers as the No Action/No Project Alternative in 2015.

The purpose of moving the north airfield runways further apart is to provide adequate separation between the closely spaced parallel runways for a center parallel taxiway. The purpose of the center taxiway is to enhance safe aircraft operations and reduce the potential for runway incursions. The proposed center taxiway on the north airfield complex would be designed to accommodate New Large Aircraft (NLA) anticipated in the future aircraft fleet mix. Please see Response to Comment SPHO00004-9.

As described in Table S3-3, 2015 Activity Comparison, in Section 3.3.2, of the Supplement to the Draft EIS/EIR, Annual Enplanements per Departure, 2000 Actual was 94.69 while with Alternative D in 2015 the number would increase to 110.59.

In discussing the number of passengers per air carrier operation, the commentor fails to take into account the impact of commuter operations on the total enplanements per departure in 2015. With Alternative D, LAX would be suited to handle most of the region's international long haul wide body service in addition to the regions commuter aircraft. Domestic narrow body air carrier operations are the most likely flights that would shift from LAX to the region's other airports once LAX becomes constrained, as it would in Alternative D, because they primarily serve O&D passengers that are less reliant on a hub facility. This explains the large increase in the number of commuter flights at LAX in Alternative D in 2015. The majority of LAX commuter passengers connect to other flights. No other Southern California airport is currently capable of serving the connecting traffic or international traffic as well as LAX. Additionally, Because LAX is the sole major international airport in Southern California, the number of international operations would not be as sharply impacted by the various build alternatives relative to commuter operations.

The centerline separation between the south airfield runways would be 800 feet in Alternative D, which would provide 400 feet from each of the runway centerlines to the proposed center parallel taxiway. This meets FAA Group V design guidelines. However, through a modification to standards and operational limitations, NLA would also operate on the south airfield upon completion of the proposed improvements associated with Alternative D.

SAL00013-29

Comment:

3.1.4 Terminal Space in Alternative D is Equivalent to Alternative C

Alternative D increases terminal space by 70%. The proposed increase in terminal space from 4 million square feet (msf) to 6.8 msf represents a considerable increase - 70% higher than existing. The resulting capacity is only 8% less than Alternative C, again indicating an ability to handle many more than 78 MAP.

Response:

Alternative D was developed after the events of September 11 and the increased terminal space in Alternative D is the result of incorporating evolving federal airport security requirements. The number of passengers that would be accommodated by Alternative D would be constrained to 78.9 MAP based on

the design of the Alternative D gate facilities and the projected airline response to the constrained facilities.

SAL00013-30

Comment:

3.1.5 The No Project Alternative Cannot be used to Evaluate Alternative D.

Comparison with the No Project Alternative does not provide a reasonable basis to conclude there will be no additional growth. As discussed below in §3.4.2, the origins of the service levels used in the No Project Alternative are obscure and undocumented, thus casting some doubt upon their validity. If the No Project service levels are inflated, as we anticipate, then Alternative D would surely be promoting growth as the service levels increased from the current 55 MAP to 78 MAP.

Response:

Comment noted. The No Action/No Project Alternative would essentially leave the existing airport infrastructure in place. The existing CTA is the constraining physical infrastructure element at LAX today and would be for No Action/No Project Alternative in 2015. The passenger activity for No Action/No Project Alternative was developed based on its constrained curb and roadways where passengers are dropped off and picked up in front of the existing terminals. The resulting annual passenger performance measure of this alternative is approximately 78 million. Implementation of Alternative D would shift the constraining infrastructure element to the terminal gate frontage. However, the airport would remain constrained to serve approximately 78.9 MAP.

SAL00013-31

Comment:

3.2 IMPROPER USE OF A SUPPLEMENT TO THE DRAFT EIS/EIR

The CEQA Guidelines state that a Supplement to an EIR may be prepared if changes to a project are not considered major §15162(a)). Where the changes necessitate major revision to a previous EIR, CEQA requires preparation of a Subsequent EIR. Both types of documents must receive the same notice and public review requirements as the original EIR. However, in a Subsequent EIR, all information must be presented, whereas in a Supplemental EIR only new or revised information need be presented. Discussion provided in Public Resources Code §21166 (and CEQA Guidelines §15162 and §15163) indicate that both types of review are intended for use in connection with previously certified or approved environmental documents. For documents that have not yet been certified, CEQA outlines a procedure for recirculation. Discussion provided with the CEQA Guidelines states specifically that, "Circulating a subsequent EIR or supplement to an EIR is not "recirculation" as described under §15088.5."

In the present case, there is no previously certified or approved document. Furthermore, review of the Supplement to the Draft EIS/EIR provides incontrovertible evidence that changes to the proposed project are major and affect the entire environmental assessment: LAWA has presented an entirely new alternative as the preferred project, and the alternative was created to meet safety and security challenges that did not exist in 2001. In effect, the entire framework for this project - from the baseline conditions, to the project purpose and need, to the very project itself - changed following September of 2001, and yet LAWA used a CEQA format intended for minor changes to a certified EIR.

Finally, the format used by LAWA serves to obfuscate rather than facilitate understanding of this complex project.⁵ Every reasonable interpretation of CEQA would indicate that LAWA should have addressed the project through preparation of a comprehensive revised Draft EIS/EIR, in which the full record of information was consolidated in an effort to facilitate public review and agency decision-making.

Public review and lead agency decision-making would also have been far better served by providing copies of the comment letters submitted during public review of the original EIS/EIR. During 2001, the County of Los Angeles devoted considerable time, public funds and staff effort to review and submit comments on the extensive Draft EIS/EIR and Master Plan documentation released by LAWA at that

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time. Surely a similar effort was spent by many other agencies, organizations and individuals, and it is probable that the collective comments contained a wide range of information that would have been relevant to the current review. Despite this fact, the Supplement to the Draft EIS/EIR makes no effort to present or even summarize the earlier comment letters. This approach creates a process that is confusing and cumbersome for reviewing agencies and organizations, and thwarts an opportunity to advance public participation. A response to the earlier comments would have served to advance public discourse, strengthen the opportunity for environmental protection, and facilitate an understanding of the Lead Agency's thinking on a wide range of key issues. We acknowledge that LAWA was under no obligation to respond or acknowledge the earlier comment letters. However, the failure to have done so belies a continuing pattern of disinterest in public views that was established in 2001.

5 At a minimum, the SDEIS/EIR Index (§7.7) could have provided the reader with a more listing of topical issues and where they can be found, along with a cross reference to text discussions in the 2001 and 2001 documents. Instead, the Index offers only a cursory guide to topical discussions (for example, the Index contains no references for "cumulative impacts") and provides no useful tools for locating or accessing analyses from the 2001 Draft EIS/EIR.

Response:

Comment noted. The Supplement to the Draft EIS/EIR provides a comprehensive analysis of Alternative D in a manner and format similar to that provided in the Draft EIS/EIR for the No Action/No Project Alternative and Alternatives A, B, and C. In addition, the Supplement to the Draft EIS/EIR provides certain new information applicable to all alternatives in a format compatible with that of the Draft EIS/EIR. It is unnecessary, and would have been unduly burdensome to the reader, for the Supplement to have incorporated all of the information from the Draft EIS/EIR, and also present or summarize the comment letters submitted on the Draft EIS/EIR as suggested in the comment. The content and format of the Supplement to the Draft EIS/EIR was specifically designed and intended to allow the reader to focus on new information during the public review period, while also offering the ability to directly compare the analysis within the Supplement to the Draft EIS/EIR to the analysis within the Draft EIS/EIR (i.e., review copies of the Draft EIS/EIR were made available at the same time and same locations as the Supplement to the Draft EIS/EIR).

It is important to note that the EIS/EIR for the proposed LAX Master Plan is a joint NEPA/CEQA document. Federal Council on Environmental Quality (CEQ) Regulations 40 CFR Section 1502.9(c) and FAA Order 5050.4A Paragraphs 28 and 104 address the use of supplements, and specifically recognize the use of supplements for draft environmental impact statements. Paragraph 28 states: "The choice of preparing a supplement to a previously prepared draft or final environmental impact statement is appropriate in some instances of tiering, or when significant changes occur affecting the validity of previously prepared documents, or when significant new information is brought to light." Paragraph 104, subsection "b." states: "A change in the proposed action, in the environmental circumstances, or in the agency's decision may cause a supplement to a draft or final impact statement or to a FONSI to be prepared soon after the original document. If a reasonable alternative which is significantly different from alternatives considered is identified, a supplement shall be prepared."

Section 15226 of the CEQA Guidelines indicates that for joint activities between state or local agencies and federal agencies, state and local agencies should cooperate with federal agencies to the fullest extent possible to reduce duplication, and such cooperation should, to the fullest extent possible, include joint environmental documents. To finalize and certify the EIR for the LAX Master Plan, addressing the No Action/No Project Alternative and Alternatives A, B, and C, and then prepare a Supplemental EIR that incorporates that previous information along with the new information and analysis specific to Alternative D, as suggested by the commenter, would not be consistent with the CEQA Guidelines provisions for joint activities and joint documents. NEPA provides for incorporating new important information into the environmental review process through the preparation and circulation of a supplement to the draft environmental impact statement, in a manner very similar to that described in Section 15163 of the CEQA Guidelines relative to preparing a supplement to an environmental impact report. It should be noted, however, that Section 15162 and 15163 of the CEQA Guidelines did not apply to the Supplement to the Draft EIS/EIR, in part, because a Final EIS/EIR had not been certified.

In accordance with the requirements of NEPA and CEQA, written responses have been prepared for all comments submitted during the review periods for the Draft EIS/EIR and the Supplement to the Draft EIS/EIR. The public, reviewing agencies, and decision makers are now afforded a comprehensive and

systematic co-equal evaluation of all five alternatives (i.e., No Action/No Project Alternative and Alternatives A through D) through the completion of the Draft EIS/EIS and the Supplement to the Draft EIS/EIR and the attendant preparation of written responses to comments on each document.

The comment is incorrect in asserting that the entire framework for the LAX Master Plan project changed following September 2001, and that Alternative D was created to meet safety and security challenges that did not exist in 2001. While Alternative D does provide a particular emphasis on safety and security features, there are many aspects of the plan that respond directly to concerns expressed by the public and agencies relative to the other build alternatives, and Alternative D is specifically designed to avoid or reduce impacts that would otherwise occur under the other build alternatives. Elimination of the proposed west terminal, the LAX expressway, and the ring road is proposed under Alternative D based on community and agency input, and is not driven by safety or security concerns that stemmed from the events of September 11, 2001. Additionally, Alternative D is designed to serve the same level of future (2015) passenger and cargo activity as that of the No Action/No Project Alternative. This key aspect of Alternative D provides for a Master Plan alternative that is consistent with the policy framework of the 2001 Southern California Association of Governments (SCAG) Regional Transportation Plan (RTP), which is not driven by safety and security concerns occurring after September 2001. The purpose and need of the LAX Master Plan and the project objectives, as summarized in the Executive Summary of the Draft EIS/EIR, did not change in the formulation of Alternative D. While Alternative D includes a particular emphasis on safety and security features in its design, it does not invalidate or depart from the basic purpose and need of the Master Plan.

With respect to the comment's suggestion that the Supplement to the Draft EIS/EIR could have provided more of a listing of topical issues and a cross reference to text discussions in the 2001 documents (i.e., the Draft EIS/EIR), such a listing and cross reference is unnecessary given the fact that the structure and format of Supplement to the Draft EIS/EIR paralleled that of the Draft EIS/EIR. All of the environmental disciplines (i.e., noise, land use, surface transportation, etc.) addressed in Chapter 4 of the Supplement to the Draft EIS/EIR follow the same sequence and section numbering as that of the Draft EIS/EIR. As described in the introduction to Chapter 4 of the Supplement to the Draft EIS/EIR, the analytical framework and discussion format applied to each environmental discipline are the same as presented in Chapter 4 of the Draft EIS/EIR. The Index presented in Chapter 7 of the Supplement to the Draft EIS/EIR does not provide references for "cumulative impacts", as noted by the commentor, because such impacts are addressed within the analytical framework of each environmental discipline presented in Chapter 4, in the exact same manner as occurred in the Draft EIS/EIR. The parallel structure of the Draft EIS/EIR and the Supplement to the Draft EIS/EIR is clearly evident in comparing the tables of contents for the two documents, and, with respect to the commentor's inquiry as to where cumulative impacts are discussed, it should be noted that the tables of contents indicate exactly where cumulative impacts are addressed for each environmental discipline. It should also be noted that both the Draft EIS/EIR and the Supplement to the Draft EIS/EIR were made available for review in electronic format, on CDs and on Los Angeles World Airport's (LAWA's) web site, at which the free viewing-software (Adobe Acrobat) includes easy to use search functions and features that can be employed to locate specific information in the documents.

SAL00013-32

Comment:

3.3 INCONSISTENT PURPOSE & NEED STATEMENT

The apparent contradiction between SDEIS/EIR statements and actual intent is also evident in the discussion of project purpose and need. The SDEIS/EIR states, on page ES-1, that the purpose and need for the project have not changed:

"The purpose and need for the LAX Master Plan has not changed since the publication of the Draft EIS/EIR...In particular, the Master Plan project objectives are to:

- Respond to local and regional demand for air transportation during the period 2000-2015, taking into consideration the amount, type, location, and timing of such demand.
- Ensure that new investments in airport capacity are efficient and cost-effective, maximizing the return on existing infrastructure capital.
- Sustain and advance the international trade component of the regional economy and the international commercial gateway role of the City of Los Angeles."

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In a number of text discussions, the SDEIS/EIR affirms that Alternative D responds to the stated purpose and need for this Master Plan, as shown in the excerpts below from pages 2-1 and 3-25:

"Alternative D, the "Enhanced Safety and Security" alternative, offers a well-planned and rational 'regional approach' alternative for improvement of LAX. Alternative D would respond to future demand for air transportation by encouraging, but not requiring, other airports in the Los Angeles area to increase capacity to make up for the limitations of LAX. It would allow airlines to accommodate the demand for international aviation at LAX to the greatest extent possible without otherwise increasing capacity of the airport generally. It would also maintain the return on existing capital investments at LAX. Thus, Alternative D would allow the Los Angeles region to realize some of the important economic benefits outlined in the Draft EIS/EIR, while at the same time enhancing security and safety at the airport and significantly reducing environmental impacts from airport operations to the surrounding communities. "

"Alternative D, as stated previously in § 3.1, Formulation and Refinement of Alternatives, of this document, is a direct response to the strongly expressed desire of many citizens, as indicated in comments received on the Draft EIS/EIR, for a regional approach to airport planning in Southern California that is more aggressive than demonstrated by the previously considered Master Plan build alternatives. The Mayor of Los Angeles, noting the need to fully examine a regional approach to satisfy air transportation demand, directed LAWA to develop a new Master Plan alternative for the improvement of LAX. Responding to the Mayor's direction, the new alternative is designed to:

- Enhance safety and security at LAX for users and to protect the airport infrastructure
- Encourage the development and use of regional airports to serve local demand by constraining the facility capacity at LAX to approximately the same aviation activity levels identified in the No Action/No Project Alternative;
- Maintain LAX as the International Gateway to Southern California; and
- Mitigate the impacts of LAX's continued operation."

At the same time, the SDEIS/EIR emphasizes that Alternative D is equivalent in many ways to the No Action /No Project Alternative. For example, SDEIS/EIR page ES-17 includes the following statement:

"Alternative D would encourage a long-term regional approach to serving air traffic demand in the Los Angeles basin by designing facilities at LAX to accommodate passenger and cargo activity levels equivalent to the No Action/No Project Alternative activity level, but would be designed to allow air carriers to emphasize international routes at LAX."

The Project Description (page 3-25) expands on this theme, including the statement below:

"LAWA determined that constraining the aircraft gate frontage at the terminals is a component of the airport system that is fully within its control. LAWA can constrain the development of this frontage and believes that this will, in turn, place an effective constraint on total passenger activity at LAX. LAWA can also control the amount of available cargo warehouse and processing space at LAX. By constraining the development of these cargo facilities, total cargo activity at LAX would be constrained."

Further, the SDEIS/EIR provides quantitative data to support these statements, as shown below with information excerpted from SDEIS/EIR Tables ES-1 and ES-2.

Table 2 COMPARISON OF NO PROJECT WITH ALTERNATIVES 'C' AND 'D'	No Action/No Project Previously-Preferred	Currently Preferred
Facility Alternative	Alternative C	Alternative D
Cargo-Annual Tons	3,120,000	4,172,000 3,120,000
Total # Nominal Gates	163	168 153
Million Air Passengers	78.7	89.6 78.9

And yet the SDEIS/EIR claims that the No Action/No Project Alternative is seriously deficient. For example, discussion on page ES-7 states that the No Action/No Project Alternative "would fall far short of meeting the projected demand for aviation services at LAX by accommodating approximately 78.7 million passengers (a shortfall of approximately 19.2 million) and 3.1 million tons of cargo (a shortfall of approximately 1 million tons) in 2015."

The SDEIS/EIR also portrays the No Action alternative as de minimis in the scope of its improvements, but allowing for increased passenger and cargo volumes, as shown in discussion from page 3-6:

"This [No Project] alternative includes only minor airport improvements approved as of the publication of the Draft EIS/EIR in January 2001 or that were in the planning stages at that time. The improvements include minor taxiway improvements, new cargo building space, construction of at least one off-airport parking structure, and reconstruction of an on-airport parking structure. Passenger and cargo volumes would continue to increase in response to projected demand, reaching activity levels in 2015 of approximately 78.7 MAP and 3.12 MAT, respectively."

In essence, the Supplement to the DEIS/EIR offers the following unsupportable syllogism: Alternative D meets project goals, Alternative D is substantially the same as No Action, and No Action fails to meet project goals. As discussed more fully below (and in previous sections), we believe that this inconsistency arises from the fact that the EIS/EIR is misleading in its description of alternatives.

6 Note again that the 163 gates shown for the No Project alternative includes 52 remote parking spaces.

Response:

Comment noted. Alternative D is substantially the same as the No Action/No Project Alternative only with respect to the total annual number of passengers and tons of cargo to be served in 2015. Unlike the No Action/No Project Alternative, Alternative D provides for extensive improvements to the airside and landside facilities at LAX, which will substantially improve the efficiency of, and quality of service at, LAX in 2015. These improvements, which do not occur under the No Action/No Project Alternative, complement and enhance the operation, safety, and security of LAX, helping to protect and strengthen the level of investment that the City has made in LAX over the past several decades. Additionally, these improvements, which do not occur under the No Action/No Project Alternative, will further the role of LAX as the key international gateway to southern California. These improvements are an important distinction between Alternative D and the No Action/No Project Alternative, and provide the basis for how and why Alternative D meets the basic project objectives and the No Action/No Project Alternative does not. It is acknowledged that Alternative D does not fulfill all of the stated goals of the LAX Master Plan; however, there is no requirement under NEPA or CEQA that all alternatives must meet all of the stated goals. The addition of Alternative D broadened the range of alternatives being analyzed for the LAX Master Plan.

SAL00013-33

Comment:

3.4 INADEQUATE ASSESSMENT OF ALTERNATIVES

3.4.1 Inadequate Definition and Evaluation of Project Alternatives

The SDEIS/EIR fails to comply with two cornerstone elements of CEQA - that an EIR must describe a reasonable range of Alternatives that would feasibly meet most objectives, but would avoid or lessen significant effects of the project,⁷ and that preparation of an EIR should be guided by a good faith effort at full disclosure.

The Supplement to the Draft EIS/EIR carries forward the project goals that were previously established in the 2001 DEIS/EIR. These goals included: (a) to respond to local and regional demand for air transportation during the period 2000-2015; (b) to ensure that the investment in airport capacity maximizes the return on existing infrastructure capital; and (c) to advance the role of LAX as the international commercial gateway to the region. Alternative D is presented as an option that would fulfill key aspects of the project purpose and need.

The SDEIS/EIR also emphasizes, repeatedly, that Alternative D is substantially the same as the No Action Alternative in terms of meeting transportation demand - as measured by number of gates, number of passengers, number of aircraft operations, and cargo tonnage. Yet the No Action Alternative as presented is clearly deficient in terms of meeting demand for aviation and cargo services.

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If this inconsistency has a sound explanation, it is the job of the SDEIS/EIR to provide that explanation. Instead, the SDEIS/EIR is permeated with unexplained inconsistencies. Similar incongruities were apparent in the 2001 document. The 2001 Draft EIS/EIR presented Alternative C as the preferred action, yet concluded that Alternative C would have more significant unavoidable adverse effects than either of the other two build Alternatives (25 for C; 23 for A; 22 for B), and would fail to meet projected demand.

In this regard, both the Draft and the Supplement to the Draft EIS/EIR fall short of the requirement that environmental documents must provide a clear definition of project goals in association with the selected range of alternatives. As now presented, the data suggest either that Alternative D fails to meet essential aspects of the stated goals, or that Alternative D has not been described in accordance with full disclosure requirements.

7 CEQA §15126.6(f) states, "Alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project."

Response:

While the Draft EIS/EIR provides for a reasonable range of alternatives, the addition of Alternative D is fully consistent with the intent and requirements of the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA) in that it would feasibly meet the project objectives and would avoid or substantially lessen certain significant impacts as compared to the other proposed alternatives. The reduced level of impacts associated with Alternative D can be seen throughout Section 4 of the Supplement to the Draft EIS/EIR, and the fact that it is the environmentally superior alternative is documented in Section 3.6 of the Supplement to the Draft EIS/EIR.

Please also see Response to Comment SAL00013-32 regarding the responsiveness of Alternative D to the project objectives.

SAL00013-34

Comment:

3.4.2 Alternatives are Inconsistent with Baseline Data

On close review, the numbers provided in the Tables entitled "Summary of Activity, Comparison of Alternatives and Summary of Features, Comparison of Alternatives"⁸ do not present a cohesive picture. When compared with data provided throughout the baseline and impact analyses, information contained in this summary statement appears to be fundamentally lacking in logical internal consistency. For example, in describing assumptions made for the No Project Alternative, the Socioeconomic Technical Report⁹ indicates, "The schedule of operations would still show variations throughout the day but the peak period would be at or exceed the airfield's capacity. Congestion, delays and passenger inconvenience would be common all year, not just during peak holiday periods." However, the "Summary of Features, Comparison of Alternatives" contradicts these claims. The Summary indicates that the No Project Alternative would have: (a) fewer all-weather delays than Alternative C (13.2 vs. 13.6); (b) fewer annual cancellations than Alternatives A and C (9,969 vs. 15,477 and 15,814); (c) more public parking stalls than Alternative B; and (d) the same number of all-weather peak operations and 3-hour average operations.

Similar inconsistencies occur with the addition of Alternative D. Most notably, the Design Day activity levels should approximate those for Alternative C given that the runway improvements are nearly identical. Further, public parking stalls and employee parking stalls are equal to or greater than other build alternatives, and rental car acreage is doubled over other alternatives. Passenger terminal square footage is 93% of Alternative C, but the passengers are 88%. This indicates faulty project design without consistent use of planning factors.

8 Pages ES-9 through ES-11.

9 Section 5.1.1.

Response:

This comment is similar to comment AL00022-15; please see Response to Comment AL00022-15 regarding the internal consistency of project description information.

Regarding the consistency of information pertaining to Alternatives C and D, while the number of design day passenger operations are identical between Alternatives C and D, there are more cargo flights in Alternative C. Further, the fleet mix in Alternative D is more focused on supporting international and long-haul passengers with constraints in the available gate space. Alternative C provides fully for the maximum gate requirements accommodated by the four-runway limitation.

Parking in Alternatives A, B, and C does not accommodate all of the parking demand, but leaves the shortfall to be accommodated by the private sector. Alternative D simply maintains the existing amount of parking, which is higher than the number of parking stalls in Alternative B, but lower than the number of stalls in Alternatives A and C. Much of the Alternative D rental car parking would be in surface lots as opposed to structured parking facilities in Alternatives A, B, and C, which accounts for the greater acreage dedicated to rental cars under Alternative D. In addition, some of the rental car facilities were assumed to be off-site in those alternatives. As a result, rental car parking would require greater acreage under Alternative D than it would under the other build alternatives.

Terminal planning for Alternative D occurred after the events of September 11, 2001. Terminal square footage requirements were increased because of increased security requirements to provide additional equipment and space.

SAL00013-35

Comment:

3.4.3 Alternative D may Exceed the Stated Growth Levels

The SDEIS/EIR states that Alternative D evolved from a decision on the part of LAWA and the City of Los Angeles to limit growth. Alternative D does limit growth below that of Alternative A and B. However, as discussed in § 3.1, this alternative would not limit LAX to 78.7 MAP as claimed. Considering the extensive improvements to the airfield, passenger terminals, roadways and other facilities, it is more reasonable to assume that Alternative D will achieve service levels equaling or exceeding those of Alternative C (90 MAP). Furthermore, many elements of Alternative D resemble the Phase I construction of other alternatives: in future years, land area in the western part of the airport can be used for additional terminal space, and available apron space can be readily converted to remote terminal space. These possibilities merit evaluation in the SDEIS/EIR.

The SDEIS/EIR makes certain assumptions that require further explanation or verification. Why for example do commuter flights increase from 109,000 in Alternative C to 183,000 in Alternative D? If commuters fail to materialize, will the excess capacity be used for air carrier aircraft? Similarly, as discussed earlier in regard to the No Project Alternative, air cargo growth may also not be constrained.

Many of the more capital-intensive improvements in Alternative D seem to contravene the intended purposes. For example, Alternative D would require that significant resources be devoted to separating runways and demolishing existing terminals to provide for the New Large Aircraft. In fact, many major airports in the USA have already taken a position that they will not underwrite these costs. Yet easing the way for the New Large Aircraft at LAX will surely enhance the concentration of air service at LAX to the detriment of the other regional airports. If provisions for the new 600-seat New Large Aircraft were instead placed at Ontario International Airport, it would provide a powerful incentive for the airlines to increase service there. It takes many connecting flights to fill a 600 seat aircraft; if LAX is designed to accommodate these aircraft, one outcome will be to strongly reinforce the ability of LAX to attract the bulk of the region's air service.

The stated security enhancement goals can be achieved without the expense and vulnerabilities of an Automated People Mover by building the three principal ground processing landside facilities in a strategic configuration closer to the Central Terminal Area.

Response:

As described in Section 3.3.2, Alternative D - Enhanced Safety and Security Plan, of the Supplement to the Draft EIS/EIR, Facilities that comprise Alternative D are designed to serve approximately 78.9 MAP due to its terminal gate frontage in the design. Enhanced airfield safety is achieved through airfield facility modifications that mitigate the primary causes of runway incursions at LAX. Further airfield

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safety and improved airfield efficiency are achieved through taxiway development that matches the future fleet of larger aircraft. By creating additional space for passenger terminals, efficient passenger and baggage screening facilities can be implemented at the airport. Flexibility of the new passenger space created would allow for space to implement evolving changes in airport security technology while also being responsive to the identified security threats. Accessing the airport from four landside points provides redundancy in the passenger access system and also solves many of the traffic congestion problems associated with the current airport access. The end goal of this design concept is to achieve a new balance between the needs of both passenger security and passenger convenience.

The proposed phasing for Alternative D is presented in Section 3.3.2, Alternative D -Enhanced Safety and Security Plan, of the Supplement to the Draft EIS/EIR. The phasing plan was developed independent of financial, operational, and existing lease constraints. The timing for the facilities in this alternative is depicted in an order that is consistent with the priorities established by LAWA staff. The south airfield improvements would be implemented in Phase I since the majority of past runway incursions occur on the south airfield complex. A new environmental review process would be needed for any new facilities not included in Alternative D.

The environmental analyses in the Draft EIS/EIR and Supplement to the Draft EIS/EIR, including noise and air quality, have addressed the potential impacts under the most practical and most likely activity level for each alternative including Alternative D. The Draft EIS/EIR and Supplement to the Draft EIS/EIR evaluated a reasonable range of alternatives as required by the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA).

As indicated in Table S3-3, 2015 Activity Comparison, in Section 3.3.2, Alternative D - Enhanced Safety and Security Plan, of the Supplement to the Draft EIS/EIR, the annual operations for domestic commuter operations in Alternative D would be 182,800 in 2015 and 280,300 for unconstrained annual operations for domestic commuter operations in 2015. Alternative D would not accommodate the domestic commuter operations to the 2015 unconstrained forecast level; therefore, the commuter operations anticipated in Alternative D would most likely to materialize. Commuter operations would likely be reduced from 1996 levels, consistent with the forecasts for No Action/No Project Alternative and Alternative C, in order to maximize the number of passengers that could be served with a limited number of operations. It is also projected that some of the forecast commuter O&D demand would be served by domestic air carrier flights. Alternative C would accommodate 108,900 domestic commuter operations in 2015 due to its aggressive design attempting to accommodate the unconstrained air carrier operations.

The Alternative D cargo activity is determined by the amount of cargo sort space available to process cargo tonnage. The Alternative D cargo facilities would be sized to accommodate approximately 3.1 MAT, which is the total cargo volume forecast in the constrained No Action/No Project Alternative. Please also see Section 3.3, Cargo Activity (subsection 3.3.4), of the Draft LAX Master Plan Addendum for more information.

The commenter incorrectly stated the purpose of the north airfield improvements. The purpose of moving runways further apart is to gain enough separation between the closely spaced parallel runways for a center taxiway. The purpose of the center taxiway is to enhance safe aircraft operations and reduce the potential for runway incursions. At the same time, the center taxiway on the north airfield complex would be designed to accommodate New Large Aircraft (NLA) anticipated in the future aircraft fleet mix. Please see Response to Comment SPHO00004-9 for more information.

Market forces and the regulatory structure of the commercial air transportation industry favors and promotes the continued use of primary airports such as LAX. The airlines, not government, dictate where air service will be provided and the airlines tend to select airports convenient to their customers.

It is a stated goal of LAWA to maintain LAX's status as the region's preeminent international airport. Assisting in the accommodation of the expected arrival of NLA aircraft will help LAWA achieve this goal. The NLA, specifically, the Airbus A380, will very likely be operated on long haul international routes from LAX to Asia and Europe. These unique flights rely on a massive infrastructure system that does not end at the runway pavement. Most of these flights rely on origin and destination passengers from the Los Angeles region, connecting passengers from all of the United States and, additionally, cargo and goods shipped on these flights. The specialized infrastructure systems in place at LAX that allows this type of air service to be handled is not easily or inexpensively duplicated at other airports.

Alternative D would reconfigure portions of the airfield and terminal infrastructure to improve safety at LAX and to better accommodate the next generation of super jumbo aircraft.

It was determined that the proposed sites for the RAC, GTC and ITC are well suited for their respective purposes and that the APM would be a secure and efficient means of transporting passengers to and from the CTA to the RAC, GTC and ITC.

SAL00013-36

Comment:

3.4.4 Regional Alternatives would be Best Served by Relocating New Large Aircraft Inland

The Master Plan is at odds with itself in regards to constraining or expanding LAX. As set forth in the Draft Master Plan and SDEIS/EIR, serious economic consequences will befall the region if LAX is not expanded to accommodate the unconstrained demand, and then the Supplement presents a Preferred Alternative that purports to do just that. The recent growth spurts at Long Beach and John Wayne will soon peak out. LAX will continue to attract cargo and international flights because the carriers continue to resist using other regional airports, particularly those in the inland empire. The proposed expansion of LAX and particularly the provisions for the New Large Aircraft are simply another chapter in the long history of incremental growth. As soon as these improvements are completed in twenty years or so, there is every indication that there will be another round of master planning to continue that pattern. As stated above, this master plan claims to support a regional approach to air transportation, but does not incorporate the one feature that would most secure it - i.e., relocation of the New Large Aircraft improvements to Ontario or Palmdale International Airports.

Response:

Portions of the content of this comment are similar to comment SAL00013-35. Please see Response to Comment SAL00013-35 regarding relocating NLA service to other airports in the region.

As described in Chapter 3 of the Supplement to the Draft EIS/EIR Alternative D is part of a regional approach by designing facilities at LAX to accommodate passenger and cargo activity levels as projected in regional plans, such as the SCAG RTP. Please also see Topical Response TR-GEN-4 regarding potential environmental impacts at surrounding other airports as a result of the LAX Master Plan.

SAL00013-37

Comment:

3.4.5 Additional Alternatives to Evaluate

Under CEQA, the range of alternatives addressed in an EIR should be governed by the 'Rule of Reason' which states that an EIR need only address those alternatives necessary to provide decision makers with a reasoned choice. Under this Rule, the selection of alternatives is guided by feasibility, efficacy in reducing or avoiding impacts, and ability to foster public participation and informed decision-making. 'Feasibility' includes site suitability, economic viability, availability of infrastructure, compatibility with relevant planning documents and jurisdictional controls, and proponent access in cases where the alternative involves another location. In considering alternate locations, the "key question" to be asked is whether any of the significant project impacts could be lessened or avoided by relocating the project to another site.

Response:

This comment is similar to portions of Comment AL00017-13; please refer to Response to Comment AL00017-13. Please also see Topical Response TR-ALT-1 regarding the range of alternatives analyzed in the Draft EIS/EIR and the Supplement to the Draft EIS/EIR.

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SAL00013-38

Comment:

Relocation of New Large Aircraft Facilities to another Airport: The Rule of Reason applies to the LAX Master Plan SDEIS/EIR, and this document will not meet the standards of adequacy until it evaluates relocation of all or part of the project to another site. The County of Los Angeles requests that LAWA provide such analysis for the following alternative: relocation of facilities oriented to the New Larger Aircraft to Ontario International and/or Palmdale International, both of which were designed to accommodate international travel, are underutilized, and are owned and operated by LAWA. Such an alternative would almost certainly enable LAWA to reduce project impacts around LAX substantially, without concomitant impacts at the relocation sites.

Response:

The content of this comment is similar to comment SAL00013-35. Please see Response to Comments SAL00013-35 and SAL00010-3 regarding New Large Aircraft operations. Please also see Topical Response TR-RC-5 regarding transferring LAX operations to Palmdale.

SAL00013-39

Comment:

Shift Airport Improvements from the East to the West: The County also requests that LAWA evaluate an alternative in which improvements are shifted away from human habitat on the north and east and into the butterfly habitat on the west. We understand why LAWA may have wished to avoid this assessment in light of the complex background and history surrounding the El Segundo Blue Butterfly Habitat Restoration Area and the Los Angeles/El Segundo Dunes. However, the path of omission forecloses an important opportunity for informed decision-making. In this case, the proposed Master Plan improvements will cause new, significant and unavoidable adverse new impacts to thousands of human beings (i.e. elevated noise levels, increased single-event exposures, increased school disruption, loss of industrial jobs and historical resources, elevated pollutant levels, etc.). Due to omission decision makers will not know whether it may have been possible to lessen or avoid these impacts by shifting the improvements westward and instead imposing the significant unavoidable adverse impacts on a population of 7,000-87,000 endangered El Segundo Blue Butterflies. Decision makers will not know how the mitigation costs for the human impacts would compare with the mitigation costs for relocating butterfly habitat. Due to omission, decision-makers will be unable fulfill their statutory obligation to weigh, balance and consider the trade-offs, costs and opportunities associated with environmental justice and resource protection. To avoid this outcome, the County of Los Angeles asks that LAWA provide the public and LAWA decision-maker with a full and complete assessment of this alternative.

Response:

An overview of the alternatives considered but rejected from consideration, including alternatives that would extend runways across the endangered species habitat to the west of Pershing Drive, is provided in Chapter 3, Alternatives, (subsection 3.1.3) of the Draft EIS/EIR. As indicated in Chapter 3, three alternative concepts were considered that would involve expansion of runways to the west into the Los Angeles/El Segundo Dunes (see Figures 3-1 and 3-2). As explained, these concepts were eliminated from further consideration due to potential impacts on this environmentally sensitive area. (A detailed description of the concepts, analysis, and selection process is contained in the Chapter V, Concept Development, of the Draft LAX Master Plan). Moreover, while it would be possible to bridge Pershing Drive and grade areas west of the airport for runway safety areas, this improvement would only benefit aircraft landing from the west. The landing thresholds on the east end of the airport would not be extended further west in this case and, as a result, the landing aircraft would not present any less impact on communities east of the airport. To extend these runways further west would have significant impacts on the El Segundo blue butterfly Habitat Restoration Area without providing any environmental improvements to the residents living to the east of the airport. It should be noted that, in their comments on the Supplement to the Draft EIS/EIR, the County acknowledges that airport development is prohibited in the Dunes. See Letter SAL00014 from David E. Janssen, Chief Administrative Officer, County of Los Angeles, specifically Comment SAL00014-3, which states "...the zoning for the parcels in the dunes was set at [Q]OS-1-XL in 1994, which disallows development in the dunes habitat preserve and restricts use of the remainder of the property to 'a nature preserve and accessory uses only.'"

SAL00013-40

Comment:

Redesign and Reprioritize Proposed Airport Improvements: Finally, in furtherance of finding an environmentally superior alternative that fulfills the basic objectives of the project, the County asks that LAWA develop, consider and comment on a new Alternative that would solve the urgent needs LAX in a timely manner and also eliminates costly, time consuming and controversial items. The following elements should be addressed:

- Fast track the addition of international gates on the west side of Tom Bradley International Terminal.
- Fast track the lengthening of RW 6R/24L in its present position.
- Widen the north complex runways by moving RW6L/24R to the north as proposed in Alternative C.
- Eliminate the Ground Transportation Center and the Automated People Mover. Prohibit private vehicles on World Way in the Central Terminal Area, and provide security screening for a fleet of zero emission vans that would serve the many airport and privately owned garages around the airport. (Note that this trend is already evident.)
- Eliminate all provisions for the New Large Aircraft including the Design Category VI spacing of the north complex runways and provision of larger aircraft gates.
- Provide additional space in the Central Terminal Area as proposed in Alternative D.
- Close Pershing Drive to all public access.

Response:

Comment noted.

Expanding TBIT to accommodate the addition of contact gates on the west side of the existing terminal concourse is a component of LAX Master Plan - Alternative D. The construction of these gates will require the relocation of Taxiways Q and S, which currently handle the majority of taxiing aircraft between the north and south airfields. The relocation of Taxiways Q and S further west in order to accommodate additional gates on the west side of TBIT would require the relocation of American Airlines Maintenance facilities in addition to other ancillary facilities. All of these projects are components of LAX Master Plan - Alternative D and would be completed in such a manner to maintain as efficient an operation as possible during the construction.

Alternative D would result in a southward relocation of Runway 6R/24L as opposed to a northward relocation of Runway 6L/24R for several reasons. First, relocating Runway 6L/24R further north would require that the existing boundary of LAX be expanded and that additional road construction occur outside of the airport boundary. It was determined that it would be best to avoid these impacts if possible. Secondly, in order to help control the cost of Alternative D, it was decided that only one runway would be relocated 340 feet as opposed to moving each runway 120 feet, or fraction thereof, reducing the total amount of repaving. Lastly, Alternative D was designed with input from the previous public comment period. In attempting to address comments on the previously released Alternatives, it was decided that it would be beneficial not to relocate runway 6L/24R further north.

As described in the Supplement to the Draft EIS/EIR, by limiting access by private vehicles to the main airport infrastructure, significant threats can be identified and mitigated in new facilities designed for the new security environment. The GTC and APM would be central components of the improved safety and security systems at LAX.

Prohibiting private vehicles from the existing CTA would not be feasible without another central processing facility for LAX passengers and visitors to arrive at via private vehicle. It would present a greater challenge to adequately secure a multitude of shuttle vans operating between the CTA and the garages and hotels in the LAX vicinity. In addition to the potential security issues, closure of the CTA without a centralized facility to handle private vehicles would result in more vehicle traffic on the roads in the vicinity of LAX. All existing private vehicles which currently use the CTA would be forced to arrive at the airport by first using a private garage in the airport vicinity. Additionally, each of those LAX users would then need to be shuttled to the CTA via a van or bus. This would increase the traffic volume on the surface streets in the vicinity of the airport. It is also unlikely that adequate capacity exists in the private parking facilities in the vicinity of LAX to handle 100 percent of private vehicle traffic generated by The Airport. Passengers taking a shuttle from an airport area parking facility to the CTA would still

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find that their shuttle van is subject to security screening prior to entering the CTA, which would result in additional delay. It would also be difficult for passengers arriving to Los Angeles to determine which shuttle they should use if dozens of garages and hotels were served by fleets of vehicles that appear similar.

Alternative D's proposed GTC would provide an efficient, convenient and secure location for LAX passengers to drive to or from when using LAX. The APM would provide an efficient, fast, secure, mode of transport between the future CTA and GTC.

The proposed APM would be zero-emission system efficiently connecting the CTA, ITC, GTC and RAC.

LAX Master Plan - Alternative D would improve airfield safety and provide additional airfield areas on which the Airbus A380 would be able to safely operate. The improvements to the north airfield proposed as part of Alternative D are not solely intended to accommodate NLA aircraft, such as the Airbus A380, but also to provide additional safety for all aircraft through an improved taxiway system that would help reduce the risk of runway incursions. Though it would be technically feasible to improve the airfield at LAX without constructing facilities that can adequately and safely accommodate the A380, it is in the interest of The Airport to provide facilities that will allow the airlines to operate in the most efficient manner possible fostering the greatest competitive environment on behalf of LAX passengers. The Airbus A380, which is scheduled to enter commercial service in 2006, is expected to be operated by at least six airlines that serve LAX. The A380 will have lower seat costs allowing airlines to maximize their efficiency on routes they operate with this aircraft. In order to foster a competitive and efficient market for passengers to and from Los Angeles it is considered crucial to reconstruct portions of LAX to safely accommodate the next generation of trans-continental wide body aircraft so that the airlines have the greatest amount of flexibility in their operations. Providing airlines flexibility to operate such an aircraft would help maintain lower airfares for LAX passengers. Additionally, reconstructing facilities to accommodate the A380 is consistent with the Grant-in-aid agreements with the FAA that compel The Airport sponsor to allow access by all users.

The CTA has a finite amount of space and would not be expanded if Master Plan - Alternative D were to be constructed. Instead, some of the existing facilities such as the parking garages would be removed to make way for new and larger terminal facilities providing more room for passenger ticketing, check-in and baggage claim in a more secure facility.

Pershing Drive will not be closed as part of LAX Master Plan - Alternative D. If public access to Pershing Drive were considered to be a threat to the safe operation of LAX, its closure would be evaluated at that time.

SAL00013-41

Comment:

3.4.6 Scoping Outreach did not Include Alternative D

LAWA made the 2003 SDEIS/EIR available for public comment in July of 2003 to update information presented in the 2001 Draft EIS/EIR and to integrate Alternative "D" into the environmental review process. Alternative D, the "Enhanced Safety and Security Plan," introduces numerous infrastructure and concept changes into the alternatives analysis including a reprioritization of project goals to emphasize safety. In turn, the shift in project objectives changes the manner in which alternatives must be assessed in the environmental analysis. The objectives of the CEQA process include fostering interagency coordination early in the review of projects and encourage public participation in the planning process.¹⁰ Similarly, the purpose of the scoping process required by NEPA is to identify and disclose all of the potential Alternatives under consideration by the lead agency. This provides the public with the greatest ability to understand project issues and thus contribute useful information, suggestions and comment for consideration by the lead agency decision-makers.¹¹

In the present case, the scoping outreach and early consultation with Responsible and Trustee Agencies did not include Alternative D, which became the preferred project. This denies the public of the opportunity to comment, and it also raises questions as to the validity of the process by which "D" became the preferred Alternative - between the 1996 circulation of the Notice of Preparation (NOP), and scoping outreach, and the circulation of the 2003 SDEIS/EIR. If the objectives and scope of the project

changed sufficiently between initial outreach and circulation of the Supplement to the Draft to warrant incorporation of a preferred Alternative that was not even included in the original Draft EIS/EIR, then the NEPA scoping process should have started again. CEQA also requires, at minimum, circulation of a comprehensive Subsequent Draft EIR that includes full disclosure of the alternatives analysis and process used to select the preferred Alternative.¹²

10 CEQA Guidelines § 15002, § 15086, and § 1587

11 NEPA Guidelines: 40 C.F.R. § 1508.25

12 CEQA Guidelines §15162(a)

Response:

The Supplement to the Draft EIS/EIR does not reprioritize the goals of the LAX Master Plan. In fact, the purpose and objectives of the Master Plan, as stated in the Supplement to the Draft EIS/EIR, are the same as those identified in the Draft EIS/EIR. Please see Response to Comment SAL00017-70 regarding the consistency of Alternative D with the purpose and need for the project.

The purpose of the scoping process under NEPA and CEQA is to determine the issues to be addressed in the environmental document, not to determine the nature of the proposed project. As stated in 40 C.F.R. §1507.1, the purpose of the scoping process under NEPA is to determine the scope of issues to be addressed and to identify significant issues related to a proposed action. The purpose of scoping under CEQA is to establish a consultation process between a Lead Agency and any Responsible Agencies for the purpose of identifying the scope and content of the environmental information related to the Responsible Agency's area of statutory responsibility that must be included in the draft EIR. (State CEQA Guidelines, Section 15082). In this case, the original scoping process identified the key issues to be addressed in the analysis of the alternatives selected by the Lead Agency. Each of the alternatives selected addresses each of the issues identified. Please also see Responses to Comments AL00007-1 and AL00022-17 regarding the scoping effort undertaken by FAA and LAWA, including the opportunities afforded to agencies and members of the public in the planning process.

Please see Response to Comment SAL00013-31 regarding the validity of preparing a Supplement to the Draft EIS/EIR instead of a Subsequent Draft EIR.

SAL00013-42

Comment:

3.5 INADEQUATE AND OUTDATED BASELINE SETTING

3.5.1 The 1996 Baseline is not Applicable to Existing Conditions in 2003

The Draft and Supplement to the Draft EIS/EIR both comply with the CEQA requirement that the baseline be defined by conditions extant at the time the Notice of Preparation was released. However, because the baseline was already five years old at the time of the 2001 Draft EIS/EIR release, and is now 7 years old for analyses contained in the Supplement, the review fails to comply with the intent of CEQA to facilitate an understanding of changes in the environment associated with the proposed project. Use of the five-year old baseline, coupled with the document's frequent assumption that mitigative actions addressing air quality, noise, traffic, water quality, and other topical issues will occur primarily (or only) through project-related activities, tends to consistently overstate the impacts of the No Project Alternative relative to other Alternatives. Although the 2003 SDEIS/EIR provides the "normally" accepted "baseline" of conditions extant at the time the NOP was released, CEQA Guidelines by implication allow the Lead Agency to use a baseline different than the NOP released date when "non-normal" circumstances occur.¹³

In the present case, several "non-normal" circumstances have occurred that necessitate an updated baseline. In particular, the NOP is now seven years old and conditions extant in 1996 do not represent existing-conditions at the project site. More significantly, the extraordinary events of September 11, 2001 significantly altered baseline conditions - physical and social - from what existed when the NOP was released. So fundamental were these changes that LAWA withdrew the then-pending Draft EIS/EIR and Master Plan, and proceeded to formulate an entirely new alternative, which it then identified as its preferred project. Clearly, the 1996 baseline material provides an inadequate yardstick

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against which to measure and understand the impacts of Alternative D or any other project alternative (especially including the No Action Alternative).

It is generally understood that air travel will not soon return to pre-9/11 conditions. After 9/11, LAX implemented new operational procedures that in turn changed (1) the location and distribution of passengers and visitors, (2) the length of time passengers are at the airport, (3) the number of passengers arriving, and (4) the number of aircraft taking off and landing.

For all of these reasons the 2003 Supplemental Draft EIS/EIR fails to comply with the intent and judicial interpretation of CEQA relative to the Baseline Analysis - i.e., to facilitate an understanding of changes in the environment associated with the proposed project and project Alternatives. Furthermore, use of this 7-year old baseline tends to consistently overstate the impacts of the No Project Alternative relative to other Alternatives. When coupled with the Draft EIS/EIRs frequent assumption that mitigative actions addressing air quality, noise, traffic, water quality, and other topical issues will occur primarily (or only) through project-related activities, the error is even more apparent. CEQA clearly intends that the baseline should reflect the existing level of actual development to the maximum extent possible; since the Draft EIS/EIR baseline is set at 58 MAP (vs. 67+ MAP at present - a 15%+ discrepancy), this intent is clearly unmet.

In order to achieve an adequate document, LAWA needs to provide an updated baseline for all topical sections where current data is available. Doing so will minimize the risk of an unfavorable ruling such as the situation encountered by Logan Airport in Boston. The United States Environmental Protection Agency rated the 1999 Logan Airport EIS as "Environmental Objection, Insufficient Information" for, among other concerns, the use of the outdated baseline year of 1993.

13 CEQA Guidelines § 15125

Response:

Please see Response to Comment AL00022-12 regarding the 1996 baseline and the analysis of updated conditions provided in the Supplement to the Draft EIS/EIR.

Regarding the commenter's statement that LAWA "withdrew" the Draft EIS/EIR, please see Response to Comment SAL00013-12.

Please see Appendix S-B, Existing Baseline Comparison Issues - 1996 to 2000, of the Supplement to the Draft EIS/EIR, Section 1.2, Baseline Update, for a discussion of long-term air traffic at LAX. As indicated in that section, in the long term (i.e., by 2015, the horizon year evaluated in the Draft EIS/EIR and the Supplement to the Draft EIS/EIR), air traffic at LAX is projected to fully recover from the effects of September 11, 2001. The commenter states that there is a discrepancy of 15 percent between the passenger activity level associated with the 1996 baseline and the current activity level. The commenter is correct in stating that LAX handled 58 MAP in 1996. However, the commenter is incorrect in stating that present activity levels are 67+ MAP. In 2003, activity levels at LAX were within 5 percent of 1996 levels (www.lawa.org, News & Airport Facts/Statistics).

SAL00013-43

Comment:

3.5.2 Baseline Terminology is Inconsistent and Confusing

The baseline data is also inconsistent. This problem extends not only to the many different years used as the "baseline", but also to incorrect identification of the base year for given data sets. For example, the 4th quarter 1996 database cited for the noise calibration does not match actual 4th quarter data according to published noise contours.

Table 3
DIFFERENCES BETWEEN EIS/EIR NOISE IMPACT & LAWA 1996 QUARTERLY REPORT
||e||
LAWA 1996 4' Quarter Report 31,968 85,907
EIS/EIR Table 4.1-2 For 1996 16,900 49,000
Difference 15,068 36,907

The question therefore arises as to how LAWA actually defines the "Environmental Baseline." Is the Environmental Baseline the same as the "Adjusted Environmental Baseline?" Or the "Future Without Project Scenario" (i.e., cumulative without project)? Or the "No Action/No Project Alternative?" Or none of these? Although each of these scenarios may serve a useful purpose, such gains can be realized only when the scenarios are properly defined, adequately differentiated, and consistently employed - none of which is true for the LAX Master Plan SDEIS/EIR. Does the environmental baseline include the phase-out of older, noisier Stage 2 jets, as assumed with the build Alternatives? The forecast reduction in noise exposure for Alternatives A, C and D, as compared with the No Action/No Project Alternative,¹⁴ appears to conflict with the numbers cited in the penultimate paragraph on page ES-21. It is not clear which of the congestion relief package features are scheduled for completion in Phase 1 and which will be deferred to Phase 2.

The Summary of Alternatives¹⁵ notes, in discussing baseline conditions, that "physical conditions are represented as they existed in 1997 and in more current years when possible to provide the most up-to-date information available." It is not clear why "up-to-date" information is possible in some categories but not others. LAWA has had five years to update the information and is anticipating spending significant funds to implement the project; there is in truth no justifiable reason for denying the public and LAWA decision-makers access to current information.

LAWA must clearly define each of the baseline and future condition scenarios used in the 2003 Supplemental Draft EIS/EIR, with an explicit statement of the rationale for its use. Perhaps LAWA should delete one or more of these scenarios from discussion. Referenced scenarios include "environmental baseline," "environmental baseline (1996)," "environmental baseline (2000)," "adjusted environmental baseline," "environmental baseline (2015)," "non-LAX development having cumulative impact," "future without project scenario" (i.e., cumulative without project), and "No Action/No Project". Incredibly, the Glossary defines none of these terms. The analysis constantly shifts the baseline timeframe to manipulate the comparative assessment of project impacts - using 1996 baseline data for traffic, air and aircraft noise, while using 2000 through 2002 for biology, earth, and water resources. The frequent shifting from one baseline nomenclature and timeframe to another is, at best, confusing. At worst, it conceals the underlying impacts that this 2003 Supplemental Draft EIS/EIR is intended to illuminate.

¹⁴ First bar chart on Page ES-22 titled, "Population Exposed to Noise Above 65 CNEL in 2015."

¹⁵ 2001 Draft EIS/EIR, Section 3.2.1, Pages 3-8 through 3-18.

Response:

This comment is similar to comments AL00022-12 and AL00022-55; please see Responses to Comments AL00022-12 and AL00022-55.

SAL00013-44

Comment:

3.5.3 Baseline Terms are Not Defined

There is no clear definition of the term "Unconstrained Forecast" anywhere in the Environmental Summary or in Sections 1, 2 or 3. The reader is left to guess what the term is intended to portray, where it fits into the long-range forecasts for LAX and other regional airports¹⁶ and the estimates of rising aviation demand.¹⁷

This lack of definition and intent extends to the term "Adjusted Baseline." This condition has never existed, and will never exist (i.e., 1996/97 airport activity and physical facilities plus 2005 and 2015 land use activity and regional traffic). There is no basis in CEQA and/or NEPA for use of this term and it therefore requires either clarification or removal from the document in favor of more traditional and more clearly defined comparative data.

¹⁶ 2001 Draft EIS/EIR, Table 1-13.

¹⁷ 2001 Draft EIS/EIR, Depicted in the Exhibit on Page ES-3.

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Response:

This comment is essentially the same as comment AL00022-57; please see Response to Comment AL00022-57.

SAL00013-45

Comment:

3.6 PROJECT PHASING DOES NOT REFLECT STATED PRIORITIES

The proposed project phasing illustrates the Master Plan's embrace of an environmentally inferior alternative. The most pressing problems on the airport are the lack of adequate runway length on the north complex, the security threat of private autos near the terminals, and the lack of international gates. Taxiing of loaded B747 aircraft to the south runway complex and the bussing of international passengers across the airfield creates air quality impacts, congestion, delay, and general lack of capacity. Yet the Phase 1 construction plan addresses none of these issues for many years and instead concentrates initially on the fringes of the airport preparing for the Ground Transportation Center and Intermodal Transportation Center, and on demolishing and rebuilding perfectly useable terminals in preparation for moving a runway to accommodate the New Large Aircraft. This sequence does not match the urgent environmental and congestion priorities evident on the airport.

Response:

Comment noted.

Please see Figure S3-15, Conceptual Summary Schedule, in Chapter 3 of the Supplement to the Draft EIS/EIR. This schedule has been developed to maximize efficiency of construction while maintaining the airport's function as the primary arrival location in Los Angeles Basing for International flights.

Modifications to the north airfield, prohibition of private autos in the CTA and improved international gate facilities would be features of Alternative D constructed as soon as is reasonably possible.

In an effort to maintain adequate facilities to accommodate passenger activity during all phases of construction, the rework of the existing CTA would not begin prior to completion of the GTC, ITC and APM. Once the GTC, ITC and APM are functional, work on the CTA would begin as would work on the West Satellite Concourse. The GTC, ITC, and reconfigured CTA would need to be completed prior to reworking the north airfield.

In addition to landside facilities such as the GTC, RAC, and ITC, Phase 1 of the 2015 Alternative D Conceptual Summary Schedule, would include the construction of relocated Runway 7R/25L in the south airfield and the associated center parallel taxiway between the south airfield runways. The construction of the south airfield center parallel taxiway and runway relocation would primarily benefit airfield safety, which is a key component of LAX Master Plan - Alternative D.

The security threat of private autos near the terminals is, as the commentor noted, a pressing problem facing LAX. Prioritizing the construction of the GTC and ITC in Phase 1 of the Conceptual Summary Schedule would allow for the most rapid relocation of automobile traffic from the CTA.

SAL00013-46

Comment:

3.7 APPEARANCE OF ADVOCACY

Both the Draft EIS/EIR and the Supplement to the Draft EIS/EIR contain numerous comments and conclusive statements that create an appearance of project advocacy. This is inappropriate given the policy guidelines contained in CEQA and NEPA. It undermines confidence in the objectivity of the analyses and casts doubt on the Lead Agency commitment to full disclosure. We are particularly concerned about technical assumptions that understate the growth potential and overstate the benefits of Alternative D, as paired with assumptions that overstate the adverse impacts of the No Project Alternative (please see §3.5.2 above for further elaboration of this concern).

Response:

Comment noted. The growth potential of Alternative D has not been understated, nor have the benefits of Alternative D or the adverse impacts of the No Action/No Project Alternative been overstated. The underlying bases for the statements made in the Supplement to the Draft EIS/EIR, as well as all source material, are identified throughout Chapter 4 of the document. Please see Response to Comment SAL00013-43 above for a response to the issues raised in Section 3.5.2 of the commentator's letter.

SAL00013-47

Comment:

3.8 INADEQUATE SCOPING OUTREACH

Both the 2001 Draft EIS/EIR and the 2003 Supplemental Draft EIS/EIR make frequent mention of the regional significance of LAX and of the Master Plan process. This emphasis on regional context is evident in discussions and analyses provided throughout the text, but more significantly is an integral part of the Purpose and Objectives statement. As stated, "The purpose and objectives of the Master Plan are to provide...sufficient airport capacity for passengers and freight in the Los Angeles region to sustain and advance the economic growth and vitality of the Los Angeles region..."¹⁸

Nevertheless, the original scoping outreach effort did not include a single agency within the county governments of San Bernardino County, Orange County, Riverside County, or Ventura County.¹⁹ Nor did the scoping outreach include any municipal agencies, airport officials, businesses, or services within any of these four counties, although many such entities would have an interest in the regional issues addressed and in the development and analysis of project Alternatives. This is a serious omission, particularly in light of the NEPA mandate to establish close nexus between project goals and project Alternatives. It may also explain why none of the project Alternatives incorporates even minimal regional elements.

Furthermore, the scoping process is intended to identify and disclose all of the potential Alternatives under consideration by the lead agency. This provides the public with the greatest ability for input and understanding into the potential project and offers an opportunity to comment. In fact, it is common for lead agencies to remove Alternatives from further consideration between the scoping process and the distribution of the Draft EIS/EIR. In this case, the scoping outreach did not include Alternative C (the 2001 preferred alternative) or Alternative D (the 2003 preferred alternative). As noted previously, this approach forecloses the opportunity for public comment and casts doubt on the adequacy of the process by which LAWA screened and selected the alternatives. In any case, the SDEIS/EIR fails to meet CEQA and NEPA standards because LAWA did not disclose the preferred Alternative D to the public prior to document release.

Furthermore, although LAWA presented the original 2001 draft master plan at a number of public meetings held specifically for minority citizens, it is unfortunate that the same level of outreach has not occurred for the Supplement to the Master Plan. The minority segment of the population will experience the greatest exposure to the effects of changes at LAX. In particular, the County's interest in this issue is again with the unincorporated Lennox community. LAWA should develop a more thorough outreach program for Alternative D that fully informs the citizens in this area of the complete range of options and how the proposed master plan would specifically affect them. LAWA should fully disclose the decision to extend runways to the east and avoid the endangered species habitat to the west along the beaches.

¹⁸ 2001 Draft and 2003 Supplemental Draft EIS/EIR, Section 2.1, Page 2-1.

¹⁹ Based on review of EIS Agency Scoping Coordination Letter Mailing List and other materials provided in Appx. A.

Response:

Comment noted. Please see Response to Comment AL00007-1 regarding the scoping undertaken for the LAX Master Plan. This response identifies the public informational meetings/workshops and the formal public scoping meetings held on the LAX Master Plan. Additional details of the scoping and public outreach processes are provided in Appendix A, Scoping and Agency Coordination, and Appendix B, Public Involvement, of the Draft EIS/EIR. The Draft EIS/EIR and the Supplement to the Draft EIS/EIR were prepared in consultation with numerous public agencies (see Sections 7.2 and 7.3 of the Draft EIS/EIR and the Supplement to the Draft EIS/EIR).

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Please see Response to Comment SAL00013-41 regarding the purpose of the scoping process under NEPA and CEQA. In response to input from the community obtained through the public scoping process as well as other outreach efforts by LAWA, three of the four original build alternatives were eliminated from consideration and two new build alternatives (subsequently referred to as Alternatives B and C) were proposed. A Supplemental Notice regarding the preparation of an EIS/EIR for the LAX Master Plan was circulated identifying the new alternatives. Following input from the public on the Draft EIS/EIR, and the events of September 11, 2001, a fourth build alternative (Alternative D) was proposed.

Regarding outreach to minority citizens for the Supplement to the Draft EIS/EIR, LAWA held three Environmental Justice Workshops in July 2003 specifically aimed at the minority population, including one in the community of Lennox on July 26, 2003. FAA and LAWA also held 12 public hearings in the region, including several in minority communities. Each public hearing was preceded by a public workshop, during which members of the public were afforded the opportunity to learn about the LAX Master Plan and to ask questions.

An overview of the alternatives considered but rejected from consideration, including alternatives that would extend runways across the endangered species habitat to the west of Pershing Drive, is provided in Chapter 3, Alternatives, (subsection 3.1) of the Draft EIS/EIR. (A detailed description of the concepts, analysis, and selection process is contained in the Chapter V, Concept Development, of the Draft LAX Master Plan.) As indicated in Chapter 3, three alternative concepts were considered that would involve expansion of runways to the west into the Los Angeles/EI Segundo Dunes (see Figures 3-1 and 3-2). As explained, these concepts were eliminated from further consideration due to potential impacts on this environmentally sensitive area. It should be noted that, even if these concepts had been carried forward, while it would be possible to bridge Pershing Drive and grade areas west of the airport for runway safety areas, this improvement would only benefit aircraft landing from the west. The landing thresholds on the east end of the airport would not be extended further west in this case and, as a result, the landing aircraft would not present any less impact on communities east of the airport. Please also see Response to Comment SAL00013-39 regarding development of runways within the Dunes.

SAL00013-48

Comment:

3.9 PROGRAM ASSESSMENT OF BASELINE, IMPACTS, MITIGATIONS

The analytic framework of the 2001 Draft EIS/EIR was described as one in which the document was meant to set the basis for "tiered" environmental review pursuant to both NEPA and CEQA. The tiered concept assumes that subsequent environmental documents will be required to focus the analysis on site-specific, project-level issues, impacts, and mitigation measures. The 2003 Supplemental Draft EIS/EIR does describe many concepts in more detail, but continues to keep the analysis at a program level. The program-level analyses and vague mitigation commitments may not provide the Federal Aviation Administration (FAA) with an adequate basis on which to issue an "unconditional approval" of the airport layout plan (ALP). An unconditional approval assumes that LAWA has completed appropriate analyses for all development actions, and the circulated document does not fulfill this requirement.

20 Section 4, Pages 4-5 and 4-6.

Response:

Comment noted. The Supplement to the Draft EIS/EIR, by definition and intent, supplements the information and analysis presented in the Draft EIS/EIR for the No Action/No Project Alternative and Alternatives A, B, and C to provide a comparable level of information for Alternative D. Both the Draft EIS/EIR and the Supplement to the Draft EIS/EIR provide a programmatic level of information and analysis. The Federal Aviation Administration (FAA) will carefully review all information and analyses presented in the subject documents prior to rendering a decision on whether to issue a conditional approval or an unconditional approval of the proposed airport layout plan (ALP). The FAA's Conditional Approval of the ALP may allow certain project components to be built without additional NEPA review.

SAL00013-49

Comment:

3.10 GROWTH & CUMULATIVE IMPACTS MAY BE UNDERSTATED

The Supplement to the Draft EIS/EIR bases its analysis of growth inducement on projected cargo and passenger activity. It concludes that by 2015, Alternative D would yield a direct economic output of \$63.7 billion and 350,500 jobs, plus an indirect economic output of \$93.8 billion and 629,000 jobs through a multiplier effect of 1.5. The EIS/EIR assumes that all of the jobs would be within the 5-County SCAG region, 78% of the jobs would be within a 20-mile radius, and 40% within a 10-mile radius of LAX. Finally, it concludes that Alternative D would be similar in terms of job formation to the No Action/No Project Alternative, differing by an increase of about 1%. With respect to collateral development, the EIS/EIR finds Alternative D impacts equivalent to the No Project Alternative for LAX Northside21, Westchester Southside and Belford, and less than the No Project Alternative for Continental City and Manchester South.

In taking this approach, the document ignores the cumulative synergistic effects that would result if LAX Northside is constructed in tandem with the LAX improvements, as proposed under Alternative D (but not Alternatives A, B or C). The increase in cargo will create corresponding increases in off-airport services and place extraordinary pressures on commercial and residential land uses in the immediate neighborhood. Apart from a discussion of the proposed cap on peak hour traffic from the LAX Northside project, the Growth-Inducing Impact Analysis (which is also the Cumulative Impact Analysis for Alternative D) does not address these more localized impacts at all, even though the history of LAX shows them to be potentially significant.

21 LAX Northside is approximately 330-acres of land located on the north side of LAX (bisected by Westchester Parkway) and owned by LAWA Tentative Map #34836, approved for this site during the mid-1980s, would allow development of about 4.5 million square feet of office, hotel, restaurant, retail, research and airport-related land uses.

Response:

The content of this comment is similar to Comment SAL00004-11; please refer to Response to Comment SAL00004-11. Please also see Response to Comment SPHPD00004-7 regarding the analysis of induced socio-economic impacts associated with Alternative D.

SAL00013-50

Comment:

4.0 COMMENTS SPECIFIC TO THE SUPPLEMENT TO THE DRAFT EIS/EIR

4.1 AIRPORT SECURITY ASSESSMENT IS INCOMPLETE

4.1.1 Summary of Findings Concerning the Analysis of LAX Master Plan Security

As detailed at length in the discussion that follows, the security content of Alternative D documentation is inconsistent and contradictory, leaving important questions unanswered and an urgent need for definitive clarification of the true policy and planning direction. The security analysis has been treated in an aloof and disconnected manner, is preoccupied with the public approaches and the eastern half of the infrastructure; and fails to address total airport security vulnerabilities and risk management planning. These inconsistencies imply an absence of coordination in the planning process. Of greater concern is the possibility that the professed emphasis on security enhancement is not the true priority in terms of planning and phased implementation.

There is a strong case for the separate ground processing facilities and for dispersal of target populations by reducing density, controlling and limiting vehicular access and proximity. Access roadways merit greater emphasis on security design, demonstrating a clearer commitment to specific contingencies while anticipating traffic impacts.

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The separation concept is diminished in value by the expensive and vulnerable mass transit link between the Central Terminal Area and remote landside ground facilities. It is further diminished by the lack of Flow Process Mapping data, the risk of task overload and failure to achieve target reduction, and by potential alienation if the public perceives screening requirements as excessive.

For reasons discussed in this report, we believe that the Automated People Mover is a weak link in the overall security plan. Security enhancement goals can be achieved without the Automated People Mover by moving the 3 main ground processing facilities closer to the Central Terminal Area. The western half of the airport should be drawn into the Plan with all subcomponents receiving 'substantial treatment' as required of federal regulators and stated early in the analysis. In the course of addressing the western end of the airport, and as a matter of urgency, LAWA should conduct a detailed assessment of the vulnerability to terrorist attack. LAWA should give serious consideration to the permanent closure of Pershing Drive as a public thoroughfare.

LAWA should provide an illustration that shows anticipated concentric ring security applications along with an explanation of the capabilities for surveillance of adjoining commercial and residential neighborhoods. Finally, the analysis should offer a quantitative projection of the demands on security and law enforcement personnel, and the intended ratio of manpower to technological devices.

4.1.2 Introduction to the Analysis of the LAX Master Plan Security Component

The LAX Master Plan Security Component addresses known and implied security issues, with a focus on Alternative D (the Enhanced Safety and Security Alternative), while also referencing the more limited discussions found in the Master Plan and SDEIS/EIR documents as a whole. The events of September 11, 2001 are commonly referenced in the Alternative D documentation, and security issues predictably appear in documentation released by the City of Los Angeles on July 9, 2003. However, it has been more difficult to obtain security plan elements for earlier plan options, namely Alternatives A, B and C, and also the No Project Alternative.

Fundamental to the integrity of the exercise is simulation of the process by which an ordinary member of the public would gain access to this public documentation. Although airport security is a relevant topical in the context of environmental review, it did not receive any attention in the pre- 9/11 public deliberations for the 2001 LAX Master Plan. This is an extraordinary fact considering the status of LAX as a world-class destination and departure airport. The public documentation search process is therefore discussed here because the security content, its location within the Master Plan and the priority afforded to it, bears directly on the credibility of the stated title of Alternative D, 'The Enhanced Safety and Security Initiative' and therefore upon the worth of the security planning component.

The documentation is voluminous and consequently electronic key word searches were employed to locate security related sections in the earlier documentation, i.e. up to June of 2001. Key words used included 'security', 'threat' and 'terrorism;' Master Plan documentation published during 2003 was also searched using electronic means. The major portions of the documentation subjected to analysis from the security perspective, after search and filtering are:

- The LAX Master Plan SDEIS/EIR: Chapter 3 Alternatives (Including Proposed Action).
- LAX Master Plan Addendum Draft dated June 2003.
- Appendix I to the LAX Master Plan Addendum Draft: Comparative Security Analysis of Alternative D and the No Action/No Project.

4.1.3 Review of the LAX Master Plan Supplement to the Draft EIS/EIR

Chapter 3, Alternatives: The Introduction notes that Council on Environmental Quality (CEQ) regulations for NEPA require federal regulators to "Devote substantial treatment to each alternative considered in detail..." The SDEIS/EIR offers an historical explanation of the Draft Master Plan and the context in which Alternative D was developed. An excerpt from page 3-1 illustrates some of the extraordinary circumstances applicable to long-term security planning:

"Alternative D is designed to protect airport users and critical airport infrastructure in response to the increased risk of terrorism aimed at aviation and commercial assets. The Plan is designed with the flexibility to incorporate evolving federal airport security requirements. Alternative D is also designed to enhance the on-airport presence of law enforcement and emergency response teams."

The words 'flexibility' and 'evolving' effectively equate at the time of public deliberation to 'unknown'. The discussion of baseline conditions (Ch. 3.2) does not address security planning in terms of existing conditions, and, the discussion of airport security (Ch. 3.3.1) provides no explanation for the failure to address security planning in the pre-9/11 options. A vague attempt is made to reassure the reader that security plans are available for Alternatives A, B, and C should these be chosen (as opposed to Alternative D), yet the discussion is wholly inadequate. Noting that 'these alternatives would provide on-airport space for the Transportation Security Administration to conduct its mission,' the report goes on to state:

- "At the time this supplement to the Draft EIS/EIR was published, the federal government's security requirements were continuing to evolve and LAWA officials were working with TSA to determine and accommodate its needs to the greatest extent possible," and
- "...it is anticipated that an extensive array of security features and operational practices if/as required could be accommodated by any of the build alternatives. "

These statements suggest that the public disclosure of security plans is unnecessarily vague, and that security planning has been overly deferred to federal regulators.

The SDEIS/EIR summarizes conceptual points making up the new approach to airport security on page 3-27 under Alternative D: "The end goal of this design concept is to achieve a new balance between the needs of both passenger security and passenger convenience." Besides claiming public safety and security benefits in very sweeping terms, it also refers to the physical layout of Alternative D and mentions the Master Plan boundaries. But it does not provide any detail concerning the features of the security plan that will deliver these benefits.

The description of Alternative D Facilities (p. 3-43) repeats the message that "Alternative D is designed to be flexible in accommodating new federal security requirements." There follows brief mention of 'important security features' referring to elimination of private vehicles from the Central Terminal Area roadways and elimination of the public parking structures within the Central Terminal Area. This and subsequent statements are not so much 'security features' as 'security objectives' or 'security outcomes'. The difference is important, because it is the details that impart greater understanding and thereby enable the public to judge and offer comment. For example, when the text states that passengers and employees will access the Central Terminal Area via the Automated People Mover, there is no explanation of the methodologies that would be used to secure the safety of that journey. It is thus unclear that the APM would be safer than the Central Terminal Area public parking facility. The document also declares that "The presence of law enforcement and emergency response teams would be enhanced with Alternative D." Although it then goes on to speak of two new Aircraft Rescue and Fire Fighting facilities, a new police headquarters and Terminal police posts, again it resorts to generalized claims of the advantages without supportive detail. In fact, the planned police headquarter (at Westchester Parkway and Emerson Avenue), is located outside of the operating boundary of the airport.

In subsequent pages (3-47 to 3-56), the following topics are listed and discussed without reference to any specific security component: Terminal Facilities; Traffic/Parking/Circulation Facilities; Automated People Mover; Cargo Facilities; Ancillary Facilities; Land Acquisition and Relocation; Collateral Development; and Proposed Phasing. The text states that publicly available data show that airport facilities have to be upgraded to improve security. However, the Transportation Security Administration is not the only arbiter of security issues. Security is becoming an integrated component across all airport functions. Given the size of the LAX Master Plan project, it is reasonable to expect discussion of the security plan for each listed action, each function and each facility. Cargo and Phasing offer good illustrations of this need: Cargo security is currently the focus of attention by TSA and others. It is unarguable that cargo security processes will affect airport operations, logistics and facilities access over the next 2 years, but the Supplement does not appear to anticipate this. Moreover; the 3-part Phasing Plan does not even acknowledge advance security preparation for a protracted construction project during which exceptional and extraordinary vulnerabilities will apply to the airport and its environs. The new police headquarter is not listed in the phasing, nor is there any apparent recognition of the significant perimeter and core security demands. All of these elements should be addressed before project commencement.

Discussion of the Preferred Alternative (Ch. 3.5) and the CEQA Environmentally Superior Alternative (Ch. 3.6) does not elaborate on the security benefits from traffic and incident management. Security plan elements discussed in other parts of the Master Plan suggest that the security surveillance and

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detection system will extend well beyond the airport infrastructure into the wider public environs, but there is no detail to confirm this. We request that LAWA provide further discussion, in keeping with full public accountability, so that long-term impacts can be considered.

The role of the Transportation Security Administration is briefly discussed in Chapter 4 (p. 4-698). The remainder of this subsection describes post 9/11 security measures, including government-mandated deadlines on baggage screening that LAWA states it has met, together with current and long term plans for deployment of 'inline' screening systems. A statement in this discussion indicates that: "...TSA is in the process of developing additional recommendations and requirements to increase security at the nation's airports" but provides no details. We request discussion of the additional TSA recommendations and requirements and how they may be applied to the LAX Master Plan.

4.1.4 Review of the LAX Master Plan Addendum Draft June 2003

The Executive Summary to the Draft Addendum speaks of Alternative D as 'a new design approach to securing airports for the future' (page i-1). It states that "The alternative would incorporate, to the greatest extent possible, [TSA] recommendations as they are developed as well as the latest passenger and baggage screening technologies;" and "...would also enhance the on-airport presence of law enforcement, surveillance, security, and response teams." These statements merit further explanation as to how this would be accomplished, and with what impact. The following page (i-2) describes conceptual goals for deterrence and prevention of terrorist attacks. In shorter form the goals stated are:

1. Reduced concentrations of people in the public areas of the airport;
2. Relatively rapid movement of departing passengers and baggage through the necessary processes to the secure (sterile) parts of the airport; and
3. Reducing vehicular access to the Central Terminal Area and avoiding concentrations of people and vehicles in other ground processing areas.

On the same page, it is stated that, "Alternative D would utilize an expanded LAWA-operated FlyAway Program throughout the region to disperse passenger processing. This service would include remote check-in of passengers and baggage, and provide direct access into the Central Terminal Area. Refer to Appendix I for a detailed assessment of the security and safety features of Alternative D." Although the foregoing suggests that an explanation will be forthcoming from Appendix I, our analysis has shown that Appendix I does not present a detailed assessment as promised, especially when compared with other parts of the documentation. Accordingly, some comment is due concerning the generalizations stated in the Executive Summary.

As noted above, the third goal is to permit only known, screened and controlled vehicles into the Central Terminal Area; this means that some vehicles will still have access. Expansion of the FlyAway program throughout the region would also offer access to the Central Terminal Area. These two factors may compromise the intent to prevent vehicle bombs imposing heavy casualties in and around the Central Terminal Area. Terrorists seeking weak links in the protective systems would have the opportunity to exploit both approaches, e.g. by hijacking, stealing or attaching bombs to vehicles that they, know have privileged access. The County requests further review and comment on this issue.

Furthermore, a number of questions arise about the modes of permit, identification (vehicle and driver) and screening of so-called 'controlled vehicles.' Access and special egress road design, emergency diversion contingencies, fully equipped road vehicle inspection checkpoints, chokepoints, and barriers - all away from the concentrations of people - come into play here. An efficient system should impose structural constraints on all roadways, with special allowance for those passengers and foreign drivers who will make mistakes or misinterpret airport road signs. This need appears to have been underestimated (in contrast, Appendix I does enter into speculative possibilities on roadway security controls) and we ask for a reassessment of this issue.

It is extremely doubtful that regional expansion of the FlyAway service can satisfactorily and consistently secure a fully screened passenger and baggage load to justify a bus being brought close to the Central Terminal Area, especially given the threat of suicide attack. The description of the proposed passenger screening systems for those passing through the Ground Transportation Center, Intermodal Transportation Center and Rental Car facilities will be discussed later, as there are some contradictions to address. But it is necessary to point out here that a 'level one' screening will not be adequate for passengers at the FlyAway bus stations. The TSA 'level two' screening would be essential, but would have to be repeated in the Central Terminal Area because of the mixing of people from different modes

of access at that location. It is unlikely that LAWA can consistently operate fully equipped remote resources (and sterile station-to-bus areas) to accomplish full screening prior to embarking on the FlyAway bus, and then keep that bus closed and secure for its entire journey. Such a system is prone to error and penetration. Moreover, the 'hassle factor' from lengthy duplication of screening operations would to some extent defeat the initial reason for using this service. We request further review of the screening operations, including assessment of the feasibility of operating the remote resource to complete screening in advance of the FlyAway bus.

Still on page i-2, the document briefly describes the Ground Transportation Center as the primary pick-up and drop off for LAX passengers. It states "The facility would combine a controlled and monitored roadway access system with first level passenger security screening and profiling to further enhance the safety and security of all passengers using LAX." The interested observer might wonder what this actually means. Parts of the Draft Addendum on this topic contradict other parts of the same document, creating confusion if not doubt about the ultimate intention for security risk management of the various facilities. LAWA has made an effort in the right direction, but the analysis below shows that the documentation for Alternative D must be significantly expanded before its title as the enhanced safety and security alternative can be justified.

Discussion of the Terminal/Passenger Processing Facilities for Alternative D (Ch. 2.2) includes a statement that, "The Central Terminal Area reconfiguration would prohibit private and commercial vehicle access to the area, eliminating the threat of vehicular blast at the curb front, which exists today in the Central Terminal Area." What vehicles would LAWA permit to enter the area? Would FlyAway buses and 'screened, controlled vehicles' be allowed, as mentioned in the Executive Summary?

Text on page 2-20 mentions a baggage tunnel that connects the new airport terminals with the Ground Transportation Center, and notes that this tunnel would allow passengers to check their baggage at the Ground Transportation Center, with arriving passengers using the system to re-check their baggage back to the Ground Transportation Center from the Central Terminal Area. This statement is somewhat confusing - does this refer to Skycap check-in service only? What security process would LAWA use for departing passengers? Is the baggage tunnel available for use by departing passengers who will check in at the Central Terminal Area? If so, is there a plan to screen 100% of this baggage? Further, what are the implications for synchronizing transit of passengers and their baggage to the Central Terminal Area?

Ch. 2.2.5 describes an airside secure underground Automated People Mover linking the West Satellite Concourse with the reconfigured Central Terminal Area. Given that a geological fault exists in or close to the area, we request discussion concerning the resulting safety implications as well as contingency plans for emergencies including Automated People Mover breakdown.

The Ground Transportation Center: Discussion in Ch. 2.2.8 notes-the theoretical role of the Ground Transportation Center in drawing concentrations of people away from the check-in queues by separating curbside pick up, drop off, and parking. Some of the statements in this discussion require further clarification:

"...limiting large congregations of passengers by moving ticketing, security screening, and baggage claim to the Central Terminal Area would improve passenger safety and security. Passengers would be subjected to a first level security screening process at the Ground Transportation Center. It is anticipated that the process would include a random checking of baggage and passengers using sniffing dogs, video surveillance systems, and other security devices. Second level screening would occur at the Central Terminal Area; however the Ground Transportation Center would be designed to accommodate second level screening at any time." (Underlined words relate to later comment in this review).

Eight major functions are proposed to be included in the Ground Transportation Center, including E-Kiosk check in, Skycap baggage check-in and first level 'passenger security screening.' We assume that the passenger screening would also apply to visitors and employees (not just passengers), but it is unclear what is meant by 'random checking.' The deployment of explosive detection canine units, given their limitations, suggests that far less than 100% of people and bags would be screened at the Ground Transportation Center. Please provide further clarification for this part of the plan.

Discussion of the baggage tunnel (p. 2-36) tends to reinforce the assumption that the baggage transit system between the Ground Transportation Center and the Central Terminal Area will not incorporate

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EDS screening or, if some check is applied, it will not be to the standard required for aircraft loading. The discussion leaves open the question as to whether passengers not using the Skycap service would be able to send baggage through the tunnel to the Central Terminal Area, but it does say 'Passengers that do not use Skycap baggage check-in may carry [note, not 'must carry'] baggage on the Automated People Mover'. There are two important qualifying statements about the process: "Bags carried by passengers on the Automated People Mover would need to be checked by the appropriate airline in the Central Terminal Area. No airline agents are initially anticipated to be located in the Ground Transportation Area." The foregoing suggests a confused and difficult process, particularly for passengers who do not use the Skycap service (potentially 60% of all LAX traffic).

There is also risk of a terrorist attack via baggage used to carry a device for detonation on the APM. The terrorist objective in this case would be 3-fold: (1) killing and maiming a maximum number of Automated People Mover passengers; (2) closing a critical part of the system down; and (3) terrorizing the public so that they will not use LAX. In logistical terms an APM journey that involves loading, mixing and unloading of passenger baggage would reduce the potential frequency of Automated People Mover arrivals and departures and the subsequent loop journey time. Please comment on this issue.

Intermodal Transportation Center (ITC): The description of random screening in the ITC section (page 2-45) is almost identical to that describing the processes at the Ground Transportation Center. Also mentioned is the intent to monitor all approaching vehicles using video surveillance systems. Please see the discussion of Appendix I for further comment on this subject.

Consolidated Rental Car Facility (RAC): This section does not address security issues, and so the review process defers to Appendix I for explanation.

Ground Access and Parking: Discussion in Chapter 2.3 emphasizes means to reduce terrorist target density and the County does not dispute the validity of this approach. However, the document lacks data to show that the projected dispersal pattern would justify the expense and disruption of reconfiguration. For example, if an improvised explosive device was detonated at the Ground Transportation Center, curbside, on or near the Automated People Mover, or at the reconfigured Central Terminal Area, what casualty rate would LAWA anticipate at, say, peak travel time? Are the projected measurements of time, distance, people dispersal, response capabilities and resources proportionate to the desired gain? Part of the improved protection evidently comes from proposed blast mitigation measures that combine structural design with open space, but we request more data on the flow of people and vehicles in order to evaluate the plan. For example, if the needed dispersal percentages are achieved by adding 3 outlying facilities, is it necessary to operate an automated train system for a distance of 1.5 miles away from the Central Terminal Area? Could LAWA achieve the same goals closer in, with resultant savings and safety mitigations on Automated People Mover operations? If LAWA holds that there is a logistical and dispersal advantage by having the Automated People Mover further out, thereby staggering the flow of people, we request that an explanation of the basis for this advantage.

In discussion of the Central Terminal (Ch. 2.3.2.1) the document says that "access points to the Central Terminal Area road system would be controlled to enhance security in the areas immediately surrounding the airport's infrastructure." It then mentions FlyAway buses and vehicles cleared to drive on the secure airside. This appears to open a security loophole. Would it not be better to provide FlyAway passengers with a dedicated lane or fast track, using the public entrance to the Central Terminal Area while having their baggage processed through the level two TSA screening checkpoint? It appears feasible to screen all FlyAway buses, passengers and baggage with a unit contracted or employed by LAWA with TSA approval. Sufficient user numbers within the FlyAway expansion plan would justify this investment. Moreover, this additional service feature, once given the security planning attention it requires, may offer a more cost effective use of reconfiguration, in addition to its target dispersal contribution. Please comment on this proposal.

Discussion of the Ground Transportation Center (p. 2-60) mentions use of video surveillance to monitor activity, and cites the ability to pre-screen vehicles before they approach the Ground Transportation Center as an integral part of security. Some very simple calculations show this to be an extremely optimistic expectation in terms of prevention. Current, developing and anticipated surveillance technology may offer improved detection and interception, but the distances covered by vehicles at various speeds (whether at normal or excessive traffic flow rates) significantly limit the ability of responding security or law enforcement officers to prevent a determined attack. A number of examples of the speed of attack execution exist, such as terrorist bombings of military installations overseas. A

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vehicle traveling a linear mile at 20 mph would cover the ground, if unhindered, in 3 minutes; at 40 mph, in 1.5 minutes. Some type of substantial physical obstacle, such as a hydraulic arrest barrier built into a choke point, should therefore be part of the roadway design. Such equipment does need some visibility for deterrent value; in a multi-lane setting, the barrier could be used to moderate traffic volume for other goals. We request that LAWA comment on roadway design from a security perspective, including the concept outlined above.

Security features for access to/from the Intermodal Transportation Center and the Rental Car Facility are not discussed in Chapters 2.3.2.3 and 2.3.2.4. We thus repeat our previous comments on controlled choke points, and request that LAWA provide discussion of security design. The reduction of people and vehicle density is but one layer in the defensive design that will allow the 'protection, detection, assessment, and response' concept to become reality. The fact that a target density at one location is reduced from say, 1000 to 100 people will not in itself deter an attacker. The possibility remains that a back up of people could be orchestrated to deliberately increase congestion, density and target volume. This possibility must be addressed at every airport ground processing facility in order to eliminate weakness in the overall security plan and avoid the need to later retrofit the roadways. The suggested control would also apply to design of exit roads, to prevent reverse flow access by an attacking vehicle. The intermodal and rental car facilities would probably not benefit from as much close-in law enforcement and security personnel coverage as the Ground Transportation Center and Central Terminal Area. This compounds the need for optimum security design features on roadways and building access. Please comment on these points.

Discussion of the Air Cargo Roadway (§2.3.2.5) offers no discussion about security planning, conveying the assumption that there are no security considerations. Is this a correct assumption? Similarly, there is no discussion of security planning for Off-Airport Public Road Access (§ 2.3.3), conveying the assumption that there are no security considerations. Is this a correct assumption?

In §2.3.6 it is noted that the proposed 12,400-stall employee garage (accessed via Pershing Drive) would "be designed to help diffuse blast impacts from surrounding vehicles. It would be designed with a security-screening checkpoint for all employees using the garage. " Why does LAWA emphasize this point for the employee parking facility but not for public parking facilities at the Ground Transportation Center, the Intermodal Transportation Center, or the rental car facility?

Discussion of the Automated People Mover (§ 2.4 et seq.) touches briefly on security in a reference to video surveillance. We have indicated previously our concern about the vulnerability of the Automated People Mover, but would add that the expected security issues and management plans for the Automated People Mover deserve more public disclosure. Please provide an assessment of this risk and the steps proposed to address it.

In discussing Cargo Facilities, Chapter 2.5 acknowledges that new security requirements are being developed by the TSA and advises that "LAWA would incorporate any new requirements into the cargo facilities as those standards are developed." This section does not adequately address LAWA's own 'industry capability' - i.e. using its own initiative to offer options. The future direction of air cargo security management may not be fully known from a regulatory perspective, but in terms of public safety we believe that it would be responsible for LAWA to pioneer its own air cargo security standard. Alternative D by virtue of its title claims to answer security concerns and to offer innovation in the process. Yet innovation is decidedly absent from the cargo aspect of the plan. The ultimate test may come from an attack on commercial aircraft via air cargo: adequate warnings exist in industry circles to justify a stronger effort in this regard. We request that the SDEIS/EIR provide more detailed discussion of air cargo security measures, and respond to the suggestion that LAWA pioneer its own standards.

Among the measures that could be considered for air cargo facilities is a plan that would allow airline operators to provide, at short notice, an integrated roadway and security system to screen and clear inbound vehicles, and a 'cold' or 'hot' operational facility for dual technology screening of outbound cargo. In combination, these facilities could routinely earn additional airport revenue and facilitate business continuity during periods of high alert. Please comment on this suggestion.

Addendum Illustrations: The various plan drawings and artists impressions found in the Master Plan Alternative D documentation are helpful and informative. There are, however, several considerations for improving public articulation. Residents of the surrounding environs are a valuable part of airport protection. The eyes, ears and voices of local residents can provide superior protection of community assets. This holds true even when compared with trained law enforcement personnel who have access

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to advanced technologies. Citizens and local residents who perceive that they have a stake in the future of their airport, and who are consulted in the security planning aspects, are most likely to participate constructively. What efforts have been or will be taken by LAWA to provide public education sufficient to harness this resource?

4.1.5 Review of Appendix I: Comparative Security Analysis

The Master Plan Draft Addendum refers to Appendix I as "a detailed assessment of the security and safety features of Alternative D." This statement, combined with the lack of detail in other Master Plan documents, creates high expectations as to the quality of its articulation. In practice, our review has found the experience to be disappointing. The discussion is inconsistent with other documentation and falls short of the detail that should be available for public scrutiny. We are in a new era of risk management. Traditional or conventional thinking will not successfully address future vulnerabilities unless there is a respectful treatment of the public debate. The physical and operational reach of the defensive concept will extend beyond the footprint of the airport infrastructure. In fact, the security component will have environmental effects that are unprecedented in American commercial airport planning, particularly in urban and suburban settings. The Master Plan Alternative D must offer detailed projection, measurement and quantification of these impacts.

Discussion of the Concept: The document states, on page I-2 of the Executive Summary, "The first level (Level 1) entails screening of all persons and bags prior to entering the Central Terminal Area. Level 1 screening is focused on preventing attacks on the ground and ensuring a safe passenger environment. This level of screening will occur prior to entering the Automated People Mover system or FlyAway shuttle buses and focuses on weapons and explosive." This directly contradicts the 'random screening, sniffing dogs' explanation in the main Draft Addendum document; clarification is requested.

On page I-4 of the Appendix, under Methodology, reference is made to the Department of Homeland Security and General Accounting Office validation of "concentric rings of security" to bring protection, detection, assessment, and response" capability 'to the extended airport perimeter'. The following statements from that Chapter appears to contradict the approach offered in the prior two documents:

'Anyone entering the airport property whether to visit or travel will undergo security inspections. There are at least two levels of personnel and baggage inspection that will take place. Level 1 inspection requires screening for explosives and weapons prior to transport by the Automated People Mover or FlyAway shuttle bus to the Central Terminal Area. Using current technology, Level 1 inspection would include screening of persons and bags similar to checks made upon entering federal buildings today. These checks should be designed to be as unobtrusive and not impede the flow of transportation to the Central Terminal Area and should take advantage of the emerging technology. Level 2 inspections will consist of current security screening criteria as mandated by TSA for departing passengers and baggage which is more intrusive and detailed than level 1'.

We offer the following observations on the above excerpt, and request that LAWA provide comment and clarification for each point:

- Level 1 inspection as described here does not match the 'random selection, sniffing dogs' explanation offered in the Draft Addendum.
- There is no mention of profiling people and baggage for selective screening.
- The stated similarity to 'checks made upon entering federal buildings today' is meaningless to people who have never seen or experienced the federal security screening process.
- At federal buildings 100% of those who enter are screened, but these systems rarely (if ever) encounter baggage in size and volume such as will be common to an airport.
- The statement above contradicts itself: the process for federal buildings is obtrusive and would impede flow if applied literally as a Level 1 screening protocol.
- The possibility of 2 levels of screening that are both obtrusive, even with Level 1 proving to be selective, implies a need to estimate consequential density effects that might in some circumstances defeat the desire to disperse people rapidly into the airport controlled areas.
- The reader is left wondering whether there is agreement and/or coordination between the planning entities on security policy and practice.

The same page refers to Figures 4-1 & 4-2 as illustrations of the concentric rings of security and deterrence strategy respectively. These very simplistic figures are of no value in helping the public to understand what the strategies mean for LAX, and no other drawings are included in Appendix I. Why is

this not done, given the proliferation of site drawings and artists' impressions in the other parts of the Alternative D documentation? We ask that LAWA superimpose the concentric rings over the airport plan and explain the resulting figure. The following statement from the same page is offered for its relevance to further comment:

"PDAR facilitates the detection of possible malevolent acts prior to the hostile force coming within range of the target. By increasing the distance between critical areas and the point of detection, law enforcement officers and security personnel have additional time to assess the act as benign, dangerous, or overtly hostile, and respond appropriately."

We offer the following observations on the above excerpt, and request that LAWA provide comment and clarification for each point:

- Is it correct to assume from the statements about bomb threat dispersal that 'critical areas' include public areas where concentrations of people can be expected (e.g. the Ground Transportation and Intermodal Transportation Centers, the Central Terminal and perhaps to a lesser extent, the Rental Car Facility)?

- A rough calculation of available response times (using existing travel distances and transit times) indicates that Alternative D roadway configurations will not significantly increase response time 'prior to the hostile force coming within range of the target.' What does LAWA anticipate in terms of this issue?

- By inference, the 'protection, detection, assessment, and response' system would prove of value only if the outer concentric circles encompass more distant roadways and areas including commercial and residential areas, beyond the immediate airport environs. Is LAWA contemplating an expansion of the concentric circles to include these areas?

- Implementation of a multiple concentric ring system defies imagination in its practical application to LAX. The airport has an irregular property boundary that may be poorly suited to this system. There is no logical center point for the concentric rings, apart from the large Air Operations Area, and the critical areas at LAX are disparate and scattered. In this setting, what is the feasibility of developing the concept with a series of overlapping concentric rings?

Discussion in Ch. 5 (Threat) evaluates LAX as a target. This is a complex topic; we understand that evolving trends in terrorist tactics may unexpectedly shift some of the security emphasis and strategy over time. However, we believe that the threat may have been understated and ask for further discussion and comment on this issue.

The discussion of Potential Mitigations (pp. I-12, I-13) describes security measures that will be applied to MTA Green Line connections with the proposed Intermodal Transportation Center. The discussion refers to use of Closed Circuit Television surveillance and related intelligent devices (as yet unidentified), and specifically mentions facial recognition technology. Several security industry reports in 2002 and 2003 have discredited the so-called 'face in the crowd' facial recognition applications. Original hopes for this technology were overly optimistic, and recent experience has shown this application to be flawed. In a number of cases (for example, Ybor City, Tampa, FL) the systems have been withdrawn from use.²² Further comment will be made later in regard to use of an array of technology and the finite value of detection data inflow.

The final paragraph discussing the MTA Green Line states that "The Green Line connection enhancements in Alternative D provide for a better security solution because no unscreened people or luggage would be permitted to enter the Central Terminal Area." This suggests 100% screening of people and bags, yet there is no reference elsewhere in the Addendum or Supplement to confirm this. Please comment on whether 100% screening will be provided.

There is also no discussion of the planned accommodation for and type of screening equipment, other than a vague mention: 'The MTA Green Line connection facilitates the future employment of security technology allowing a level of initial screening to occur prior to entering the Intermodal Transportation Center or Central Terminal Area.' What form of screening will actually take place there initially, and to what extent? What increase in screening activity is planned or accommodated in the contingencies for change?

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Chapter 6.2 offers a more comprehensive description of the Intermodal Transportation Center. The Comparative Analysis acknowledges that the Intermodal Transportation Center is an integral part of the concentric rings of security and 'protection, detection, assessment, and response' concept. The concentric rings processes are described, with the final stage described thus: "Prior to boarding the APM, all people and bags will be screened using appropriate technology to identify weapons and explosives." Two benefits are cited: one is that it would permit initial screening of passengers and vehicles that without the reconfiguration would not occur; and the other is that it adds a measure of protection to passengers using the APM as they move to the Central Terminal Area. This appears to contradict other elements of the Master Plan documentation, raising questions about the consistency between security components. LAWA should define the word 'screening' and use the classification 'Level 1' more consistently. Otherwise this suggests the emergence of different security standards for access to the Automated People Mover and Central Terminal Area.

Pages I-16 and I-17 cover general security matters pertaining to the reconfigured roadways. Again we note that security technology is a valuable adjunct to trained security patrols but it is not a panacea; it is instead a management tool. Please articulate the contingency plan for interception and management of roadway incidents with minimal disruption to airport operations. This is particularly important at the policy setting stage, as large projects are notorious for paring back security expenditures and thereby compromising protection standards. Will LAWA policy identify agreed-upon security standards so that this does not occur?

In practice, the performance of Closed Circuit TV will depend on the ratio of trained personnel to monitoring devices. Although the stated benefits of roadway monitoring are attractive, the increased data will require monitoring, interpretation and action. How much thought has LAWA given to the risk of data saturation? Over-dependence on security technology may lead to higher risk of error and, ironically, diminished protection. Occupied space is projected under this plan to increase from 3.9 to 6.8 msf. In combination with increased separation distances, this increase will impose substantial new constraints and demands on emergency and enforcement response, and also upon patrol/deterrent services.

Mitchell Gray, in a University of British Columbia paper title Urban Surveillance and Panopticism (<http://www.surveillance-and-society.org>) explores many of the more complex issues associated with surveillance in the community. It is worthy reading for any elected official attempting to understand the implications and potential unintended consequences of surveillance systems. The basic message to be gained from Gray's treatise is contained in the following extract: "It is rapidly becoming an urban instinct to grasp at security through surveillance and knowledge, but this, paradoxically, may add to urban insecurity in a fundamental way: by transforming society in unforeseen directions. There is a threshold point in urban surveillance beyond which quantitative change - the addition of devices used and areas watched - becomes qualitative change." Please comment on how LAWA has addressed the potential for over-dependence on security technology at LAX as part of the proposed Master Plan improvements.

A review of the Ground Transportation Center in Appendix I (Ch. 6.4) restates the threat and target dispersal philosophy along with the 'protection, detection, assessment, and response' protocols. According to discussion on page I-19, passengers will go through a well-organized Level 1 screening point at the Ground Transportation Center before transport on the Automated People Mover to the Central Terminal Area. The Level 1 screening serves to insure the integrity of the Automated People Mover and common areas of the Central Terminal Area, and represents the first opportunity to check passengers and employees for concealed weapons and explosive devices. Yet again there is a clear contradiction with the main part of the Draft Addendum, reinforced by a listing of measures that makes reference to design and installation of passenger and baggage screening devices; please clarify. Additional comment and questions are provided below:

- Is it the planned intention to have two levels of screening, to include 100% of pedestrians accessing the APM and Central Terminal Area?

- How would 100% screening of Level 1 people and baggage affect the risk of congestion and increased people density at the Ground Transportation Center and other remote locations?

-Has LAWA analyzed this risk? If so, where are the results?

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- What ergonomic design factors will optimize rapid movement of people and bags? Has LAWA considered the impact of Level 1 screening on the elderly, infirm, and people traveling with small children?

- Has any field market research been conducted to assess the tolerance for earlier arrivals to negotiate two levels of screening and transportation of baggage between those two levels?

Discussion of the Rental Car Facility (Appendix I Ch. 6.5) repeats the intention to screen all personnel from the Rental Car area to the Automated People Mover. However, the same discussion notes: 'should the current Central Terminal Area roadway need to be secured' inspection of an estimated 1 million shuttle bus trips annually would be time consuming and subject to human error even if state-of-the-art security inspection equipment was employed'. If Alternative D removes vehicular traffic, and thereby mitigates vehicle bomb risk, then would not the passenger and baggage security factor shift to the Automated People Mover? The APM system could become an attractive and vulnerable target. We are therefore concerned about the potential need to police and manage a much larger area (including an occupied mix of separate facilities), that may from the outset require equal standards of screening at Levels 1 and 2. Please comment on this concern.

The Rental Car Facility mitigation measures offer a blend of logical and speculative measures, including the discredited facial recognition system. We again raise earlier comments about discredited systems, data saturation and over-dependence on technology. This is particularly pertinent since the assessment does not refer to an equivalent demand for the increased training and numbers of security operatives (ranging from technicians through guards to airport dedicated law enforcement personnel). Please comment on LAWA's plans with respect to the presence and role of security personnel at the Rental Car Facility.

We request that LAWA provide a security deployment projection for Alternative D, together with a security technology and equipment schedule. Please illustrate how 'protection, detection, assessment, and response' can be accomplished using only technology available today, and describe any credible security equipment advances that can be expected over the next 5 years that might justify an investment in this program. It may be unwise to count on as-yet undeveloped technologies, particularly since reliable and proven technology is with us today, sufficient for planning purposes. More problematic may be the use of human resources, including appropriate numbers, competence and strategic locations.

The comparative analysis in Chapter 6.6 indicates that the Automated People Mover will be a key component for dispersal of vehicular traffic from the Central Terminal Area roadway network. This may be true, but could LAWA accomplish the same dispersal by reducing the distance between the remote ground processing points and the Central Terminal Area? Please provide a vulnerability analysis to address this issue. Further comment and questions are provided below:

- Please provide additional discussion about screening for weapons and explosives at the inbound remote Automated People Mover station access points

- Please discuss the security logistics and practical challenges of handling heavy baggage, multiple bags, and elderly and disabled passengers and children when loading and unloading the Automated People Mover. It is extremely difficult to imagine how screening, loading and offloading of passengers and baggage could be accommodated at the Ground Transportation and Intermodal Transportation Centers and the Rental Car Facility, with sufficient frequency to achieve the level of service promised in the Plan - especially with the reconfiguration objective of rapid dispersal of people.

- The Draft Addendum states (p.2-37) "It is also assumed that luggage carts would be allowed on the Automated People Mover and highly utilized in the transfer of people and baggage." This chaotic image invites questions about safety factors and load capabilities, neither of which is discussed in the Appendix I security assessment. Please address this issue.

- Please provide an exhibit showing street-to-departure ergonomics, flow and density patterns, and screening equipment layout of the remote people mover access points. Although security screening equipment is implied, space utilization is at odds with this statement from page 2- 37: "it is anticipated that passenger assembly would be limited to the passenger platform."

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- The prevention of unscreened vehicular and bomb access to the Central Terminal Area could be offset by the APM: the train could actually carry the device to its target if Level 1 does not screen for explosives carried on the person (as in suicide attacks in Israel). Magnetometers do not detect explosives. Please address this potential security threat.

- The APM could be attacked via vehicles using Century Blvd. and 98th Street, and/or from commercial buildings and hotels overlooking the Automated People Mover guideway system. Please address this potential security threat.

- The primary vulnerability appears to come from the track distance and elevated nature of the Automated People Mover, and its target worth (i.e., elimination of a critical airport transit link, serious disruption to operations, high casualties, public terror and a prestigious but discredited security program). In effect, the Automated People Mover may serve to reintroduce the target potential that Alternative D was purportedly designed to reduce.

- If the Automated People Mover concept is to be pursued, we ask that LAWA consider the possibility of building a grade level (surface) operation, with blast diffusion techniques and materials applied to a protective wall and an armored one-way-transparent canopy for the length of the track

- Overall this part of the Plan is conceptual and idealistic. It lacks data that is essential to show how and when the processes interconnect and will be successfully negotiated while achieving safe dispersal objectives. If the main part of the Addendum (Page 2-35) is correct in its description of the intended screening activity (i.e., "random checking of baggage and passengers using sniffing dogs, video surveillance systems and other security devices") then the Automated People Mover will be vulnerable. Acceptance of that risk is a matter for public policy debate, but moving walkway bridges would obviate need for the Automated People Mover. We request comment and discussion on each of the points raised in this item.

Discussion of the Expanded FlyAway (Ch. 6.7.1) attempts to instill confidence in a speculative system to protect buses from becoming unwitting vehicles for terrorist attack. We have already expressed our doubts on this topic, including the considerable physical spread of the security requirement, the attendant cost, and serious questions as to the ability to control bus security within remote stations and in transit. The FlyAway bus operations would come inside the concentric circles, and it is unclear how the protection would be achieved. The technology to address these concerns (such as under-vehicle inspections) is simplistic and conceptual. Please provide more detail concerning this system, with discussion of the attendant human resource requirements.

In the Chapter 8 Summary, Appendix I uses a subtitle 'Alternative D Advantages and Disadvantages.' It then lists five primary advantages followed immediately by three 'potential enhancements'. We request that LAWA provide more explanation of each, as we believe they merit greater priority. Note that the first suggests the provision of a Vehicle Inspection Center. We have already made reference to the need for this in roadway planning.

We believe that the Remote Delivery Facility will become a reality for many critical government facilities in the United States over the next 5 years, closely followed by other critical infrastructure sectors including commercial airports. It is already operating policy for a variety of private and public sector facilities in different parts of the world, and has seen an increase since the Anthrax mail attacks of late 2001. Accordingly, we ask that LAWA give serious consideration to an extension of this prospective facility to include an Identification and Authorization Processing Center, including some discussion in the response to this comment.

During this review we have established an unquantifiable but extensive (potentially massive) future demand for data input, retrieval, analysis, interpretation and sharing. The data will be diverse, covering audio & visual, electronic signaling, text, numerical, pictorial, computer code, identification systems, people, vehicles, transactions etc. etc. Our understanding of the transactional volume and complexities for a busy international airport shows that a dedicated Identification and Authorization Processing Center is justified to monitor the demand for access to different parts of the airport. This security-controlled service provides identification and clearance for individuals and vehicles, engaging electronic tagging, biometrics, and the administration of airport asset and airside vehicle tracking. Variables allow for individual issue of identification and access control media whether the subject is escorted or unescorted, permanent or temporary, urgent or routine. This facility should be off-airport, based on long established methods employed overseas. The processes will relate directly to the interests of law

enforcement agencies and the security resource. This facility should be located close to the planned new police headquarters. Please comment on the possibility of incorporating these suggestions into the Master Plan.

The third enhancement described in Appendix I relates to the Automated People Mover, previously discussed in this review. There is, however, a distinct and in fact total, absence of listed disadvantages relating to Alternative D security. Our concerns are deepened by the fact that Appendix I lists 5 disadvantages of the No Action/No Project Alternative and then proceeds to mix conceded points with counter argument on 5 other points, thereby maintaining absolute opposition to the No Action/No Project Alternative. A similarly critical eye needs to be cast upon all alternatives. The current approach significantly weakens the value and integrity of the discussion as a comparative analysis, and echoes the concerns for bias and lack of full disclosure that we have stated elsewhere. We request that LAWA provide a full discussion of the disadvantages associated with the proposed security plans for each of the project Alternatives.

4.1.6 Other Security Considerations

In a project of this size, with a title of the Safety and Security Alternative, the County of Los Angeles would expect the LAX Master Plan Alternative D to embrace a total security concept. It is therefore notable that the documentation does not elaborate on plans to secure areas that are known to have major security implications, such as cargo, maintenance hangars and facilities, fuel farm operations, and the perimeter fence lines. During an airport environs tour, the review team saw many security exposures at the west end of LAX and witnessed extreme weaknesses in access control allowing commercial delivery vehicles to enter facilities unchecked (in one instance by simple tailgating). This unauthorized access provided close quarter observation and potential access to parked wide body passenger aircraft in the vicinity. Please comment on this apparent lack of existing security at the west end, and any plans to remedy the situation.

We are aware that in a September 2002 press release, Mayor Hahn announced installation of more than 1,200 video cameras throughout the airport complex. We are unsure whether the word 'complex' refers to all LAWA managed airports, or just LAX; please clarify. We also request discussion of the current status of this project; is it correct that bids have been invited for installation of surveillance technology on the LAX perimeter? With respect to perimeter areas, we offer the following comments, along with a request that LAWA respond to each:

- The Alternative D Plan provides a substantial, expensive (albeit imperfect) protection system for the 'front door' to LAX. But it leaves the back door wide open.
- LAWA should give much more effort to security planning for the individual cargo area, the maintenance and fuel farm complex and roadways, and for the entire perimeter. Otherwise there is a danger that the environmental impact will not receive public scrutiny or will consume unacceptable time when that becomes urgent and essential.
- It is evident that LAX is vulnerable and that security improvements are relatively urgent. LAWA should prioritize the work so that the new security enhancements, when selected, come on stream as early as practicable. Special need exists for a thoughtful security risk management program during construction.
- Serious consideration should be given to the permanent closure of Pershing Drive to public access, and to introduction of a controlled, partially-automated access and egress system for vehicles with legitimate business in the maintenance, fuel farm and employee parking areas.
- In 1994 the Irish Republican Army fired four mortar bombs onto the runway at London Heathrow from a pick-up truck parked outside the perimeter fence. Two bombs hit the runway but failed to detonate. Two more recent attempts to attack aircraft with rocket-propelled grenade have occurred in Africa and at a military air base in the Middle East. The vulnerability arising from use of surface-to-air missiles is acute at the western end of the LAX airport environs. The location of the Segundo Blue Butterfly Habitat/Reserve, the topography and rough shrub cover, is almost perfect for the launch of shoulder-fired missiles and offers target range proximity to ascending and descending aircraft. As disturbing as it may be to be so candid, it is necessary to point out that a passenger, cargo and fuel laden wide-body passenger aircraft heading out for a long haul trans-Pacific flight could be attacked without sufficient time to implement successful counter measures. The suicidal nature of modern day terrorist attack reduces the notional response time even further. We recommend that an urgent and intensive review be

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undertaken to address this vulnerability and to proffer solutions that meet both public safety and environmental review requirements.

- Security and law enforcement personnel requirements merit discussion, as the number and need for specialized training would increase under Alternative D. For the sake of efficiency and public safety, this review should consider ways to reduce potential for jurisdictional and operational law enforcement conflict. It is our understanding that senior officers of the Los Angeles Police Dept. in 1991 proposed a merger of policing entities for the airport, but without progress at that time. This may be a good opportunity to revisit that proposal.

22 Note that biometric facial identification systems, which are used to match individuals on a one-on-one basis, are a different form of this technology and continue to show successful results.

Response:

This comment does not raise or pertain to any environmental issues that are subject to NEPA or CEQA review requirements. Notwithstanding, please see Topical Response TR-SEC-1, which addresses the most frequently raised security-related issues pertaining to the design and ability of Alternative D to enhance existing safety and security at LAX. It should be noted that the Final EIS/EIR is a programmatic document. Therefore, additional detail will be provided and further environmental review will be conducted, as applicable, as project components are implemented.

SAL00013-51

Comment:

4.2 THE ENVIRONMENTAL JUSTICE ASSESSMENT IS DEFICIENT

Presidential Executive Order 12898, issued in February 1994, requires all federal agencies to analyze environmental justice impacts when proposing public projects. The analysis is intended to determine whether minority and low-income communities are unfairly burdened by project impacts, with the goal of using mitigation measures to create a level playing field. In 1999, Senate Bill 115 was passed making environmental justice a requirement of CEQA as well (PRC §.72000-72001).

Despite the importance of this subject, the original Draft EIS/EIR was found to lack even the most elementary NEPA requirements for this topical issue. Review of the Supplement to the Draft EIS/EIR indicates that many of the same deficiencies in the analysis remain. The impacts associated with Environmental Justice demand a far more rigorous analysis than has been provided in the 2001 and 2003 environmental reviews. As discussed below, NEPA requires that information be included in the EIS if costs of obtaining the information are not exorbitant. Where such costs are exorbitant, NEPA requires that the EIS: (1) state that the information is complete or unavailable; (2) state the relevance of the information to the analysis; (3) summarize credible scientific information about the impacts; and/or (4) use other methods of assessing impacts that are generally accepted by the scientific community. CEQA also addresses the issue of analytic detail, requiring that an EIR provide information and analyses with a sufficient level of detail to permit informed decision-making and public participation. LAWA must apply these very basic NEPA and CEQA requirements to the SDEIS/EIR assessment of Environmental Justice.

Response:

The analyses contained in Section 4.4.3, Environmental Justice, of the Draft EIS/EIR and Supplement to the Draft EIS/EIR provided extensive information (over 125 pages of narrative, maps and tabular data) pursuant to NEPA and CEQA and consistent with Executive Order 12898 and DOT Order 1610.2 that is sufficient to support informed decision making. Supporting technical data and analyses are provided in Appendix F of the Draft EIS/EIR and Appendix S-D of the Supplement to the Draft EIS/EIR. It should also be noted, as indicated in subsection 4.4.3.5 of the Draft EIS/EIR and the Supplement to the Draft EIS/EIR, that the environmental justice analysis focuses on those issues with potential for disproportionate effects on minority or low-income communities and also draws on extensive quantitative analyses contained in the other technical sections of these documents. Also please see Topical Response TR-EJ-1 regarding potential air quality and health risk impacts on low-income and minority communities, and Topical Response TR-EJ-2 regarding environmental justice-related mitigation and benefits.

SAL00013-52**Comment:**

We are also concerned about the method used to compare alternatives in the environmental justice analysis. In both the 2001 and the 2003 documents, the No Project Alternative incorporates future planned improvements that were not actually being built, and overstates the capacity of existing facilities. Consequently, the No Project Alternative appears to have far more environmental impacts than any of the proposed Build Alternatives.

Response:

Please see Topical Response TR-GEN-2 regarding No Action/No Project Alternative assumptions.

SAL00013-53**Comment:**

Further, the 2003 Supplemental Draft EIS/EIR describes Alternative "D" as an option that would limit growth to 78 MAP. However, as described previously in § 3.1, Alternative D provides 153 fully functional, high capacity gates and does not remove concrete areas that can be used for aircraft parking. By parking aircraft, Alternative "D" can function as though it has over 200 gates. In overstating the capacity of the No Project Alternative and minimizing the capacity of the build alternatives, the impacts relating to air emissions, air toxics, noise, and traffic are all underestimated for the build alternatives. Underestimating these impacts skews the environmental justice assessment. This is particularly true for Alternative "D," which shifts many of the impacts toward the more economically disadvantaged communities east and northeast of LAX.

Response:

Regarding limiting growth to 78 MAP and aircraft gates, please see Response to Comment SAL00013-126 and Topical Response TR-GEN-3 regarding actual versus projected activity levels. As indicated in these responses, impacts associated with Alternative D have not been underestimated and the environmental justice analysis has not been skewed. Regarding the comment that Alternative D shifts many impacts toward communities to the east, please see Response to Comment SAL00013-16.

SAL00013-54**Comment:**

Finally, in designing runway extensions and facilities to the east under Alternative D, this plan appears to protect biological resources (especially the El Segundo Blue Butterfly) at the expense of residents in Lennox, Inglewood & Manchester. As part of the Environmental Justice assessment, a revision to the 2003 Supplemental Draft EIS/EIR needs to be made that compares the disproportionately high and adverse human health and environmental effects that will be incurred by minority and/or low-income communities in order to protect a limited habitat area on the coast (see also our discussion under § 3.4.5). Our concerns are discussed further in the sections below.

Response:

Please see Response to Comment SAL00013-39 regarding moving the proposed airport facilities to the west. As indicated in that response, while it would be possible to bridge Pershing Drive and grade areas west of the airport for runway safety areas, this improvement would only benefit aircraft landing from the west. The landing thresholds on the east end of the airport would not be extended further west in this case and, as a result, the landing aircraft would not present any less impact on communities east of the airport. It should be noted that the purpose of the Environmental Justice analysis is to identify potential disproportionately high and adverse human health or environmental effects on minority and low-income communities and to recommend measures or processes to avoid, eliminate, reduce, or offset these effects. It is not the purpose of an Environmental Justice analysis to balance impacts to human populations against potential impacts to biological resources that are protected by federal law.

3. Comments and Responses

SAL00013-55

Comment:

4.2.1 Results of Scoping Outreach Must Be Discussed

Scoping is a public process, required by NEPA, that should be conducted as early as possible after a Lead Agency decides to prepare an EIS. The scoping process is designed to determine the scope of issues to be addressed in an EIS, and should be conducted as early as possible after a Lead Agency decides to prepare an EIS. It is intended to be an open process, incorporating the views of other agencies and the public regarding the scope of an EIS.

Environmental Justice issues are usually a major component of the scoping process, and the 2001 Draft EIS/EIR does list 126 outreach efforts with low-income and minority communities and Appendix S-D of the 2003 Supplemental Draft EIS/EIR includes copies of the material (in both Spanish and English) handed out during these outreach efforts. The 2003 SDEIS/EIR also lists four additional Environmental Justice Workshops conducted in 2001. However, neither the 2001 DEIS/EIR nor the 2003 SDEIS/EIR provides an indication of concerns or issues raised by those that were contacted, or details of what transpired during these meetings. The public is thus unable to assess whether or how LAWA may have used the information developed through these efforts. The County of Los Angeles hereby requests that the 2003 SDEIS/EIR be expanded to include specific descriptions of the efforts made to gather information from low-income and minority communities, with a table that identifies the specific concerns raised by each of these groups and discusses LAWA's steps to address those concerns.

Response:

As indicated in Section 4.4.3, Environmental Justice (subsection 4.4.3.7), of the Supplement to the Draft EIS/EIR, LAWA's Environmental Justice Program reflects and incorporates important input received at the Environmental Justice Workshops and during the public review periods for the Draft EIS/EIR and Supplement to the Draft EIS/EIR. For further description of efforts made to gather information as part of the Environmental Justice Program, see Topical Response TR-EJ-2. A table, similar to that requested, is provided in Appendix F-A, of this Final EIS/EIR.

SAL00013-56

Comment:

4.2.2 The Level of Analytic Detail is Inadequate²³

Many potential Environmental Justice impacts were not fully evaluated, reportedly because LAWA was unable to quantify the impacts. NEPA states that when information is incomplete or unavailable, the Lead Agency must obtain that information unless costs are exorbitant.²⁴ According to CEQA, the analysis must be specific enough to permit informed decision-making and public participation. The following subsections include some of the impact discussions considered inadequate.

In discussing Air Quality and Health Effects, the 2001 Draft EIS/EIR and the 2003 Supplement both state: "Due to the lack of available background data and limited information on the cumulative effect of multiple air pollutants, the effect of the Master Plan on cumulative health risks among minority and low-income population cannot be quantified or fully analyzed." NEPA regulations do not permit such a deferral of obligation. All available data must be included, consistent with the mandate of NEPA, and the report must document the efforts made to obtain needed data. Where data is found to be unavailable or limited, the report should identify the cost associated with developing original data and indicate why such cost was determined to be exorbitant in the context of overall project costs.

The 2001 Draft EIS/EIR further asserts, "Due to the lack of available background data, the cumulative or synergistic health effects of (toxic air pollutants (TAP)) emissions associated with the build Alternatives and other environmental hazards could not be quantitatively analyzed within the scope and timeframe of this Draft EIS/EIR." The 2003 SDEIS/EIR dropped this discussion and did not provide new information related to cumulative or synergistic health effects. The 2003 Supplemental Draft EIS/EIR could and should have made assumptions in order to determine such impacts. The County asks that LAWA

develop and apply these assumptions to a quantitative analysis of the cumulative and synergistic health effects of TAP emissions associated with the build Alternatives and other hazards.

23 2001 Draft EIS/EIR, Section 4.4.3.

24 NEPA Guidelines; 40 C.F.R. § 15022.22.

Response:

The evaluation of environmental justice presented in Section 4.4.3, Environmental Justice, of the Supplement to the Draft EIS/EIR, provided a comprehensive evaluation with sufficient analysis to support informed public participation.

Although the discussions of air quality and health effects do indicate that the incremental contribution of the build alternatives to the cumulative effects of multiple air pollutants among minority and low-income populations could not be quantified, the document states that this circumstance was due to a lack of available data, and that obtaining the data would require long-term health studies well outside of the scope of a CEQA or NEPA document. See pages 4-335 and 4-336 of Section 4.4.3, Environmental Justice, of the Supplement to the Draft EIS/EIR and Topical Response TR-EJ-1. There was no lack of effort to secure such data due to cost. Efforts made to obtain data relating to the health effects of TAP emissions have involved cooperative efforts between LAWA and EPA, including LAWA offers of assistance in helping to fund and complete such studies. Nonetheless, in the absence of such data an analysis was provided and a finding was made that the build alternatives would have potential for disproportionately high and adverse effects relating to air quality, as well as potential for disproportionate human health effects under Alternatives A, B and C. These findings have been finalized based on public input provided as part of the Environmental Justice Program and through comments received during circulation of the Supplement to the Draft EIS/EIR. The findings have not changed but have been further clarified in Section 4.4.3, Environmental Justice (subsection 4.4.3.6), of the Final EIS/EIR. These findings of disproportionately high and adverse noise and air quality effects on minority and low-income populations, are made in light of all feasible mitigation measures. Furthermore, accepting that even with implementation of mitigation measures there would still be disproportionately high and adverse impacts on minority and low-income populations, off-setting benefits are also proposed as presented in Section 4.4.3, Environmental Justice (subsection 4.4.3.7), of the Final EIS/EIR. Regarding the County's request that a quantitative analysis of the cumulative and synergistic health effects of TAP emissions be completed, LAWA remains committed to work with the EPA on such long-term studies independent of the LAX Master Plan. Please see Topical Response TR-EJ-1 regarding potential air quality and health risk impacts on minority and low-income communities. Also see Response to Comment SAF00005-10 regarding cumulative effects of multiple air pollutants.

SAL00013-57

Comment:

4.2.3 The Relocation Plan and Requirements are Unsubstantiated²⁵

The 2001 Draft EIS/EIR stated that, "Minority-owned businesses or businesses with a high proportion of minority employees or minority/low-income customers may face special challenges that need to be considered in developing a Business Relocation Plan" but provided no explanation or definition of "special challenges." LAWA needs to clarify this term and indicate how these challenges would be considered in developing a business relocation plan.

The 2001 Draft EIS/EIR further stated that, "Data is currently not available regarding the number of minority owned businesses or minority employees that might be affected by proposed acquisition." In fact, the referenced data is generally available and can be obtained with reasonable effort. LAWA must obtain and analyze this data in the SDEIS/EIR.

The 2003 assessment of Alternative D relocation impacts includes this statement: "While it is possible that certain of these businesses may be minority owned, they are mostly airport related uses or uses that serve the largely non-minority/non-low-income community of Westchester-Playa del Rey. " This statement is unsubstantiated by any facts presented in the 2001 Draft EIS/EIR or the 2003 SDEIS/EIR. Neither of these documents presents data showing how many businesses are minority owned or serve minority communities. The County requests that LAWA present such information in the SDEIS/EIR.

3. Comments and Responses

25 Discussion in this section is based on 2001 Draft EIS/EIR, §4.4.3 and SDEIS/EIR §4.4.3.

Response:

Please see Response to Comment AL00022-71 and Response to Comment PC00558-7.

Public information on the demographics of business ownership and employment is limited. As a result, and based on issues related to privacy rights and the difficulty of completing a survey within the study area, this information was not included in the Draft EIS/EIR or the Supplement to the Draft EIS/EIR. However, the potential for relocation effects on minority businesses or residents was identified on pages 4-428, 4-430, and 4-432 of the Draft EIS/EIR and on pages 4-336, 4-337, and 4-339 of the Supplement to the Draft EIS/EIR. As stated in Section 4.4.3, Environmental Justice, of the Draft EIS/EIR and Supplement to the Draft EIS/EIR, relocation would be undertaken in compliance with the Uniform Relocation Act and pursuant to a LAWA Relocation Plan that would include special provisions to assist minority owned businesses or residents to the extent necessary. To the extent that there could be a disproportionate effect on minority businesses or residents, the effect would be addressed through these provisions contained within LAWA's Relocation Plan and through the Environmental Justice Program described in subsection 4.4.3.7 of the Final EIS/EIR, including Mitigation Measure MM-RBR-2 and the job related provisions for disadvantaged business enterprises described under the environmental justice benefit "Job Outreach Center." As demonstrated by the provisions outlined above, the lack of greater specificity on demographics has not compromised the environmental justice analyses or the adequacy of LAWA's Environmental Justice Program, Mitigation Measures or Master Plan Commitments that address and offset potential disproportionate effects.

SAL00013-58

Comment:

4.2.4 Noise Impact Mitigations Require Further Discussion

Both the 2001 and 2003 environmental documents assert that "Certain areas affected by noise would still be faced with significant impacts due to constraints that apply most directly to minority and/or low-income communities. These include residential areas ineligible for mitigation due to inconsistent zoning or land use designations and substandard housing that may be infeasible to insulate."²⁶ At the very least, the 2003 Supplemental Draft EIS/EIR needs to clearly delineate the location of these impacted areas. A more appropriate solution would be to identify and implement specific mitigation measures to reduce impacts on minority neighborhoods; the document did not contain any noise mitigation measures, as discussed in detail later in this report.

²⁶ 2001 Draft EIS/EIR, Section 4.4.3, Page 4-423; Supplemental Draft EIS/EIR, Section 4.4.3, Page 4-323.

Response:

Regarding the specific locations of residential areas ineligible for soundproofing please see Response to Comment SAL00013-109. Regarding the comment about no noise mitigation measures, see Response to Comment ASL00013-61. All feasible mitigation measures to address noise impacts, including those effecting minority communities have been proposed as presented in Chapter 5, Environmental Action Plan, of the Final EIS/EIR. In recognition of disproportionate and adverse noise effects on minority and low-income areas, also see Section 4.4.3, Environmental Justice (subsection 4.4.3.7), of the Final EIS/EIR.

SAL00013-59

Comment:

4.2.5 LAWA Must Develop a Build Alternative Based on Community Input

Scoping is intended to be an open process, incorporating the views of other agencies and the public regarding the scope and focus of the EIS. CEQ regulations require Federal Agencies to identify an environmentally preferable alternative in the record of decision.²⁷ When the agency has identified a

disproportionately high and adverse human health or environmental effect on minority and/or low-income populations, as occurs in the 2001 and 2003 EIS/EIR documents, NEPA requires that the distribution as well as the magnitude of the disproportionate impacts should be a factor in determining the environmentally preferable alternative. This mandate is evidence in the following excerpt from the CEQ Environmental Justice Guidance document:28

"Agencies should encourage the members of the communities that may suffer a disproportionately high and adverse human health or environmental effect from a proposed agency action to help develop and comment on possible alternatives to the proposed agency actions as early as possible in the process."

To conform to these requirements, LAWA and FHWA must develop an environmentally superior alternative based in part on input from members of minority and/or low-income communities that may suffer a disproportionately high and adverse human health or environmental effect. The 2001 Draft EIS/EIR and the 2003 Supplemental Draft EIS/EIR are void of any evidence indicating that comments or input offered by impacted members of minority or low-income communities were considered in developing an environmentally superior alternative. LAWA must revise the 2003 SDEIS/EIR to incorporate an environmentally superior alternative.

27 NEPA Guidelines: 40 C.F.R. § 1505.2(b)

28 Environmental Justice Guidance Under NEPA, Section 5, page 15.

Response:

The scoping process for the Draft EIS/EIR included members of surrounding low-income and minority communities, as required. Please see Section 4.4.3, Environmental Justice (subsection 4.4.3.7), of the Supplement to the Draft EIS/EIR and Response to Comment SAL00013-47. Alternative D, which is designed to serve a level of future (2015) airport activity comparable to that of the No Action/No Project Alternative, was added to respond to public comment received on the Draft EIS/EIR, including comments from members of minority and/or low income communities that may suffer disproportionately high and adverse environmental effects. Alternative D would have the fewest negative impacts to the surrounding communities and the region is considered to be the Environmentally Superior alternative.

SAL00013-60

Comment:

4.2.6 The Area of Analysis is Arbitrarily Limited

The Environmental Justice analysis of existing conditions and impacts focuses only on census tracts surrounding LAX. LAWA completed no regional analyses, although it was stated that the area of included the region as a whole. The analysis needs to be expanded to incorporate the region that is referenced in § 2 titled the Purpose and Need for the Proposed Action in both the 2001 Draft EIS/EIR and the 2003 Supplemental Draft EIS/EIR.

Response:

As stated on page 4-402, in Section 4.4.3, Environmental Justice, of the Draft EIS/EIR, the study area for the analysis is defined as the area in which the collective environmental effects of the Master Plan alternatives would be likely to occur, extending beyond the areas adjacent to LAX to include those areas potentially affected by aircraft noise (defined by the future 65 dB CNEL noise contours) and aircraft or airport-related emissions, as well as airport-related traffic impacts, including congestion, noise and air pollution. Although specific analyses of environmental justice concerns at a regional level is outside of the scope of the LAX Master Plan EIS/EIR, see pages 1-3 of Appendix S-D of the Supplement to the Draft EIS/EIR for a discussion of regional environmental justice issues as appropriately analyzed in the Southern California Association of Government (SCAG) Regional Transportation Plan (RTP) and Regional Aviation Plan, including issues associated with airport improvement projects and LAX. These documents indicate that limiting expansion at LAX is the best possible outcome from an environmental justice perspective given the high concentration of minority and low-income populations in the LAX vicinity. Also note that LAWA Staff's new preferred alternative, Alternative D, limits future (2015) growth at LAX to levels similar to what would occur with existing facilities if the LAX Master Plan were not approved. Alternative D reduces growth at LAX compared to the other build alternatives, potentially shifting the burden of airport expansion to other regional airports, including airports in the Inland Empire. To the extent that other regional airports undertake expansion

3. Comments and Responses

plans, these plans would be subject to environmental review and would address environmental justice issues pursuant to NEPA and/or CEQA as applicable. Please see Topical Response TR-EJ-3 regarding environmental justice and regional context.

SAL00013-61

Comment:

4.2.7 Environmental Justice Mitigation Measures are Vague and/or Deferred²⁹

The 2003 Supplemental Draft EIS/EIR describes Environmental Justice mitigation in vague terms, deferring some of the mitigation to future studies. For example, aircraft noise mitigation measure MM-LU-1 (2003 SDEIS/EIR) states that LAWA will revise the Aircraft Noise Mitigation Program (ANMP) to include:

"Aspects that are particularly relevant to addressing the unique issues and conditions in minority and low-income areas include provision by LAWA of additional technical assistance to local jurisdictions to support more rapid and efficient mitigation, and the reduction and elimination of structural and building code compliance constraints to mitigation of substandard housing."

Although the language suggests that LAWA has addressed this problem, the measure does not in fact commit LAWA to any definable actions that would reduce impacts. The 2003 SDEIS/EIR also describes future studies as mitigation. Of particular concern is mitigation measure MM-LU-3 calling for a study of the relationship between aircraft noise levels and the ability of children to learn:

"This measure requires that LAWA conduct a comprehensive study to determine the relationship between learning and the disruptions caused by aircraft noise with the intent to set a threshold of significance for classroom disruption due to aircraft noise"

This description suggests that the children of disadvantaged communities may be subjected to harmful noise levels in order to define thresholds of significance. A more responsible and conservative approach is needed that does not have the potential to do additional harm.

While the 2003 Supplemental Draft EIS/EIR elaborates on mitigation concepts more fully than the 2001 document, in many cases the mitigations still do not commit LAWA to definable actions that meet the CEQA and NEPA requirement to avoid, minimize, rectify, reduce, or compensate for adverse project impacts. All identified adverse impacts need to be accompanied by specific and defined mitigation measures. LAWA must evaluate the efficacy of the proposed measures in reducing identified primary and secondary impacts. The EIS/EIR should clearly identify impacts for which no measures are proposed, and should provide an indication of their severity. LAWA should then offer the amended analysis for public review and comment as part of a revised (or entirely new) Draft EIS/EIR. Only by these means can the EIS/EIR achieve adequacy with respect to the analysis of Environmental Justice.

²⁹ Discussion is based on review of 2003 Supplemental Draft EIS/EIR Section 4.2.8.

Response:

The mitigation measures summarized in Section 4.4.3, Environmental Justice (subsection 4.4.3.7), including Mitigation Measure MM-LU-1, are as specific as possible and represent clear commitments to address the impacts of the project. The commentor's statement that part of the language in MM-LU-1, regarding the reduction and elimination of structural and building code compliance constraints does not represent a definable action that would reduce impacts, is due to the fact that LAWA can assist but not fully control how individual jurisdictions run their own soundproofing programs. For example, as further described in Response to Comment SAL00013-109 below, one apparent solution to resolving the lack of progress toward soundproofing in Los Angeles County would require that the County change its code enforcement procedures for properties electing for soundproofing.

Regarding the comment that mitigation measure MM-LU-3 includes a future study and that the measure would subject children in disadvantaged communities to harmful noise levels, as described in Topical Response TR-LU-3, prior noise mitigation payments, aviation easements, and other provisions of the "Settlement Agreement" resolved land use incompatibility and aircraft noise mitigation issues associated with airport operations and affected schools. Nonetheless, as presented in Section 4.2,

Land Use (subsection 4.2.8), of the Supplement to the Draft EIS/EIR, under mitigation measures MM-LU-3 and MM-LU-4 mitigation in the form of sound insulation or relocation would be provided for those schools without avigation easements that are newly exposed to high single event or cumulative noise levels that result in classroom disruption. LAWA considers this mitigation measure both conservative and responsible, as it would set a threshold and provide potential mitigation for impacts that would go well beyond environmental review standards used at other major airports in the Country.

Regarding the statement that the Supplement to the Draft EIS/EIR include mitigation measures that represent specific and definable actions, and meet CEQA and NEPA requirements, see the Executive Summary, and Chapter 5, Environmental Action Plan, of the Final EIS/EIR. Regarding the efficacy of proposed mitigation in reducing primary and secondary impacts, note that the topical issue sections in Chapter 4, Affected Environment, Consequences, and Mitigation Measures, provide this analysis where applicable under the subheading, "Level of Significance After Mitigation." The findings for environmental justice, including off-setting benefits refined and expanded based on public input received during circulation of the Supplement to the Draft EIS/EIR, are presented in Section 4.4.3 (subsection 4.4.3.7), of the Final EIR.

SAL00013-62

Comment:

4.3 TRAFFIC ASSESSMENT

4.3.1 The LAX Interchange at Lennox Boulevard

If Alternative D is chosen for the LAX Master Plan, the County of Los Angeles recommends the LAX Interchange be constructed on the 405 Freeway at Lennox Boulevard. The LAX Interchange would provide direct access between the 405 Freeway and LAX and significantly reduce the traffic impact of LAX on the unincorporated Lennox community and surrounding area. The name "LAX Interchange" is recommended, rather than Lennox Interchange, is to avoid the impression that motorists on the 405 Freeway can exit the freeway and travel to Lennox. Additionally, some form of interchange at Lennox Boulevard is recommended regardless of the plan chosen for LAX. Traffic demand at LAX is expected to increase steadily to the 78.9 MAP, even under the no-build scenario. Therefore, intersection or interchange improvements will be needed to mitigate LAX's traffic impact on the Lennox community and nearby area.

County staff has met with Mr. Bruce McDaniel, Superintendent of the Lennox School District, and his staff to consider the School District's input about the LAX Interchange. In response to their concerns, County staff informed the School District that the EIR/EIS for the LAX Interchange would include a noise study of the proposed interchange ramps. County staff also informed Mr. McDaniel the study would consider Lennox School District's new pre-school recently constructed at the west end of 106 Street. Mr. McDaniel also expressed concern that the LAX Interchange may affect the visibility of signs to be installed on Lennox School District property adjacent to the LAX Interchange. Public Works referred the School District's concern about the signs to LAWA's representatives for their review and response.

Response:

Comment noted. Since the Supplement to the Draft EIS/EIR is a programmatic document, it does not include a detailed study of the proposed I-405 interchange. However, a Project Study Report (PSR) for the interchange must be completed before final approval by Caltrans and the FHWA. The PSR will detail the impacts of the interchange, including potential noise impacts on nearby properties and the need for sound walls.

The I-405 interchange is only being proposed as part of the traffic mitigation plan for Alternative D of the LAX Master Plan. Under Alternatives A, B and C, the traffic mitigation plans included other projects to improve access between the I-405 and LAX. The No Action/No Project Alternative has no proposed off-airport ground transportation improvements to the I-405.

Although the name "Lennox Boulevard Interchange" is used in the Supplement to the Draft EIS/EIR, LAWA agrees with the Commentor that the name of the interchange should reference LAX rather than the community of Lennox, as there will be no connectivity between the freeway and Lennox.

3. Comments and Responses

LAWA is aware that the pre-school on 106th Street may need to be relocated, depending on the approved design for the interchange. LAWA will work with the Lennox School District to determine a suitable relocation site if needed. LAWA staff has met with the Lennox School District and the billboard company of which the school district is in negotiation. LAWA provided information to the billboard company regarding the alternative interchange designs and will continue to work with the Lennox School District as the design of the interchange proceeds.

SAL00013-63

Comment:

4.3.2 Traffic Model Questions

A. C. Lazzaretto retained Mr. Terry Austin of Austin Foust and Associates to review the traffic model used in the LAX traffic study. Public Works staff coordinated its traffic review with Mr. Austin, and agrees with the questions and concerns raised by Mr. Austin in the discussion below.

Trip Generation: The trip generation table (Attachment A in Technical Report S2B) gives information by activity component but is hard to follow for the "Airport Miscellaneous" category. For example, what items represent the trip generation for the 12,400 space west employee parking structure and the 1,300 east employee parking structure? With respect to the employee trips, why are 54 percent assigned to the east parking structure with 1,300 spaces and only 46 percent to the 12,400-space west parking structure? (See Page 22 of the Supplemental On-Airport Surface Transportation Technical Report).

Response:

As specified on Page 22 of the Supplemental On-Airport Surface Transportation Technical Report, the 54 percent and 46 percent referred to by the commentor only include employees that work in the terminals and need to park a vehicle. Because the east garage is closer to the terminals, the terminal employees were assumed to first fill the east garage, and any overflow employees would be assigned to the west garage. Other parking employees that don't work in the terminals, such as those working in cargo buildings or ancillary buildings around the airport, would be assigned exclusively to the west garage. Therefore, when considering all employees that park at LAX, there would be a much higher percentage that use the west garage than the 46 percent referred to by the commentor.

SAL00013-64

Comment:

Trip Distribution: The trip distribution diagram (Figure B-1) is difficult to follow (while not labeled, it appears to be airport peak hour trips). Is there information that can more clearly show the trip distribution? The methodology discussion suggests that employee/other trips have a different trip distribution than air passenger trips. This would certainly be appropriate, but there does not appear to be any elaboration on this or any quantitative description.

Response:

Figure B1 does represent the airport peak hour. Percent distributions of airport trips have been created in the form of matrices and are used to create airport trip tables. Individual percentages are assumed for each of 1,600 zones, with separate percentages for four categories of airport trips. This means that there are over 6,400 distribution percentage assumptions. The same matrices are used for each year 2005 alternative (except Adjusted Environmental Baseline which uses the existing trip generation and distribution) for each alternative. The same matrices are also used for each year 2015 alternative. More information is provided in the "LAX Ground Access Model Calibration and Validation Report", dated September 30, 1998. Since these trip tables are so large and complex, it was determined that Figure B1 would be the best way to illustrate the general trip distribution.

SAL00013-65

Comment:

General: There does not appear to be a reference for a description of the traffic model. There presumably is such a report which describes the model and provides a peak hour intersection level validation. Other questions that are also presumably addressed in that document pertain to the intersection forecasting process. For example, does the traffic model use post-processing for year 2015, and if so, is it 2000-2015 or some other interval? If there is no post-processing, then considerable reliance is being placed on the raw modeled data for 2015. This is particularly critical for peak hour intersection turn movement volumes.

Response:

The LAX Ground Access Model Calibration and Validation Report," dated September 30 1998, is contained in the CD of technical reports for the Draft EIS/EIS following Technical Report 2b. "Raw modeled data" are not used in the analysis for any existing or future year scenarios. As described in the report on pages VIII-2 and VIII-3, two adjustments are made to the raw model data. First, link adjustment factors are applied to the model-estimated volumes on all studied links. As described in the report, these adjustment factors "compensate for the over or under simulation of traffic volumes by creating an 'offset' for each link volume with count data. This offset, which is simply the difference between the modeled volume and the counted volume, is applied to the link. With the application of the adjustment factor, the (adjusted) volume is equal to the counted volume at every counted link. This adjustment factor is saved, and will be used for the analysis of alternative model scenarios. For example, if a link currently has a count of 1200 and a (raw) model volume of 1250, an adjustment factor of -50 is applied to the link. If future scenario model produces a (raw) model volume of 1275, the adjustment factor will be applied to produce an (adjusted) model volume of 1225." The final adjustment procedure is a post-processor which estimates individual turning movement volumes at every studied intersection. The methodology used is documented in TRB #795 by Pagitsas and Shin. It starts with the actual counted turning movements for 1996, then adjusts the individual movements such that the total approach and departure link volumes match the (adjusted) volumes estimated by the model for the scenario being analyzed. When applied to an existing conditions scenario, the resulting turning movements match the ground counts. When applied to a future year scenario, the resulting approach and departure volumes match the model's adjusted link volumes.

SAL00013-66

Comment:

4.4 NOISE ASSESSMENT

The County previously submitted to LAWA a lengthy set of comments on the noise analysis contained in the 2001 Draft EIR/EIS for the LAX Master Plan. The prior comments addressed noise impacts associated with the project Alternatives (A, R and C) under review at that time. The 2003 SDEIS/EIR expands on analyses contained in the original EIR/EIS to cover the new preferred project, Alternative D. The SDEIS/EIR also contains an analysis of single event noise impacts on sleep disturbance as well as an expanded analysis of noise impacts on schools. The sleep disturbance and school noise impacts analyses were prepared in response to CEQA litigation on the Oakland International Airport Master Plan commonly known as "Berkeley Jets." The SDEIR/EIS presents Year 2000 noise data for comparison in addition to the Base Year 1996 data.

The comments presented here are ones made specific to the analysis of Alternative D and the sleep and school analyses that are presented in the supplemental EIR/EIS. The comments submitted in 2001 concerning Alternatives A, B and C also apply to Alternative D. Accordingly, we have organized the following review to include all of the comments originally submitted in 2001, as well as the new comments appropriate to Alternative D as described in the SDEIS/EIR.

Response:

Comment noted. Please see Responses to Comments SAL00013-68 through SAL00013-112 below.

3. Comments and Responses

SAL00013-67

Comment:

4.4.1 Restatement of Critical Review Submitted in 2001

It is important to note that the findings of the Draft EIS/EIR include a finding of significant noise impact that cannot be mitigated to a point of insignificance. The issues raised in our analysis do not change this finding of significance. The comments presented here address whether or not the Draft EIS/EIR adequately discloses the extent and magnitude of the impact and whether or not mitigation issues are addressed adequately.

Response:

Comment noted. Please see Responses to Comments SAL00013-68 through SAL00013-96 below.

SAL00013-68

Comment:

Determination of Potentially Significant Impacts: CEQA requires that the Draft EIR identify all impacts that could arise to significant levels and must employ the proper "thresholds of significance" to make that identification. CEQA also requires that the document "challenge" and "update" thresholds that may not be current or protective of the public interest. This notion includes the idea of setting thresholds that will improve the quality of life of residents. As it relates to the impacts identified below, LAWA should seize this opportunity to push the SDEIS/EIR beyond mere minimum standards or code compliance, and assert a more conservative approach to identifying significant impacts. The following identified impacts relate to the use of minimum standards.

CEQA does not mandate, require or endorse a specific decibel standard or noise metric to determine if a project engenders a significant adverse environmental impact with respect to aircraft noise. However, a significant aircraft noise impact is said to have occurred if one or both of the following conditions exist:³⁰ (a) noise sensitive areas (such as residences, churches, and hospitals) are newly exposed to 65 CNEL or greater; and/or (b) noise sensitive uses in the 65 CNEL contour of a "build" alternative experience an increase of 1.5 CNEL or greater compared with the environmental baseline conditions.

The Airport Noise Compatibility Planning guideline³¹ is the primary Federal regulation guiding and controlling planning for aviation noise compatibility on and around airports. It establishes, for most land uses and noise sensitive uses, the standard of < 65 day-night average noise level (DNL or Ldn) as "acceptable," although it recognizes that local communities may choose to mitigate impacts below the Ldn of 65 dB.

The Federal Interagency Commission of Noise has identified 65 Ldn as the 24-hour day-night average sound level at which most people become highly annoyed by noise. However, FICON has acknowledged that people may and do become highly annoyed by noise levels well below 65 Ldn. Indeed, many commentators and acoustic researchers are seriously questioning the validity of the 65 dB Ldn criteria for planning purposes: research has shown that at this level about 15% of the population remains "highly annoyed" and that the standard is an average sound level, not a measurement of individual sound events that tend to affect people more than average levels.

The SDEIS/EIR should have employed these conservative criteria to allow a survey of a larger area and reveal the true pervasiveness of sound that was not identified in the Draft EIS/EIR. This would be important in the discussion of impacts and mitigation of noise to show that "average" threshold levels were not sufficient to show the chronic and long-term effects within the LAX flight path. It is likely that there will be exacerbated and disproportionate levels of impacts on unincorporated neighborhoods under the flight path approaches to LAX.

³⁰ California Aircraft Noise Standards, Title 21 of the California Code of Regulations.

³¹ Title 14 of the Code of Federal Regulations, Part 150.

Response:

The content of the comment is essentially the same as Comment AL00022-93; please see Response to Comment AL00022-93.

SAL00013-69

Comment:

Number of People Impacted by Noise: There is a significant discrepancy in the number of dwelling units and population impacted between the EIS/EIR baseline year impacts and data published by LAWA. Under California law, the airport must publish a quarterly report that describes the noise impact of the airport. This law has been in effect since the early 1970s and LAWA has published the Quarterly Reports as required. Appendix D of the EIS/EIR states that the base year noise impact is based on data published by LAWA in the 1996 Fourth Quarter Report.32 Chapter 4, § 4.1.3.1.2 states that the EIS/EIR relies on the Fourth Quarter 1996 operational data but does adjust the EIS/EIR contours to reflect the noise monitoring data that are collected by the airport. The difference between the impacts as defined by the EIS/EIR and the impacts as identified by LAWA in its Quarterly Report is dramatic and significant. The following data compare the number of dwellings and population impacted as defined by LAWA in the 1996 Fourth Quarter Report and as defined in the EIS/EIR for baseline year 1996.

Table 4

Difference Between Draft EIS/EIR Noise Impact and LAWA 1996 Quarterly Report

I - I I e I I ' I

LAWA 1996 Fourth Quarter Report 31,968 85,907

EIS/EIR Table 4.1-2 For 1996 16,900 49,000

' Difference 15,068 36,907

The differences shown in Table 4 are not presented, reconciled, or explained in the SDEIS/EIR. The population and dwelling data shown in the LAWA 1996 Quarterly Report are not mentioned in the Supplement to the Draft EIS/EIR even though the Quarterly Report shows noise impacts nearly twice as large as those reported in the SDEIS/EIR. Section 4.1.3.1.2 and Appendix D § 2.2 discuss the LAWA Quarterly Reports and the fact that noise contours in the Quarterly Reports are adjusted to reflect noise monitoring data. Appendix D presents the difference between the noise monitoring results and the EIS/EIR noise model results in the terms of dB CNEL in Table 5. The average difference between the two is presented as an under-prediction in the model of approximately 1.1 dB. Examination of the data shows that the noise monitor sites east of the airport, primarily in Inglewood, consistently show noise levels nearly 3 dB greater than the EIS/EIR noise modeling predicts. While the differences are smaller in other communities, the bulk of the population impacted is in the area where monitors show that the noise model has under-predicted the impact.

LAWA operates a permanent noise monitoring system as required by the California Airport Noise Regulations that has been approved by the State of California Division of Aeronautics. LAWA has been monitoring noise on a continuous basis and submitting Quarterly Reports since the early 1970's and every Quarterly Report includes noise impact data based on noise contours that have been adjusted to match noise monitoring data. Nevertheless, the Draft EIS/EIR relies on a noise computer model output that has not been adjusted to reflect the noise monitoring data even though the noise monitoring data show a consistent 3 dB bias in the east approach corridor to LAX.

There is no doubt that there is a consistent bias in modeling data in the Inglewood approach corridor; the size of the difference in the Inglewood area compared to the system accuracy is significant. Appendix D, in the paragraph just below Table 6 makes the misleading and inaccurate statement that the SDEIS/EIR noise contours "were generally confirmed by the actual noise measurements." This statement is based on the overall average difference at all sites, and fails to recognize the bias in the Inglewood approach corridor. The Draft EIS/EIR contours under-predict the noise impact as measured by the number of dwellings and population within the 65 CNEL contour by an amount that makes it difficult to establish a credible disclosure statement to the general public.

The SDEIS/EIR does not attempt to examine the reason for the under-prediction of aircraft noise by this noise model. Instead, the SDEIS/EIR rationalizes the lack of contour adjustment by stating, "draft FAA Order 1050.E indicates that measurements should not be used to calibrate noise contours;"33 the cause of the discrepancy is not identified. The difference may be due to errors in input data to the noise

3. Comments and Responses

model, not a calibration issue. Failure to adequately account for flight track dispersion could cause the kind of discrepancies the data shows. The model has the capability to report noise levels by aircraft type at each location. Such data should be compared to measurement data for those aircraft and a rational and detailed explanation of the model/measurement differences should be made. At the least, the source of the difference would then be identified (i.e., input data errors, model database differences, or model algorithm shortcomings).

The FAA has a history of being reluctant to adjust noise contours based on measurement data. This policy was based on historical attempts to use short term monitoring data to make adjustments that are not statistically justified. Such a policy is justified, in particular when attempts are made to use a few hours of monitoring data as a basis for moving noise contours. In this case, however, LAWA operates noise-monitoring sites 24 hours a day, measuring every aircraft, and has been doing so for over 20 years. These data do warrant adjustment to the noise contours; either by correcting input errors or modifying model databases (such as noise curves and aircraft profiles). FAA does not prohibit these changes and, in fact, FAA provides a mechanism for user changes to the database. The "INM Users Guide,"³⁴ contains Appendix B, "FAA Profile Review Checklist." The first paragraph of that appendix contains the following statement,

"The Office of Environment and Energy (AEE) requires prior written approval for all user changes to the Integrated Noise Model (INM) standard profiles for FAR Part 150 studies. A similar requirement under National Environmental Policy Act (NEPA) will take effect pending FAA Order 1050.1E".

Following that paragraph is a detailed list of information required for the FAA review of user made changes. It is not known if any attempt was made to seek FAA approval of changes needed to make the model better match measurement data. If there was no attempt, the decision should be explained. This last comment is especially appropriate if input errors have already been eliminated as a possible source of the difference.

32 Appendix D Section 2.1, Appendix D Section 2.2.

33 Appendix D, Page 17.

34 For INM Version 6, dated September 1999.

Response:

Appendix D, Aircraft Noise Technical Report Section 2.2 Comparison of Environmental Baseline Noise To Quarterly Noise Report of the Draft EIS/EIR and Appendix S-C1, Supplemental Aircraft Noise Technical Report Section 2.1.7 Relationship of 2000 Contours to 4th Quarter 2000 Report Contours of the Supplement to the Draft EIS/EIR explained the differences in the modeling vs. monitoring process. The measured noise data collected at the various sites around the Airport is not adequate to allow the modification of the INM databases to better reflect measured noise levels. The absence of thrust level information for each distance (from ARTS) and noise level combination produced by the monitoring system prevents the modification of the databases in accord with the guidance of the FAA as provided in Appendix C of the INM User's Guide. The noise analysis was done in complete compliance with appropriate FAA and scientific principles including FAA Order 1050.1D and Order 5050.4A. The INM is intended to be a planning tool for the relative comparison of noise exposure patterns and intensities among environmental baseline, future No Action/No Projective Alternative and build alternative development conditions. It was not designed for, nor intended to provide, highly defined noise levels reflecting measured local conditions. Consequently, the modeled noise levels associated with environmental baseline conditions will have consistent relative relationships to future noise patterns prepared with the INM. The Draft EIS/EIR acknowledged and showed the differences in Table 6 that the model under predicts noise levels for some noise monitoring sites. Please see Topical Response TR-N-1, regarding noise modeling approach. Please see Section 4.1, Noise, and Section 4.2, Land Use, of the Draft EIS/EIR and Supplement to the Draft EIS/EIR and Appendix D and Technical Report 1 of the Draft EIS/EIR and Appendix S-C1 and Technical Report S-1 of the Supplement to the Draft EIS/EIR for more information on and comparisons of noise and noise-related land use impacts under the baseline and Year 2000 conditions and the various Master Plan alternatives including new Alternative D.

SAL00013-70

Comment:

Change in Number of People Impacted by Noise: The Draft EIS/EIR relies on the noise model to identify relative changes between baseline and future Alternative conditions. The Draft states, "the modeled noise levels associated with environmental baseline conditions will have consistent relative relationships to future noise patterns prepared with the INM "35 This statement, while possibly true for changes in noise level, is not accurate with respect to the area of noise impact, the number of dwelling units, and the population within the noise contours. The implication of the statement quoted above is that the increased number of people identified as impacted will be the same whether or not the noise contours are adjusted to reflect results of noise monitoring. This is not true and fails to reflect that area, dwelling units, and population are second order functions of the size of the contour. The change in the number of people residing inside the 65 CNEL contour will be much larger than reported in the Draft EIS/EIR. The percent change may remain nearly constant, but the absolute magnitude will be larger.

If LAWA does not adjust the Draft EIS/EIR contours to reflect monitoring data then the document should attempt to estimate the correct number of dwellings and people inside the contours by using an adjustment factor based on the differences identified for the baseline conditions. While this is far less satisfactory than adjusting the contours, the impacts identified would be a far better disclosure of the magnitude of the impact than is now included in the document.

35 Appendix D, Page 17.

Response:

The content of the comment is similar to Comment AL00022-95. Please see Response to Comment AL00022-95.

SAL00013-71

Comment:

Use of 1996 as Base Year: There is reason to question the validity of 1996 as the baseline year. Use of the 1996 baseline appears to underestimate the impact of the project (in addition to the contour adjustment issue identified above). To demonstrate this concern, the following table compares 1996, 1999, and Year 2000 noise impacts at LAX:

Table 5
LAWA 1996, 1999 and 2000 Quarterly Report Noise Impacts

1996 Fourth Quarter Report	31,968	85,907
1999 Fourth Quarter Report	26,422	78,026
2000 Fourth Quarter Report	27,312	80,211

The above data show that the use of the 1996 baseline, with its larger impact area, would result in underestimating impacts compared to using 1999 or 2000. The difference in the number of people impacted for the year 1996 and the year 2000 is potentially large enough to change the conclusions as to whether future year contours impact a larger or smaller number of people than baseline conditions. As a result, LAWA should update the noise study to a more current year.

Response:

This comment is essentially the same as comment AL00022-96; please see Response to Comment AL00022-96. In addition, please see Topical Response TR-N-1, Noise Modeling Approach, particularly Subtopical Response TR-N-1.3, regarding use of the 1996 baseline for the noise analysis, and TR-GEN-1 regarding baseline issues in general.

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SAL00013-72

Comment:

Project Description/Operational Assumptions: The noise analysis is a comprehensive analysis that attempts to identify cumulative and single event noise impacts as well as detailed tables of time above specific thresholds. However, in addition to failing to adjust the contours to reflect noise monitoring data, there is substantial uncertainty associated with the future operational assumptions. The operational assumptions are in many cases counterintuitive and lack justification. This makes any analysis of the noise impacts speculative, and potentially under-predicts the impact. The following are examples of areas of concern and point to a need to do a "worst case" analysis in the event that these assumptions cannot be assured or justified. The following data were taken from the Executive Summary, Pages ES-9 and ES-10.

Response:

The content of the comment is essentially the same as Comment AL00022-97; please see Response to Comment AL00022-97.

SAL00013-73

Comment:

Passengers Per Departure: The baseline passengers per departure are 90.76 while Alternative C assumes 145.09. It is not explained how LAWA expects the project to result in a relocation of short haul operations to some other airport and an increase in average aircraft size. There is no component of Alternative C that results in a nearly 60% increase in passengers per departure. This increase is extraordinarily large given that no part of the project forces commuter or short haul aircraft to move or even includes a design feature that discourages these aircraft. In light of this, the Draft EIS/EIR should contemplate the noise impacts if this assumption proves to be false and commuter and short haul carriers do not move to some other airport. Further, the extent to which the passenger per departure increase is due to increased load factors needs to be addressed and a discussion of whether, or not this increase in load factor (expressed as an increase in aircraft weight) was included in the INM input for the future case scenarios needs to be explored.

Response:

The content of this comment is identical to comment AL00022-98; please refer to Response to Comment AL00022-98.

SAL00013-74

Comment:

Cargo Activity/Cargo Building Space: The baseline cargo activity is 1.9 million tons of cargo using 1.9 million square feet of space. Alternative C activity is 4.1 million tons using 5 million square feet. The future ratio assumes that new cargo facilities are no more efficient than the old LAX facilities and fails to recognize that modern facilities may handle twice the amount of cargo per square foot. LAWA does not provide the basis for this assumption. The noise analysis should be based on the potential impact of far more cargo traffic than is currently estimated.

Response:

LAX Master Plan Alternative C is designed to include 4,903,000 square feet of cargo buildings, which would process 4,172,000 million annual tons of cargo. Table S3-2 in Chapter 3, Alternatives, of the Supplement to the Draft EIS/EIR identified that the unconstrained demand for annual tons of cargo would be 4,172,000 in 2015. The 4,903,000 square feet of cargo buildings included in Alternative C is greater than the 4,735,305 square feet needed to meet the unconstrained forecast. The apparent disparity in cargo sorting efficiency between Alternatives C and D results from Alternative C having greater than sufficient cargo sorting capacity to meet the unconstrained forecast for cargo activity. Cargo activity would not increase beyond the forecast unconstrained demand regardless of available capacity.

Therefore, the noise analysis conducted as part of the Draft EIS/EIR and Supplement to the Draft EIS/EIR, based on the forecast cargo activity, is correct.

SAL00013-75

Comment:

Maximum Airside Capacity: The Draft EIS/EIR nearly doubles the terminal space but assumes a very modest increase in passengers and operations. This is based on the assumption that future technology will not increase the capacity of existing runways. However, LAWA should also explore the opposite: what would result if improved technology results in increased airside capacity? Given the increase in terminal space, how much air traffic could those terminals handle? LAWA should disclose noise impacts for air traffic estimates based on maximum terminal capacity for the proposed project.

Response:

The constraining feature of Alternative D is the number and type of aircraft gates. Runway design, runway layout, and terminal space in Alternative D are not capacity constraints.

Section 1.2, Facility Constraints, of the Executive Summary of the Draft Master Plan Addendum describes how one component of an airport system can constrain the capacity of the entire system. Just as a chain is only as strong as its weakest link, an airport is only as capacious as its most constrained component. The capacity of the runway system or terminal system at LAX is irrelevant if enough gates exist to efficiently process only 78.9 MAP.

SAL00013-76

Comment:

Peak Hour Operations/Delay: The All Weather Peak Hour Operations are identified as 150 for the baseline condition and 145 for Alternative C. The All Weather Average Delay is identified as 8.69 minutes while the Alternative C delay is identified as 13.59 minutes. This statement is counterintuitive and, at the very least, challenges the credibility of the aviation forecasts upon which the noise analyses are based. Please explain the basis for these findings.

Response:

The content of this comment is identical to comment AL00022-101; please refer to Response to Comment AL00022-101.

SAL00013-77

Comment:

Terminal Space/Number of Gates: Alternative C increases terminal space from 4 to 7.3 msf while gates increase from 165 to 172 (186 to 228 narrow body equivalents). The narrow body equivalent ratio increases from 21,500 sq. ft. per narrow body equivalent gate (baseline) to 32,000 square feet per gate, which is nearly a 50% increase. It appears that the project will have a larger gate capacity than is being reported and, if so, this needs to be accounted for in the noise analysis.

Response:

The content of this comment is identical to comment AL00022-102; please refer to Response to Comment AR00022-102.

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SAL00013-78

Comment:

Regional Issues: The project is primarily a landside development project (terminals and roads) with no new runways. A major assumption in the document is that some other airport in the region will absorb the unmet aviation demand. The Draft EIS/EIR does not identify which airports will meet this demand or any mechanism to ensure that this assumption is valid. LAWA, as proprietor of multiple airports is lead agency for the EIR and the FAA is a lead agency for the EIS. Both agencies have the ability to commit to or fund airport projects outside of LAX. The document needs to address the noise issues in the event that future airport capacity is not developed elsewhere in the region. The SDEIS/EIR should include an Alternative that meets aviation demand for the region - either through committing to a regional solution or anticipating additional runways in Alternative C - and discloses the noise impact of that Alternative.

Response:

The content of this comment is identical to comment AL00022-103; please refer to Response to Comment AL00022-103.

SAL00013-79

Comment:

Health Effects of Noise Technical Report: Technical Report 14b contains a general discussion of the effects of noise on people. In the last paragraph of § 1 the report concludes with the statement, "It is, therefore, assumed that compliance with the compatibility criteria is sufficient to protect human health." The statement in itself is correct, but is misleading in its implication that LAX complies with the compatibility criteria. The report fails to make a most important conclusion related to health effects of noise: LAX does not comply with the compatibility criteria. Based on this factor, it can then be concluded that noise levels associated with aircraft operations at LAX have adverse health effects on people. This should be addressed in the Technical Report and the DEIS/EIR should identify the health effects associated with high noise levels including the fact that in 1996 over 85,000 people resided in areas that exceeded the compatibility criteria.

Response:

Please see Responses to Comment AL00017-52 regarding the health effects of aircraft noise.

SAL00013-80

Comment:

Mitigation of Noise Impacts: The proposed project includes no noise mitigation recommendations for the proposed project. It should be noted and clearly recognized that LAWA has for many years conducted an ongoing noise mitigation program and has periodically introduced new programs as appropriate.

Response:

Comment noted. Please see Topical Responses TR-LU-5 and TR-N-4 regarding noise mitigation measures presented in the Draft EIS/EIR and Supplement to the Draft EIS/EIR. The Supplement to the Draft EIS/EIR included new mitigation measures that would revise the Aircraft Noise Mitigation Program to encompass noise-sensitive uses newly exposed to single event noise levels that may result in nighttime awakening and classroom disruption. Please also see Topical Response TR-LU-3 regarding the Aircraft Noise Mitigation Program. One example of a new program that is currently administered by LAWA to remove incompatible residential uses from areas exposed to high noise levels is the Voluntary Residential Acquisition/Relocation Program for the Manchester Square and Belford areas. As further described in Section 4.2, Land Use (subsection 4.2.3), of the Draft EIS/EIR and Supplement to the Draft EIS/EIR and Topical Response TR-MP-3, the Voluntary Residential Acquisition/Relocation Program for the Manchester Square and Belford area is a separate program from the LAX Master Plan and was established based on interest from homeowners and residents who requested that LAWA purchase their property in lieu of soundproofing. A discussion of measures considered under the Noise

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Abatement Program is provided in Response to Comment AL00022-106 and Topical Response TR-N-7. Also see Response to Comment AL00022-28 regarding noise mitigation recommendations.

SAL00013-81

Comment:

What is not clear is why the proposed project does not address any new noise mitigation programs. Several mitigations are discussed in detail in Appendix D but not recommended for adoption by LAWA. Appendix D includes the following measures that LAWA should consider for inclusion as recommended programs for the proposed project:

- Shorten the downwind leg approach to reduce the number of overflights to communities well east of the airport.³⁶
- Eliminate early turns over El Segundo.
- Reevaluate the benefit of restricting outboard runways to arrivals only in terms of number of people and dwellings inside the 65 CNEL contour.

The analysis in Appendix D describes benefits and impacts in only general terms of change in noise level but not in area impacted. Further, the analysis appears to rely on questionable economic data to estimate mitigation costs. Specifically, the analysis assumes that the delay of 2-4 minutes associated with the measure would apply to all flights independent of time of day. It would be more logical to assume that the delay would be longer during peak periods and shorter during off peaks.

An important aspect of the existing LAX noise mitigation program is the preference for west flow departure operations. The project assumptions presented in Appendix D appear to assume some degradation in the amount of time that the airport is in west flow for departures. Figure 10 of Appendix D shows 5.71% of operations in east flow for the proposed project. Table 3 of Appendix D indicates that less than 1% of departures are to the east for baseline conditions. Figure 10 and Table 3 are in different formats, so the above comparison may not be fair; however, the SDEIS/EIR does not provide assurance that the project will not result in an increase in east flow departures.

36 Exhibit 29 of Appendix D.

Response:

The content of the comment is essentially the same as Comment AL00022-106; please see Response to Comment AL00022-106.

SAL00013-82

Comment:

A final mitigation that should be given consideration is expansion of the sound insulation program to homes within the 60 CNEL contour. Such a program may not qualify for traditional Federal funding but there may be an opportunity to use passenger facility charge (PFC) funding for such a program. Because community concerns about the impact of aircraft noise goes so far beyond the boundary of the 65 CNEL contour (particularly when the contour is not adjusted to match noise measurement data), consideration of expanding the program should be given a thorough evaluation in the Draft EIS/EIR. Figure 4.2-5 shows the 1992 65 CNEL contour upon which the insulation program is based. The Draft EIS/EIR should compare this contour with the project 60 CNEL contour and evaluate the cost of expanding the program to include the 60 CNEL contour.

Response:

Comment noted. Please refer to Subtopical Response TR-N-2.2 regarding why the expansion of the ANMP under the LAX Master Plan would not be extended to include the 60 CNEL. Priority for sound insulation is given to residential properties within the highest noise level band above the 65 CNEL. Section 4.1, Noise and Section 4.2, Land Use of the Supplement to the Draft EIS/EIR included an analysis of single event noise levels that may result in nighttime awakenings. As stated in Section 4.2, Land Use (subsection 4.2.8) of the Supplement to the Draft EIS/EIR, the ANMP would be revised to include areas newly exposed to these noise levels (defined by the 94 dBA SEL noise contour).

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Regarding the assertion that the noise contour is not adjusted to match noise measurement data, as described in Topical Response TR-LU-3 the boundary of the 65 CNEL noise contour is validated through the continuous monitoring of 25 sites in the area surrounding LAX. Furthermore, quarterly noise reports are submitted by LAWA to Caltrans and the County of Los Angeles and are also adjusted annually by LAWA.

Regarding additional funding through a PFC, a PFC increase is currently proposed to supplement the current ANMP.

SAL00013-83

Comment:

Miscellaneous Noise Comments:

Data Sources and Assumptions: In §2.1, the third from last sentence, 2nd paragraph states, "this EIS/EIR will rely on the results of the Noise Management Bureau's system in the definition of environmental baseline noise levels (per the 4th Quarter 1996 Report)." This statement is categorically wrong and misleading. It implies that the report relies on the calibrated noise contours produced by LAWA. The report relies on uncalibrated noise contours generated by the noise model that are considerably smaller than the contours presented in the 4th Quarter 1996 Report.

Response:

The content of the comment is essentially the same as Comment AL00022-108; please see Response to Comment AL00022-108.

SAL00013-84

Comment:

Environmental Baseline vs. Quarterly Noise Report: Discussion in §2.2 attempts to downplay differences between the Quarterly Report contours and the baseline contours in the SDEIS/EIR. The first paragraph cites a Figure 37 that would help the reader understand that the Draft EIS/EIR baseline is considerably smaller than the Quarterly Report contours, but the figure is missing from the report. The statistical analysis of the noise measurement data and noise model results from Table 6 is completely inadequate and fails to identify the bias in the noise model to under-predict noise levels in the approach corridor over Inglewood. Please address this concern.

37 Figure 2.3.

Response:

The content of the comment is essentially the same as Comment AL00022-109; please see Response to Comment AL00022-109.

SAL00013-85

Comment:

Impact on Schools: §3.3 of Technical Report 14b (Health Effects of Noise) has a footnote explaining the 1980 lawsuit settlement with the school district. The analysis appears to assume that because of this settlement there is no impact on schools. Please identify which schools have been insulated, which schools remain to be insulated, and how many more schools will need to be insulated as a result of the project.

Response:

Please see Response to Comment AL00022-110.

SAL00013-86**Comment:**

Federal Standards: § 4.1.4.1.2 in the last sentence states that the "...FAA has adopted standards and guidance governing airport noise compatibility." The FAA has only published land use: compatibility guidelines and has not adopted noise standards. It is up to the local authorities to adopt noise/land use compatibility standards.

Response:

The content of the comment is essentially the same as Comment AL00022-111; please see Response to Comment AL00022-111.

SAL00013-87**Comment:**

Construction Noise: § 4.1.4.3.1 should reference the City of Los Angeles and the County of Los Angeles Noise Ordinances which contain noise limits and limits on the hours of activity. The County requests that LAWA identify noise limits in the ordinance as a threshold of significance, and provide analyses in accordance with that threshold.

Response:

The content of the comment is essentially the same as Comment AL00022-112; please see Response to Comment AL00022-112.

SAL00013-88**Comment:**

Operations Data: In the discussion on noise patterns,³⁸ the first bullet point outlines an increase in heavy aircraft and a decrease in small aircraft. There is no explanation as to how Alternative C accomplishes this transition and there are no explicit features of Alternative C that would appear to encourage it. If the assumption cannot be justified, the noise analysis should be revised to reflect the trend toward a fleet mix that does not rely on heavy aircraft for achieving the passenger demand.

³⁸ Section 4.1.6.1.2.2, Alternative C, Aircraft Noise Pattern at 2015.

Response:

The content of the comment is essentially the same as Comment AL00022-113; please see Response to Comment AL00022-113.

SAL00013-89**Comment:**

Construction Scheduling: The City and County of Los Angeles have ordinances that limit the hours of construction activity. § 4.1.8.3, MM-N-9, should reference those ordinances and identify the hours that construction is permitted.

Response:

The content of the comment is essentially the same as Comment AL00022-114; please see Response to Comment AL00022-114.

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SAL00013-90

Comment:

Location Impact Analysis: The last sentence of the last paragraph on Page 87 states that only CNEL and DNL have a regulatory function. This is a very limiting assumption and fails to recognize that for some types of impacts, these metrics may be inadequate. Specifically, FICON identifies these metrics as potentially inadequate for assessing noise impacts on sleep or noise impacts on the classroom environment. FICON recommends use of supplement metrics for analysis of these impacts; the County requests that LAWA use the metrics to analyze these impacts. While the document does present some Sound Exposure Level (SEL) contours and tables of time above data at specific points, the Draft EIS/EIR fails to use these data to assess sleep disturbance or school impacts.

Response:

The content of the comment is essentially the same as Comment AL00022-115; please see Response to Comment AL00022-115.

SAL00013-91

Comment:

No-Action/No Project Comparisons: The first sentence of § 5.1.3 identifies that 11 grid points will be exposed to increases of 1.5 dB. This comparison of the number of grid points is used throughout the analysis. This type of analysis fails to account for the land use that may occur at the grid points. In effect, the grid points, while regularly spaced, are located on random land uses. It would be more accurate to use INM to construct a different contour that shows all areas exposed to a change of 1.5 dB or more; the County requests that LAWA use this contour to quantify the land use impact. The INM has the ability to construct such a different contour.

Response:

This is a comment on the Draft EIS/EIR (Alternative C), not on the Supplement to the Draft EIS/EIR. The content of the comment is essentially the same as Comment AL00022-116; please see Response to Comment AL00022-116.

SAL00013-92

Comment:

Noise Mitigation: The first sentence of §7 identifies the need for mitigation of significant impacts. Since the project is shown to have a significant impact, the County requests that LAWA propose appropriate noise mitigation measures.

Response:

This is a comment on the Draft EIS/EIR, not on the Supplement to the Draft EIS/EIR. The content of the comment is essentially the same as Comment AL00022-117; please see Response to Comment AL00022-117.

SAL00013-93

Comment:

Alternative C Figures: Alternative C, Figure 11, does not use flight track dispersion in the noise model; however, LAWA has radar-tracking ability. Please provide a 24-hour period of actual radar tracks as an example of the extent of track dispersion over the affected areas.

Response:

The content of the comment is essentially the same as Comment AL00022-118; please see Response to Comment AL00022-118.

SAL00013-94**Comment:**

Area Wide Flight Paths: Please supplement Alternative C, Figure 17 with one chart for existing conditions so the reader can identify differences. At a minimum, the text should describe how this chart changes paths relative to existing conditions.

Response:

The content of the comment is essentially the same as Comment AL00022-119; please see Response to Comment AL00022-119.

SAL00013-95**Comment:**

Appendix D: Table 7 of Appendix D identifies the forecast year 2005 baseline as 2,107 operations per day and year 2015 as 2,124 operations per day.³⁹ The Quarterly Report for the 4th Quarter of the year 2000 shows that current operation levels are 2,280 operations per day (201,347 quarterly operations). Existing operations are already exceeding the 10 and 20-year projections for the No Action/No Project case. Please revise the noise analyses and comparisons to reflect realistic descriptions of future no project conditions.

³⁹ Table 8.

Response:

The content of the comment is essentially the same as Comment AL00022-120; please see Response to Comment AL00022-120.

SAL00013-96**Comment:**

Reduced Impact of Approach Overflights: Exhibit 29, Reduced Impact of Approach Overflights, shows (and the accompanying text contains) an analysis of this approach procedure and there appear to be community benefits to this procedure. Therefore, it is concerning as to why is it not included as a recommended mitigation measure.

Response:

The content of the comment is essentially the same as Comment AL00022-121; please see Response to Comment AL00022-121.

SAL00013-97**Comment:**

4.4.2 New Comments on the Supplemental EIR/EIS for Alternative D

The following comments are provided based on an analysis of EIR/EIS § 4.1, "Noise," and Appendix S-C1, "Supplemental Aircraft Noise Technical Report:"

Noise Modeling: Section 2.1 implies that noise monitoring and flight track system data were used to generate noise contours, but should be revised to state that the noise analysis and noise contours were based entirely on a computer noise model. The noise data presented in the Supplemental EIR/EIS do not use any of the noise data collected by the airports noise monitoring system. The airports noise monitoring and flight track system was used only to obtain operations and runway utilization data. In fact, there is a significant conflict between the noise monitoring data published by the airport and the noise modeling done as part of the EIR/EIS.

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Response:

Noise levels from LAWA's Environmental Management Division-Noise Bureau noise monitoring and flight track system were not used. However, the system was used to determine the following data: aircraft type as designated by radar, runway and flight track assignments, user identification and flight number, type of operation (approach or take off). The differences in the contours are defined in Section 2.1.7 Relationship of 2000 Contours to 4th Quarter 2000 Report Contours of Appendix S-C1, Supplemental Aircraft Noise Technical Report, of the Supplement to the Draft EIS/EIR. Please see Response to Comment SAL00013-69 regarding measurement vs. modeling conflict between baseline and quarterly noise reports and Section 2.1.3 Flight Tracks of Appendix S-C1 Supplemental Aircraft Noise Technical Report. Please also see Topical Response TR-N-1 regarding the noise modeling approach, in particular Subtopical Response TR-N-1.4 regarding simplified line drawing flight tracks vs. track dispersion.

SAL00013-98

Comment:

Noise Contour Errors: § 2.1.7 The noise contours presented in the SDEIR/EIS for the year 2000 are smaller than the noise contours published by the LAWA in its Year 2000 Q4 report. No attempt is made in the SDEIS/EIR to examine the reason for the noise model under-predicting aircraft noise. The Supplemental EIS/EIR rationalizes the lack of contour adjustment by stating, "draft FAA Order 1050.E indicates that measurements should not be used to calibrate noise contours." However, no attempt is made to identify the cause of the discrepancy. The difference could be due to errors in input data to the noise model, not a calibration issue. Failure to adequately account for flight track dispersion could cause the kind of discrepancies the data shows. The model has the capability to report noise levels by aircraft type at each location. LAWA should compare the data to measurement data for those aircraft and offer a rational and detailed explanation of the model/measurement differences. At the least, the source of the difference would then be identified (i.e., input data errors, model database differences, or model algorithm shortcomings).

Response:

Comment noted. The 1996 baseline and Year 2000 contours are based on input data provided from LAWA's Environmental Management Division-Noise Bureau noise monitoring and flight track system. Section 2.1.7 Relationship of 2000 Contours to 4th Quarter 2000 Report of Appendix S-C1 Supplemental Aircraft Noise Technical Report of the Supplement to the Draft EIS/EIR explains that the data differ as a result of two factors. First, LAWA does not include ground run-up noise in its quarterly report computations. Secondly, LAWA modifies the contour output of the INM based on measurements from its 25 permanent monitoring sites. The noise analysis was done in complete compliance with appropriate FAA and scientific principles including FAA Order 1050.1D and Order 5050.4A. For noise modeling purposes noise levels were not adjusted to reflect noise monitoring data. The commentator may have confused the Draft EIS/EIR modeling with the Quarterly Report to the State of California. The INM is intended to be a planning tool for the relative comparison of noise exposure patterns and intensities among environmental baseline, future No Action/No Project Alternative and build alternative development conditions. It was not designed for, nor intended to provide, highly defined noise levels reflecting measured local conditions. Consequently, the modeled noise levels associated with environmental baseline conditions will have consistent relative relationships to future noise patterns prepared with the INM. For informational purposes, Year 2000 conditions are compared to the 1996 environmental baseline conditions in Section 4.1, Noise and Section 4.2, Land Use with supporting technical data and analyses provided in Appendix S-C1 and Technical Report S-1 of the Supplement to the Draft EIS/EIR. Additionally, since baseline contours are compared to future conditions, measurement data is not available for future conditions. In future years, when measured noise levels become available for the projected conditions, the comparison between modeled and measured noise levels will be made and then existing contours will be modified by future measurements. At the same time, modifications to the ANMP boundaries will be adjusted to reflect measured noise levels. Please see Response to Comment SAL00013-69 regarding measurement vs. modeling discrepancies between baseline and quarterly noise reports and Response to Comment SAL00013-20 regarding flight tracks.

SAL00013-99

Comment:

Noise Contours Require Adjustment: The FAA has a history of being reluctant to adjust noise contours based on measurement data. This policy was based on historical attempts to use short term monitoring data to make adjustments that are not statistically justified. Such a policy is justified, in particular when attempts are made to use a few hours of monitoring data to move noise contours; however, in this case LAWA operates noise monitoring sites 24 hours a day, measuring every aircraft and has been doing so for over 20 years. These data do justify adjusting the noise contours either by correcting input errors or modifying model databases, such as noise curves and aircraft profiles. FAA does not prohibit these changes. The FAA provides a mechanism for user changes to the database. The "INM Users Guide⁴⁰," contains Appendix B, "FAA Profile Review ChecMist." The first paragraph of that appendix contains the following statement, "The Office of Environment and Energy (AEE) requires prior written approval for all user changes to the Integrated Noise Model (INM) standard profiles for FAR Part 150 studies. A similar requirement under National Environmental Policy Act (NEPA) will take effect pending FAA Order 1050.1E." Following that paragraph is a detailed list of information required for the FAA review of user made changes. It is not known if any attempt was made to seek FAA approval of changes needed to make the model better match measurement data. If there was no attempt, LAWA should explain the decision - particularly if input errors have already been eliminated as a possible source of the difference.

40 For INM Version 6, dated September 1999.

Response:

The content of the comment is essentially the same as Comment AL00022-94; please see Response to Comment AL00022-94.

SAL00013-100

Comment:

Mitigation Must Reflect Validated Contours: The Supplemental EIR/EIS should explicitly show the difference in noise contour location and the number of dwellings and population for the Year 2000 noise contours contained in the Quarterly Report published by LAWA and the Year 2000 noise contours contained in the Supplemental EIR/EIS. The Supplemental EIR/EIS further rationalizes the use of the noise modeling information in spite of the differences to the measurement data by stating that future measured contours will be used to adjust mitigation area. If noise mitigation programs will be based on noise measurement validated noise contours, then the mitigation measures should include a specific commitment to use such validated contours.

Response:

Please see Response to Comment SAL00013-98 and Topical Response TR-N-1 Noise Modeling Approach regarding modeling vs. measurement differences. MM-LU-1 Implement Revised Aircraft Noise Mitigation Program (Alternatives A, B, C, and D) acknowledges that LAWA determines incompatible land uses pursuant to the California Airport Noise Standards (Title 21, Subchapter 6) for its ANMP. Title 21, Subchapter 6, Section 5023, Noise Monitoring of the California Code of Regulations establishes that noise monitoring be used to validate the noise impact area. Therefore, by complying with the California Code of Regulations, MM-LU-1 commits to using validated contours during the ANMP process.

SAL00013-101

Comment:

Assumptions Concerning Future Noise Contours lack Validation: The supplemental EIR/EIS further states in § 2.1.7 of S-C1 that using the smaller computer generated contour will result in showing greater noise impacts. This latter statement is based on the erroneous assumption that the noise contours presented for future conditions are accurate and that the noise contours for 1996, 2000 and the future no project case are underestimated; On what basis does the Supplemental EIR/EIS conclude

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that the future noise contours are more correct than the existing noise contours when the same model and methodology are used for each?

Response:

The commentor is referring to the last paragraph of Section 2.1.7 Relationship of 2000 Contours to 4th Quarter 2000 Report Contours of S-C1 Supplemental Aircraft Noise Technical Report of the Supplement to the Draft EIS/EIR. The commentor has misinterpreted the statement. In the event that LAWA's measured contours (which are larger) were used, then the future alternatives when compared for CEQA purposes would indeed provide a smaller impact area. The noise contours are required to be compared on an apples-to-apples basis or modeled-to-modeled basis. The Supplement to the EIS/EIR does not conclude that future noise contours are more correct than the existing noise contours. Since it is not possible to measure future noise events, forecasted noise contours will be compared to measured noise levels once they occur and adjustments made to the ANMP. Please see Topical Response TR-N-1 regarding the noise modeling approach.

SAL00013-102

Comment:

Inadequate Number of Flight Tracks for Modeling: Footnote 3 of § 2.1.3 states that the 74 flight tracks were adequate to produce an adequate noise model input. What data did LAWA use to draw this conclusion? Why did LAWA not complete a sensitivity analysis to determine if the discrepancy between measured noise data and modeled result differences was due to inaccurate or insufficient number of flight tracks used in the INM model? In particular, why weren't additional flight tracks used to simulate track dispersion for aircraft approaches? In the absence of supporting data, footnote 3 is misleading and should be eliminated.

Response:

As noted in footnote 3 of Section 2.1.3, Flight Tracks of Appendix S-C1, Supplemental Aircraft Noise Technical Report of the Supplement to the Draft EIS/EIR, 74 flight tracks provided sufficient diversion to represent the array of flights experiences during a year and was adequate to define existing conditions. Between 24 and 42 flight tracks were defined to represent the locations of the 94-98 percent of all departures that takeoff to the west over the ocean, and 22 to 33 flight tracks were defined to represent the locations of the 94-98 percent of the arrivals that land from the east over the city. The remaining 18 to 45 tracks, dependent upon the alternative evaluated, were used by the 2-6 percent of all arrivals from over the ocean or takeoffs to the east over the city. Please also see Topical Response TR-N-1 regarding the noise modeling approach, in particular Subtopical Response TR-N-1.4 regarding simplified line drawing flight tracks vs. track dispersion and Response to Comment SAL00013-101 regarding measurement vs. modeling.

SAL00013-103

Comment:

Table S11 is Mislabeled: The title of this table indicates it is a comparison of single event noise. It is in fact a table of runway utilization data during runway construction. Please revise the title to Table S11 accordingly.

Response:

Table S11 Alternative D 2015 94 dBA SEL Part 161 Mitigation Contour vs. Unmitigation Alternative D 2015 94 dBA SEL of Appendix S-C1, Supplemental Aircraft Noise Technical Report, was mislabeled. Table S11 should be labeled "Runway Utilization Percentages Alternative D During Reconstruction of Runway 7R/25L". Please see Appendix F-C, Errata to the Draft EIS/EIR and the Supplement to the Draft EIS/EIR, of this Final EIS/EIR. This clarification does not change the conclusions presented in Section 4.1, Noise, or Section 4.2, Land Use, of the Draft EIS/EIR and Supplement to the Draft EIS/EIR.

SAL00013-104

Comment:

Sleep Disturbance Data Require Clarification: In § 6.1.1, the threshold of significance for sleep disturbance is based on the 94 SEL contour which represents a 10% awakening rate for noise events that occur at least once every 10 days. The number of awakenings presented in the data tables is not the total number of people awakened but the number awakened within the 94 SEL contour. In fact, at lower noise levels there is still sleep disturbance, albeit at a lower rate. For example, the FICAN curve shows that for an interior noise level of 45 SEL (58 SEL exterior noise level with windows open) about 1% of the population will be awakened. The awakening rate of 1% is quite low, but when applied to a large population such as that located in a 58 SEL contour, would produce a large number of people awakened. The Supplemental EIR/EIS should make it clear that the sleep disturbance data presented are not total awakenings, but awakenings within a specific contour. The methodology used in the EIR/EIS allows the comparison of alternatives within a contour that can be practically estimated and appears to be a fair basis for comparison.

Response:

Comment noted. The commentor is correct that in the FICAN 1997 report on the Effects of Aviation Noise on Awakenings from Sleep, Figure 2, Recommended Sleep Disturbance Dose Response Relationship, does show that noise levels as low as 45 SEL show an awakening rate of approximately 1 percent. LAWA agrees that residents located within the contour would be exposed to a higher probability of awakening and those sleepers outside the contour would be exposed to a lower probability of awakening than established by the single event threshold of significance. No guidance is available from government or academic sources as to what level would specifically indicate a threshold of significance between significant and non-significant impacts. The Berkeley Jets decision left to the project sponsor the responsibility of selecting a threshold that would be applied in each local situation. Because residents of the airport environs may sleep with windows open, it was decided to assess the area of awakenings impact based on windows remaining open. Furthermore, it was determined that the threshold should be set at 10 percent of the area population being awakened at least once in ten days (i.e., the threshold is geared toward a relatively small subset of the general population that may be particularly sensitive to single event noise as a cause of nighttime awakening). The INM was used to compute a contour representing the threshold level. The threshold is further discussed in, below. Please see Section 4.1.4.1.1, CEQA Thresholds of Significance of Section 4.1, Noise, and Section 6.1.1, Threshold of Significance, and Section 6.1.2, SEL Noise Contours, of Appendix S-C1 of the Supplement to the Draft EIS/EIR where awakenings are determined through the use of a SEL contour.

SAL00013-105

Comment:

Sleep Disturbance Flight Tracks Must be Identified: Analysis of single event for sleep disturbance does not make it clear whether or not the analysis relied on the same flight tracks as used for developing the CNEL model. Did LAWA use the same flight tracks? If so, then the sleep analysis fails to account for flight track dispersion, and given that the significance threshold is based on an event that occurs at least once every 10 days, the results are misleading. If flight track dispersion is not included in the analysis then the County requests that LAWA describe the results as comparing the number of awakenings within a specific SEL contour for aircraft flown on the nominal flight tracks and aircraft flight deviations that occur on other tracks would cause further awakenings.

Response:

Flight tracks used for the single event nighttime noise analysis are the same as those used in the development of the CNEL noise contours. The tracks used in development of the CNEL contours are adequately dispersed to allow for determination of noise exposure contour patterns. Projected flight conditions and use of flight tracks in the nighttime awakenings analysis are described in Section 6.1.2.2, Projected Future Conditions, of Appendix S-C1, Supplemental Aircraft Noise Technical Report, of the Supplement to the Draft EIS/EIR. SIMMOD modeling was used to develop the projected operating conditions and more takeoffs are assumed to the east at night during the future alternatives than for the current conditions (based on actual observations). The ultimate result of this effect is that the projected areas affected by SEL contours of 94 dBA under future conditions may be over estimated, but the

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degree of any overestimation cannot be known until the events actually occur. The continuing environmental monitoring program will address this issue.

SAL00013-106

Comment:

Sound Insulation Eligibility: §6.1.3 adds an important criterion to the eligibility program for sound insulation. The sound insulation area is now based on ANMP CNEL contours and this section adds the SEL contour map. Is this a proposed formal policy that is clearly stated in the mitigation measures (including the requirement that the location of the 94 SEL contour be verified by measurements)? Has the cost of insulating the additional homes been included in the reported costs for the Master Plan improvements? If single event contours are underestimated relative to measured noise as is the case with the CNEL contours, how would this affect the study results? How many more homes and schools would be impacted if the SEL noise is underestimated by the same amount that the CNEL contours are underestimated (as measured by comparing baseline model results to baseline year measurement results)?

Response:

LAWA's acoustical treatment program is based on the 1992 ANMP CNEL contours. Mitigation Measure MM-LU-2 does indicate that the ANMP will be expanded to include residential uses newly exposed to single event exterior nighttime noise levels of 94 dBA SEL. These areas and properties identified are representative based on modeling of future conditions. Any future adjustment of the ANMP to include dwellings impacted by single event nighttime noise would be done through an evaluation by LAWA of actual conditions present in the future. Please see Response to Comment SAL00013-110 for further information regarding periodic reevaluation of the 94 dBA SEL noise contour. The 94 dBA contours in the Supplement to the Draft EIS/EIR are based on forecasts of future conditions of build alternatives if all runway use projections come to pass. If runway usage remains as it is today, little additional land would be added to the ANMP to accommodate single event nighttime effects.

A preferred Master Plan alternative has not been selected yet, therefore, costs for sound insulation of homes has not been determined. For the measurement vs. modeling of CNEL contours please see Response to Comment SAL00013-69. In the analysis more takeoffs are assumed to the east at night during the future alternatives (based on SIMMOD analysis) than for the current cases (based on actual observations). Therefore, projected areas affected by SEL contours of 94 dBA under future conditions may be over estimated, but the degree of any overestimation cannot be known until the events actually occur. The continuing environmental monitoring program will address this issue. For additional information please see Section 6.1, Nighttime Awakenings Analysis in Appendix S-C1, Supplemental Aircraft Noise Technical Report, of the Supplement to Draft EIS/EIR.

SAL00013-107

Comment:

Lennox Preschool Mitigation Required: The Lennox School District operates a preschool at 10417 Felton. The site of this school is affected by both aircraft noise and roadway noise. The SDEIR/EIS addresses only aircraft noise at this site and does not address roadway noise. How does the combined noise from aircraft and motor vehicles affect impact this school? Further, how would roadway improvements in the vicinity of this site affect roadway noise levels and what would be the corresponding impact on the school? The SDEIR/EIS identifies a significant impact for Alternative B, but fails to address noise level changes that may result from roadway improvements that will occur with other alternatives. Similarly, in §6.2.3 the statements on school mitigation contain no commitment to mitigate identified impacts, only a commitment to study further. The County requests affirmative commitment from LAWA for the full mitigation of noise impacts at all affected schools in the project area.

Response:

The combined effect of aircraft and motor vehicles was determined at all noise sensitive receiver locations, and is summarized in Table S4.1-6 in the Supplement to the Draft EIS/EIR. For Alternative D, 10 additional roadway noise receiver analysis locations were included on the east side of the airport, since Alternative D includes passenger processing facilities east of the existing CTA, near I-405. One

of these sites, labeled S27, is at a residential area at 4821 W. Century Boulevard, which is near the Lennox preschool. Another site, site R10 is the Lennox Middle School on Buford Road at 111th St. Neither of these sites would experience combined noise levels exceeding 65 dBA CNEL under any alternative. Even if Alternative D is built with the new I-405 interchange at Lennox Boulevard, significant noise impacts are not anticipated, including at the adjacent Lennox Middle School. However, if necessary, LAWA would take additional steps to ensure that the Middle School--and consequently the Lennox preschool--are not significantly affected by roadway noise.

SAL00013-108

Comment:

Soundproofing Homes to Reduce Noise Impacts: LAWA has outlined a number of important noise attenuation goals in Mitigation Measures MM-LU-1, MM-LU-2, MM-LU-3 and MM-LU-4. However, it is not clear how or when or even if the goals would be achieved because many of the implementation components lack definition. We are particularly concerned about the following:

Response:

By integrating the mitigation measures into the ANMP (i.e., revising and expanding the coverage of the ANMP to include sensitive noise uses significantly impacted by single-event noise), LAWA will be required to provide annual updates regarding this program as a condition of its 2001 Noise Variance. Please see Section 2.3.1, 2001 Noise Variance, Technical Report S-1 of the Supplement to the Draft EIS/EIR for a full description of the conditions identified in the 2001 Noise Variance.

SAL00013-109

Comment:

MM-LU-1: Implement Revised Aircraft Noise Mitigation Program.

Under the measure calling for 'Accelerated rate of land use mitigation to eliminate noise impact areas in the most timely and efficient manner possible,' LAWA calls for "Increased annual funding by LAWA for land use mitigation." Please specify an annual dollar amount for which LAWA is willing to make a commitment.

Under the same measure, LAWA calls for "Reevaluating requirement for granting of aviation easements with sound insulation mitigation." Please specify the performance criteria that LAWA would use in this reevaluation. Under what conditions would LAWA waive the requirement for granting of aviation easements with sound insulation?

Under the same measure, LAWA calls for "Reduction or elimination, to the extent feasible, of structural and building code compliance constraints to mitigation of sub-standard housing." Please define the criteria that would justify a reduction of code compliance constraints, and the criteria that would justify the elimination of code compliance constraints. Please also estimate the proportion of currently code-constrained units that would become eligible with application of these criteria, including a specific estimate for the community of Lennox.

Response:

Establishment of specific annual funding levels for land use mitigation associated with the potential approval of a Master Plan alternative is not feasible to determine at this time. However, a general estimate can be made using Alternative D as an example and based on information provided in the 2001 ANMP. Funding levels for noise mitigation (either through sound insulation or recycling) for residential uses within the 1992 fourth quarter 65 CNEL (or ANMP) contour are estimated to be approximately \$704 million in the 2001 ANMP. Based on information provided in Table S4.2-30 of the Supplement to the Draft EIS/EIR, Alternative D would result in 70 single-family units and 190 multi-family units newly exposed to the 65 CNEL contour compared to the ANMP contour. As stated in the 2001 ANMP the estimated cost to provide residential sound insulation is \$25,500 for single-family units and \$11,000 for multi-family units. Therefore a general estimate indicates that Alternative D could require an increase in funding for residential soundproofing of approximately \$4 million. However, the actual dollar amount would be based on the number of units newly exposed to high noise levels under Alternative D that would be located outside of the ANMP boundaries based on measured data

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presented in quarterly noise reports prepared by LAWA. Even with project approval, annual funding needs for noise mitigation would also continue to be influenced by progress toward mitigation and the availability of any existing unexpended funds. To date the availability of funds from LAWA for soundproofing has not been a limiting factor in Los Angeles County; rather it has been a lack of progress in completing mitigation with existing LAWA funds. Similarly, the FAA carefully reviews the County's application for federal assistance for each fiscal year and approves appropriate funding levels for noise mitigation projects consistent with the County's ability to utilize those funds in a timely and efficient manner based on the County's past history with previous grants-in-aid, subject to availability of funds. LAWA has and will continue to offer technical assistance to the County to accelerate the rate of soundproofing.

LAWA's decisions regarding reevaluation of aviation easement requirements are based on criteria difficult to quantify, including weighing of legal risk, likelihood of litigation, relationships with and approval from other government agencies, and evolving policies and approaches in the field of noise mitigation. As presented in Technical Report S-1, Supplemental Land Use Technical Report in the Supplement to the Draft EIS/EIR, suspension of aviation easement requirements in exchange for funding of residential sound insulation is currently under study by LAWA and as part of the LAX Community Noise Roundtable as a condition of the 2001 Noise Variance for the jurisdictions of Los Angeles County, the City of Los Angeles, and El Segundo. Under a Memorandum of Understanding between the City of Los Angeles and City of Inglewood, LAWA has suspended the requirement for an aviation easement for Inglewood residents receiving sound insulation under the ANMP as long as there is continued cooperation between the cities of Los Angeles and Inglewood in studying, designing, and implementing mitigation measures that are mutually beneficial to Inglewood and LAWA. This is an example of a condition where, due to cooperative efforts, LAWA has waived the requirement for granting of an aviation easement in exchange for sound insulation. Lifting this requirement for other jurisdictions, or as a policy change, will be influenced by the results in Inglewood and with consideration of Caltrans guidance, as presented in the 2002 Caltrans Handbook, which recommends the use of aviation easements as a noise compatibility strategy.

LAWA is currently working with other jurisdictions, including Los Angeles County, on trying to resolve issues surrounding building code compliance requirements that have precluded noise mitigation through sound insulation, as described in Topical Response TR-LU-3. Currently, criteria that would justify elimination of code constraints include instances where soundproofing could be completed in a manner that would not exacerbate existing code violations or compromise health and safety (e.g., create fire hazards). As an example, many dwelling units in Los Angeles County have illegally converted garages into living spaces. As a result, these properties are not eligible, or the owners are not willing to receive sound insulation, because this code violation would need to be corrected prior to issuance of a building permit by Los Angeles County for sound insulation. If such code violations were not cited and correction required, in order to obtain a building permit for soundproofing, noise mitigation could proceed with the installation of acoustically-rated doors, windows, and insulation (except those portions of a dwelling unit that have illegal garages or additions). As another example, minor building code violations, such as the addition of smoke detectors, water heater straps, or ground fault interrupters (g.f.i), need to be corrected by the owner or tenant prior to the installation of soundproofing.

The Los Angeles County Residential Sound Insulation Program estimates that approximately 15 to 20 percent of all units within the Los Angeles County ANMP and approximately 40 percent of all units in the Community of Lennox have major building code violations (e.g., illegal building additions or converted garages) and approximately 90 percent of units within the Los Angeles County ANMP have minor building code violations, as previously described. Most minor code violations are eventually corrected by the tenant/owner. (Ray Gomez, Los Angeles County Residential Sound Insulation Program, personal communication December 30, 2003). As noted in Section 4.2, Land Use (subsection 4.2.3) of the Supplement to the Draft EIS/EIR, as of June 2002, 375 units in Los Angeles County have received sound insulation. Based on information provided in the LAX 2001 Aircraft Noise Mitigation Program (ANMP), there are 6,024 incompatible dwelling units and 368 compatible dwelling units in the Los Angeles County ANMP, leaving a total of 6,017 dwelling units currently exposed to high noise levels that are not sound insulated. Within the Lennox Community approximately 2,600 units are in the County ANMP boundaries and approximately 200 units have received soundproofing (Ray Gomez, Los Angeles County Residential Sound Insulation Program, personal communication December 30, 2003). The number of units that have not received soundproofing due to existing code violations is unknown since property owners are not asked to state their reason for declining to participate in the soundproofing program.

SAL00013-110

Comment:

MM-LU-2: Incorporate Residential Dwelling Units Exposed to Single Event Awakenings Threshold into Aircraft Noise Mitigation Program:

Although this measure adds a large number of homes to the insulation program, none of the additional units is located on unincorporated land even though many impacted homes are in Los Angeles County jurisdiction: please explain why this mitigation omits County homes. MM-LU-2 includes the following commitment, "actual adjustments to the ANMP contour would be based on periodic reevaluation of the 94 dBA SEL noise contour by LAWA." The statement implies, but does not actually state that measurements will be used to make the actual adjustments. Please incorporate the word 'measurements' into this commitment.

Response:

As shown on Tables S4.2-33 and S4.2-34 of the Supplement to the Draft EIS/EIR, under Alternatives C and D, respectively, all of the dwelling units in Los Angeles County that would be newly exposed to 94 dBA SEL noise levels are already located within the ANMP contour. As described in Topical Response TR-LU-3, residential uses within the ANMP contour are eligible for soundproofing. Methodology for developing the ANMP contour and 94 dB SEL contour are described in Section 4.1, Noise (subsection 4.1.2.1) of the Draft EIS/EIR and Supplement to the Draft EIS/EIR. Supporting technical data and analysis are provided in Appendix D of the Draft EIS/EIR and Appendix SC-1 of the Supplement to the Draft EIS/EIR.

As stated in Section 4.1.4.1.1 of the Supplement to the Draft EIS/EIR, the 94 dBA SEL noise contour represents the average frequency of this noise level that occurs once every 10 days on average. The future 94 dBA SEL would be reevaluated and adjusted by LAWA based on annual average conditions. Incorporating the word "measurements" into this mitigation measure, as requested by the commentor, would not be representative of average or typical conditions, but rather would include residential properties into the ANMP that were exposed to short-term 94 dBA SEL noise levels that have occurred as a result of rare and abnormal operating conditions. Although currently measurements of the 65 CNEL contour are validated through continuous monitoring of 25 sites in the area surrounding LAX, these sites would not provide adequate coverage to indicate the area that is exposed to 94 dBA SEL nighttime noise levels. The areas exposed to this established threshold can only be determined by grid or contour analysis. LAWA would reevaluate and adjust the 94 dBA SEL contour by computing annual average conditions with the Integrated Noise Model (INM) to disclose that area exposed to 94 dBA SEL at night. Therefore, the requested change will not be incorporated into the Final EIS/EIR.

SAL00013-111

Comment:

MM-LU-3: Conduct Study of the Relationship Between Aircraft Noise Levels and Ability of Children to Learn. This measure commits LAWA to a program to reevaluate the single event threshold for schools and using results to select "an acceptable replacement threshold of significance for classroom disruption." What group or groups will provide peer review of these studies and judge the acceptability of proposed significance thresholds?

Response:

MM-LU-3 will be in the form of a study of single event or cumulative noise levels that result in classroom disruption. The primary focus of the study is to do a comprehensive study to determine if any measurable relationship exists between learning and disruptions caused by aircraft noise. LAWA commits to a peer review of industry experts, however, to date specific individuals for the peer review have not been identified, nor have experts to design and conduct the study been retained. It is likely that both the experts and peer reviewers will be selected from among those individuals and organizations that have significantly demonstrated national/international expertise in the psychoanalytical evaluation of how student learning is affected by aircraft noise.

3. Comments and Responses

SAL00013-112

Comment:

MM-LU-4: Provide Additional Sound Insulation for Schools Shown by MM-LU-3 to be Significantly Impacted by Aircraft Noise. Please see the comment above concerning a key aspect of this mitigation measure calling for "acceptance of results by peer review of industry experts." Again, the measure does not indicate which agencies will be involved in the selection of the industry experts for the peer review. Please indicate whether and which of the affected cities, county, and school districts will have a role in selecting the experts for the peer review.

Response:

Comment noted. The methodology for selecting experts and peer reviewers has not been established. Therefore, it has not been determined whether affected cities, county or school districts will have a role in selecting the experts for peer review. Please see Response to Comment SAL00013-111 regarding the selection of experts for peer review.

SAL00013-113

Comment:

4.5 AIR QUALITY ASSESSMENT

4.5.1 Review of Ambient Air Quality Data used in the 2001 Draft EIS/EIR

Ambient air quality data were used for two purposes in the 2001 study. One purpose was to define baseline conditions and the other was to estimate background concentrations. Baseline conditions in this case were defined as the maximum air quality concentrations in the vicinity of the airport for existing conditions (an approximate 1996-98 timeframe). Background concentrations, on the other hand, were defined as the concentrations present in the absence of nearby sources. In other words, the concentrations due to multiple small sources and distant large sources were not directly accounted for in the air quality impact assessment. Estimates of background concentrations were used in the analysis to add to the concentration estimates generated by computer dispersion models for the airport and other nearby sources to arrive at estimates of total ambient concentrations.

Data from two air quality monitoring stations were used to characterize both baseline and background ambient air quality conditions. One station was located onsite and immediately to the east of the airport runways in the South Airfield Complex. LAWA operated this station for approximately 7.5 months, from August 1997 until March 1998, and measured carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂) and particulate matter (PM₁₀). The other station was located approximately 0.6 mile south of LAX. This station, located in Hawthorne and designated as Station No. 094, was operated by the South Coast Air Quality Management District (SCAQMD) and measured ozone (O₃), lead (Pb), sulfates, CO, NO₂, SO₂ and PM₁₀.

The 2001 Draft EIS/EIR did not provide any justification for the location of the onsite ambient air quality monitoring station or any information concerning the primary purpose of the station. Typically, a monitoring station will be located and operated to either measure background concentrations or maximum source impact. Given the location of the station with respect to the prevailing wind direction and the airport runways, the station appears to be situated near the likely maximum source impact area. Data from the station are used to describe "Environmental Baseline" conditions, which apparently refers to maximum source impact for existing conditions. In most cases, computer modeling would be used to identify the locations of maximum concentrations for baseline conditions, and then one or more monitoring stations would be positioned at these locations. If the onsite monitoring station was not positioned at the expected location of maximum concentration, then it is possible that concentrations higher than those reported at the station occurred in the area.

The 2001 DEIS/EIR did not discuss this, but maximum concentrations from the nearby SCAQMD station are comparable to the concentrations reported onsite by LAWA for the same timeframe. This suggests either that maximum concentrations do not vary significantly in the area or that both stations are similarly affected by nearby sources. The document shows that the maximum concentrations from

the onsite monitoring station actually occurred when the station was upwind of the airport.⁴¹ Thus, the maximum 1-hour CO concentration shown as the Environmental Baseline value in Table 4.6-11 was apparently due to other sources in the area and not the airport. This needs to be rectified.

LAWA needs to explain the basis for siting of the onsite ambient air quality monitoring station. If it was located at or near the expected location of maximum concentration (for all pollutants), please explain how this location was selected. It is also unclear whether data from the onsite monitoring station characterized true maximum baseline concentrations in the area or only the maximum concentrations at the monitoring site location. If the data did not characterize the maximum concentrations, please identify them. Finally, the Environmental Baseline concentrations shown in the 2001 DEIS/EIR Table 4.6-11 need to identify whether they represented maximum impacts from the airport emissions or if they are due to other sources in the area.

41 Technical Report 4, Attachment Y.

Response:

Please see Response to Comment AL00022-123 regarding the on-airport monitoring station.

SAL00013-114

Comment:

4.5.2 Review of Ambient Air Quality Data used in the 2003 Supplement to the Draft EIS/EIR

Additional baseline data is provided in the Supplement to the Draft EIS/EIR. Baseline data are taken to include background plus contributions from airport and non-airport sources. This additional baseline data includes measurements by the SCAQMD for the period 1998 through 2000 at a nearby monitoring station. Previously, baseline data were reported for 1996 through 1998 at the same SCAQMD station and also for on-site measurements collected during 1997-98. These data are presented together in Table S4-6.5, so presumably they are reasonably comparable.

Together, these two data sets comprise approximately five years of data. No discussion of the comparison of the two data sets is provided in the Supplement DEIS, but one obvious thing to look for is data trending. In comparing the data reported in Table S4.6-5, it appears that there has been little change or a slight increase in air pollution levels during the five-year period. Elsewhere in the Supplement to the DEIS/EIR future background concentrations of air pollutants are assumed to decrease substantially over time. Although it is possible that future area-wide emission reductions will be greater than achieved during this five-year period, the ambient monitoring data do not appear to support a significant reduction in background concentrations during the next several years. Most of the comments and questions offered previously regarding ambient air quality data are still relevant and applicable.

Suggested Questions / Comments for LAWA

The trends in baseline ambient air quality data given in Table S4.6-5 do not support the substantial decrease in background concentrations that are assumed to occur in future years. Can LAWA explain this and can the forecast reductions in future background air pollution levels be relied upon?

Response:

Please see Response to Comment AF00001-28 regarding the calculation of background concentrations and the validity of the forecast methodology.

SAL00013-115

Comment:

4.5.3 Review of Emission Data used in the 2003 Supplement

Baseline emissions data are given in Tables S4.6-6 and S4.6-7 for 1996 and 2000 on-airport emissions sources, respectively. The 1996 data have been updated while the 2000 estimates are new in the Supplemental DEIS. It is worth noting that the estimates for 1996 given in the Supplemental DEIS are

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all higher than the values given in the DEIS, and in the case of VOC and sulfur dioxide, the increases are very substantial. Compared to the original estimates given in the DEIS, the estimated emissions of VOC and sulfur dioxide are more than two times higher. The revised emission estimates for future scenarios have also increased compared to the original estimates given in the DEIS. Again, this is particularly so for VOC and sulfur dioxide which are now two to three times higher than the previous estimates.

Suggested Questions / Comments for LAWA

The estimated emissions for on-airport sources given in the SDEIS/EIR have changed substantially from the estimates given in 2001. Can the estimated emissions for on- airport sources given in the Supplemental DEIS be relied upon to be reasonably accurate?

Response:

In the cases analyzed in the Draft EIS/EIR, Version 3.23 of the FAA's Emission and Dispersion Model (EDMS 3.2) was used to estimate emissions of airport sources. This model version was used for Alternative A, B, and C and the No Action/No Project Alternative for the 2005 and 2015 analysis years. This model version was also used for Alternative D in 2015. The Alternative D 2015 air quality analysis was then conducted using Version 4.11 of EDMS. The emissions from each model version were grouped according to pollutant (CO, VOC, NOx, SO2, PM10) and source type (aircraft, GSE/APU, Roadways, Parking Lots, and Stationary Sources). An EDMS 4.11 to EDMS 3.2 ratio was developed for each pollutant and source type combination. Applying these emission ratios to each of the previous EDMS 3.2 analyses is reasonable since no changes were made to the assumed activity levels and source locations in the other alternatives. The only change was the difference in emission factors used in the emission inventory calculations. The most substantial differences between the two versions of EDMS regarding air emissions are the inclusion, in EDMS 4.11, of aircraft-specific time-in-mode (TIM) for each of the operating models (EDMS 3.2 used one set of TIM values for all commercial jet aircraft) and updated GSE emission factors from U.S. EPA NONROAD model factors (EDMS 3.2 used older NONROAD factors).

It should be noted that the GSE emission inventories will be revised once more to incorporate the California Air Resources Board (CARB) OFFROAD model emission factors. These factors were used in the Draft General Conformity Determination published January 9, 2004, in accordance with the Protocol for the General Conformity Determination developed in coordination with U.S. EPA regional, CARB, SCAQMD, and SCAG. The No Action/No Project Alternative D (mitigated and unmitigated), and 1996 environmental baseline emission inventories in the Final EIS/EIR have been calculated directly using EDMS 4.11. The other alternatives have been estimated following a ratio method similar to the method described above.

SAL00013-116

Comment:

4.5.4 Review of Meteorological Data used in the 2003 SDEIS/EIR

The Supplemental DEIS indicates that the revised analyses were performed using upper air data from a location near San Diego.

Suggested Questions / Comments for LAWA

Is the upper air data from the San Diego Miramar Weather Service Contract Meteorological Observatory representative of the LAX area?

Other comments offered previously concerning the use of 10-m onsite wind data for modeling off site impacts are still applicable.

Response:

Upper air radiosonde measurements (soundings) are taken twice daily at a limited number of stations around the country. Compared to the thousands of locations where surface observations are measured, upper air soundings are taken at approximately 60 locations around the country. Therefore, it is often unlikely that the surface and upper air observations are co-located. To determine

appropriateness of the sounding data, terrain and climate are evaluated and compared by meteorologists. If similar, the upper air data from the offsite location is deemed to be appropriate for the modeled location. Quality and completeness of the data are also evaluated. Both Miramar and LAX are located in areas of similar climate and terrain and both are subject to the marine influences which are observed in the vertical profile of the lower atmosphere along the Southern California coastline. Above the lower one to two thousand feet, the atmosphere tends to become fairly homogeneous in the horizontal, with similar wind patterns and temperatures ranging for hundreds of miles. Therefore, the San Diego Miramar upper air measurements were found to be the closest, most climatologically representative of LAX, and most complete upper air data set available for the modeling period.

Ten meters is the standard height for airport surface wind measurements. Chapter 2.5 of the Federal Standard for Siting Meteorological Sensors at Airports (FCM-S4-1994, August 1994) states that wind sensors "will be mounted 30 to 33 feet (9 to 10 meters) above the average ground height within a radius of 500 feet (150 meters). The sensor height shall not exceed 33 feet (10 meters) except as necessary to: (a) be at least 15 feet (4.5 meters) above the height of any obstruction (e.g., vegetation, buildings, etc.) within a 500 foot (150 meters) radius, and (b), if practical, be at least 10 feet (3 meters) higher than the height of any obstruction outside the 500 foot (150 meter) radius, but within a 1,000 foot (300 meter) radius of the wind sensor. An object is considered to be an obstruction if the included lateral angle from the sensor to the ends of the object is 10 degrees or more." At airports, this standard height is generally outside the influence of surface objects and features (ground cover, roughness) but still representative of the surface wind. Modeling is typically performed using meteorological data observed at airports by the National Weather Service.

Please also see Response to Comment AL00022-127 regarding meteorological data.

SAL00013-117

Comment:

4.5.5 Appropriateness of the Analysis Methodology

General Approach: As commented in the previous review, the Supplemental DEIS includes the results of computer modeling for future scenarios only. No analysis of the existing/baseline situation is provided, which could provide a benchmark of how well the models were performing.

Suggested Questions / Comments for LAWA

Why did LAWA not model the existing/baseline situation and compare the results to existing ambient air quality monitoring data to get a benchmark of how well the models were performing?

Response:

An evaluation of the air quality models' performance is beyond the scope of this environmental impact report. A number of model evaluation reports and studies have been published and are available through the sponsoring agencies and professional societies. All models used in the air quality analyses are approved and supported by FAA, EPA, CARB, and SCAQMD and are presumed to be reasonably accurate and appropriate for these analyses. Please see TR-AQ-2 for a comparison of monitored data with dispersion results.

SAL00013-118

Comment:

Aircraft Operations: The comments and questions provided previously appear to remain applicable. Perhaps the most important of these is that it remains unclear how aircraft queuing was estimated, which is critical to the accuracy of the analysis. Also, it is not clear whether the reduced airport capacity during IFR conditions has been considered in the evaluation of worst-case air quality conditions.

The Supplement to the DEIS indicates that an updated version (Version 4.11) of the EDMS model has been used to evaluate Alternative D impacts. In so doing, the version used for the previous assessments (Version 3.2) was applied to Alternative D, and a ratio of the resulting estimated emissions for the two versions was computed for each air pollutant. These ratios were then used to estimate

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impacts for the other alternatives based on the results originally obtained with the older version of EDMS.

The EDMS model performs two major functions for airport sources. It estimates emissions and it calculates atmospheric dispersion. In updating the EDMS model, changes were made to both sections of the model. Hence, simply 'ratioing' the previous results based on the old and new emission estimates will not account for any changes in the dispersion algorithms. Thus, use of the developed ratios to update the previous results may not be appropriate.

Suggested Questions / Comments for LAWA

How was aircraft queuing estimated? Is this critical to the air quality impact analysis?

Did LAWA consider IFR conditions in evaluating air quality impacts and the effect this could have on reduced runway capacity and increased aircraft queuing?

Did the 'ratioing' technique that was used to update the previous air quality impact analyses generated by EDMS account for all changes in the model or does it only account for changes in the emission algorithms?

Response:

Since aircraft engines are at idle power setting during queue, aircraft queue emissions were calculated by adding the airframe-specific average queue time to the taxi/idle time. Maximum queue length was determined using counts of aircraft in queue and an assumption of 25 meters per aircraft. Hourly temporal factors were used to adjust from peak hourly values. At idle power, emissions of CO and hydrocarbons are highest. Since the predicted concentrations of CO are well below NAAQS, even significant changes in these assumptions are presumed to make minimal changes to the estimates, and have no effect on the final conclusions.

CO emissions are highest during queue while NOx emissions are highest during takeoff. IFR conditions would tend to increase queue/delay time and reduce actual takeoffs. IFR conditions occur infrequently and the increase in queue is inconsequential (as discussed above) to CO. Assuming the maximum number of high power aircraft engine settings (takeoffs) would produce the highest estimates of NOx emissions and subsequent concentrations.

The "ratioing" technique used accounts only for changes in the emissions calculations in the model. However, since concentrations are directly proportional to emissions, a reasonable estimate of concentrations can be made without reapplying the dispersion calculations.

SAL00013-119

Comment:

Off-Airport Motor Vehicles: In the previous review, it was commented that use of wind data from a height of 10-m at the airport may not be representative of winds at off-airport intersections and that using only four receptors at each intersection may also result in underestimated maximum concentrations. These comments appear to remain applicable for the Supplemental DEIS.

Response:

Wind flow dynamics at intersections can vary substantially, with influences from buildings, landscape, etc. creating various eddies and microscale wind currents. The modeling of these eddies is usually done with a wind tunnel and is beyond the scope of regulatory modeling. To approximate these wind circulations, standard wind measurements are often adjusted in mathematical models to account for the variability in the wind flow.

Ten meters is the standard height for airport surface wind measurements. Chapter 2.5 of the Federal Standard for Siting Meteorological Sensors at Airports (FCM-S4-1994, August 1994) states that wind sensors "will be mounted 30 to 33 feet (9 to 10 meters) above the average ground height within a radius of 500 feet (150 meters). The sensor height shall not exceed 33 feet (10 meters) except as necessary to: (a) be at least 15 feet (4.5 meters) above the height of any obstruction (e.g., vegetation, buildings, etc.) within a 500 foot (150 meters) radius, and (b), if practical, be at least 10 feet (3 meters) higher than the height of any obstruction outside the 500 foot (150 meter) radius, but within a 1,000 foot (300 meter) radius of the wind sensor. An object is considered to be an obstruction if the included lateral angle from

the sensor to the ends of the object is 10 degrees or more." At airports, this standard height is generally outside the influence of surface objects and features (ground cover, roughness) but still representative of the surface wind. Modeling is typically performed using meteorological data observed at airports by the National Weather Service.

Receptors for modeling CO impacts at intersections were chosen using methods outlined in the U.S. EPA's Guideline for Modeling Carbon Monoxide From Roadway Intersections (EPA-454/R-92-005, November 1992) and the California Department of Transportation's Transportation Project-Level Carbon Monoxide Protocol (CO Protocol), (University of California Davis, December 1997). It is reasonable to assume that the area closest to the intersection would be among the highest impacted areas, resulting in the highest predicted concentrations of CO from traffic.

SAL00013-120

Comment:

4.5.6 Accuracy of the Analysis

The accuracy of the air quality analyses will depend to a large extent on the computer models used and the input data for the models. Presumably, the use of the updated EDMS model for the airport sources has resulted in improved accuracy for Alternative D compared to the previous analyses. Simple ratios were developed and applied to the previous analyses in an attempt to update the results for the other alternatives. If the ratios are based on the old and new emission estimates only, which appears to be the case, it is doubtful if the predicted concentrations for the other alternatives will be very accurate. This is because the new version of the model includes changes to both the emissions and the dispersion algorithms, and the 'ratioing' of predicted concentrations based on the emission ratios would account for changes to the emission components only. Some of the resulting concentration estimates for the other with-project alternatives given in Table S4.6-12 are considerably higher than those for Alternative D. It is conceivable that a complete assessment of these other alternatives with the new version of EDMS might yield different results.

Response:

Please see Response to Comment SAL00013-115 regarding the "ratio method".

SAL00013-121

Comment:

As commented before, the accuracy of the predicted impacts from the airport sources will depend to a large extent on the aircraft queuing estimates and the estimated airport runway capacity, especially during IFR conditions. It is not clear from the analysis how these issues were addressed.

Response:

Please see Response to Comment SAL00013-118 regarding aircraft queuing estimates and assessment of IFR conditions.

SAL00013-122

Comment:

The unmitigated off-airport impacts for carbon monoxide given in Table S4.6-13 appear unreasonably low. Presumably, traffic approach volumes at many of these intersections are at least several hundred vehicles per hour and perhaps several thousand during peak hours. Yet, the predicted maximum concentrations are only marginally higher (and in some cases even equal to) the estimated background concentration. Assuming that the background concentration estimates are accurate, then maximum concentrations near congested roadway intersections could be expected to be substantially higher.

Response:

In Table S4.6-13, the 1-hr CO concentration at La Cienega & Manchester Ave, NA/NP Interim Year (2005) is presented as 6.1 parts per million (ppm) . The value should be 6.2 ppm. The 8-hr CO

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concentration at Airport Blvd. and Century Blvd for Alternative D Interim Year (2013) is presented as 3.6 ppm and should be 3.7 ppm. The 1-hour CO concentrations at Sepulveda Blvd. and I-105 Ramps for Alternatives A and B in Horizon Year (2015) are presented as 4.1 ppm. The values should be 4.2 ppm. All values have been provided in Section 4.6, Air Quality.

Modeling CO impacts at intersections was performed using methods outlined in the U.S. EPA's Guideline for Modeling Carbon Monoxide from Roadway Intersections (EPA-454/R-92-005, November 1992) and the California Department of Transportation's Transportation Project-Level Carbon Monoxide Protocol (CO Protocol), (University of California Davis, December 1997). These methods are approved by FAA, SCAQMD, and U.S. EPA.

Since the CAL3QHC model outputs CO concentrations in ppm and only to the precision of tenths of ppm, the model is not critically sensitive to what might be perceived by the general public to be significant changes in certain input data. Also, since CO emissions are highest at engine idle, CAL3QHC is more sensitive to vehicular queue, rather than free-flowing traffic. Thus, although the number of vehicles per hour may appear high, if it is free-flowing traffic, idle emissions will be reduced and excessive CO impacts will not be predicted to occur.

SAL00013-123

Comment:

The accuracy of the predicted maximum concentrations at both on- and off-airport locations depends to some extent on the validity of the assumed substantial decrease in background concentrations of some air pollutants over the next several years. If the projected decrease in background concentrations turns out to be too optimistic, the projected maximum concentrations will likely be too low.

Response:

Please see Response to Comment AR00003-48 regarding future background concentrations.

SAL00013-124

Comment:

4.5.7 Gaps in the Analysis

The lack of an analysis of existing conditions using the same computer models and methodologies that were used to evaluate future scenarios continues to be a shortcoming. Without doing this, it is difficult to judge the accuracy of the predicted future conditions. Further, the 'ratioing' technique that was used to update the analyses of airport sources for Alternatives A, B and C and for the no-project case makes it difficult to fairly compare the alternatives.

Response:

Please see Response to Comment AL00022-133 regarding calculation of scenarios and Response to Comment SAL00013-120 regarding the ratioing method.

SAL00013-125

Comment:

4.5.8 Appropriateness and Adequacy of Mitigation Measures

Tables S4.6-6 and S4.6-7 provide emission estimates by source category for on-airport sources for the years 1996 (baseline) and 2000. Emission estimates are provided later in Table S4.6-9 for future years and project alternatives, but these estimates are not given by source category. Only the totals for the various air pollutants are shown. In Tables S4.6-14 and S4.6-16, it indicates that NO_x and SO₂ emissions from on-airport sources will be significant. In developing a mitigation plan to address this, it would be very useful to know what the major sources of on-airport NO_x and SO₂ are so that mitigation measures could be focused where they will be the most effective. Tables S4.6-6 and S4.6-7 indicate that aircraft emit a substantial portion of the NO_x and SO₂ emissions for the baseline and year 2000

cases. Thus, it seems probable that this will be true for the future scenarios, too. Table S4.6-18 provides a long list of proposed mitigation measures, but none of these involve measures to reduce aircraft emissions.

Response:

Please see Technical Report S-4 of the Supplement to the Draft EIS/EIR for additional information regarding future emission inventories.

Please note, LAWA has no regulatory authority to control aircraft emissions. LAWA has and will continue to provide facilities that allow airlines to minimize APU usages. LAWA will also encourage other operational measures such as reduced engine taxi. Only the U.S. EPA has the authority to set aircraft emission standards and aircraft pilots have ultimate authority over aircraft while in operation.

SAL00013-126

Comment:

4.6 LAND USE ASSESSMENT (Transportation)

Information within the 2003 Supplemental Draft EIS/EIR on each of the project build alternatives relating to consistency with the 2002 Regional Transportation Plan (RTP) and Regional Aviation Plan (RAP) are too vague to draw meaningful conclusions. Of the four build alternatives in the LAX Master Plan, only Alternative D has any discussion of consistency with the current RAP and this discussion is contradictory. As an example, the 2003 Supplemental Draft EIS/EIR in discussing compatibility with the SCAG Regional Comprehensive Plan and Guide states that: "Under Alternative D additional job opportunities, infrastructure growth, and indirect housing demand would occur." However, in discussing compatibility with the SCAG RAP it states that: "Under Alternative D, the LAX Master Plan would be consistent with the policy of the Regional Aviation Plan, which calls for no expansion of LAX."⁴²

How is it possible that infrastructure growth would occur at LAX without expansion of LAX? The fact of the matter is that massive infrastructure expansion would occur under Alternative "D". The result of the infrastructure expansion provides 153 fully functional, high capacity gates and does not remove concrete areas that can be used for aircraft parking. By parking aircraft, Alternative "D" can function as though it has over 200 gates and the capacity of LAX is greatly expanded. As such, Alternative "D" is incompatible with the SCAG RAP.

Revisions to the LAX Master Plan EIS/EIR need to be made that discuss compatibility of the build alternatives to the SCAG RTP and RAP including a discussion of either how Alternative "D" can be made compatible to the current RAP, or explain why it is not feasible for Alternative "D" to be made compatible. Without these discussions, meaningful analysis of this issue is not possible.

42 2003 Supplemental Draft EIS/EIR, Section 4.2.6.5, page 4-169

Response:

Regarding the statement that Alternative D is the only build alternative with a discussion of consistency with the RTP and RAP, consistency of all four Master Plan alternatives with the SCAG 2001 RTP and 2001 RAP (since there is no 2002 RTP and RAP as referenced by the commentor) is discussed in the Supplement to the Draft EIS/EIR. In Chapter 3, Alternatives, and Section 4.2, Land Use of the Supplement to the Draft EIS/EIR, Alternative D is identified as consistent with key policies and aviation activity levels referenced in the RTP and RAP. The RTP, RAP, and consistency of Alternatives A, B, and C with these plans are noted in Section 4.2.6 and further described in Section 3 in Technical Report S-1, Supplemental Land Use Technical Report, of the Supplement to the Draft EIS/EIR. The analysis provided in the Supplemental Land Use Technical Report evaluates consistency of Alternatives A, B, and C with RTP and RAP policies and RTP and RAP forecasts for LAX. A complete listing of RTP policies is included in Section 3.1.2 of Technical Report 1, Land Use Technical Report, in the Draft EIS/EIR with a discussion of the 2001 RTP provided in Section 2.1.1 of Technical Report S-1, Supplemental Land Use Technical Report of the Supplement to the Draft EIS/EIR. A discussion of the RAP is provided in Section 2.1.1.2 of Technical Report S-1, Supplemental Land Use Technical Report of the Supplement to the Draft EIS/EIR.

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The statement on page 4-169 of the Supplement to the Draft EIS/EIR, indicating that additional job opportunities, infrastructure growth, and indirect housing demand would occur under Alternative D, consistent with SCAG's forecasts warrants clarification. Alternative D is consistent with SCAG's forecasts, and would result in additional jobs, infrastructure growth and indirect housing demand. As further described in Section 4.4.1, Employment/Socio-Economics of the Supplement to the Draft EIS/EIR, there would be an estimated 48,778 jobs directly associated with the construction of improvements in Los Angeles County over the construction period, translating to 102,244 jobs when a multiplier effect is taken into account. There would also be limited growth in infrastructure, particularly for surface transportation, such as connections to the MTA Greenline and development of the Intermodal Transportation Center (ITC). However, improvements to facilities at LAX, and certain components of the project that could be characterized as growth in infrastructure, do not equate to "massive infrastructure expansion." These improvements to infrastructure do not conflict with the RTP and RAP and do not enhance capacity at LAX beyond the approximate passenger and cargo levels associated with the No Action/No Project Alternative. As indicated in Chapter 3, Alternatives, of the Supplement to the Draft EIS/EIR, the improvements to the airport under Alternative D focus on increasing the safety and efficiency of the airport and on encouraging development and use of other regional airports by constraining LAX, consistent with the RTP and RAP.

Regarding jobs and indirect housing, it should be clarified that the net additional jobs and indirect housing demand associated with the limited growth in annual passenger and cargo levels under Alternative D would be overwhelmed by productivity increases (i.e., the production of more economic output per worker) over time during the planning period, as further described in Section 4.4.1, Employment/Socio-Economics of the Supplement to the Draft EIS/EIR. Therefore, there would be a decline in jobs and indirect housing growth under Alternative D. This clarification has been incorporated in Section 4.2, Land Use of the Final EIS/EIR.

The 153 gates and concrete areas under Alternative D are designed to improve airport operations and not to expand the capacity of LAX. The 153 contact gate positions proposed under Alternative D provide parking for an aircraft adjacent to an airline concourse structure that is directly reachable by a passenger loading bridge. The contact gates allow passengers to board or disembark an aircraft directly to or from the airline concourse facility. The contact gates provide a greater level of passenger service and operational efficiency for the airlines. By removing the bussing operation to the remote gates the aircraft can be transitioned from an arriving flight to a departing flight in a significantly shorter period of time, thereby increasing the utilization of the gates and allowing a greater number of passengers through a reduction in the total amount of existing gates. As described in Chapter 2 and listed in Table 2.2-3 of the Draft Master Plan Addendum, different gates are able to accommodate varying sizes of aircraft. For example, 32 of the gates planned as part of Alternative D would accommodate commuter aircraft. These 32 gates would not be able to accommodate larger long haul domestic and international air carrier aircraft such as Boeing 757s. Six of the planned gates would be for the exclusive use of NLA aircraft such as the Airbus A380, which is scheduled to enter commercial service in 2006. Therefore, each of the 153 contact gate positions planned as part of Alternative D would not be considered to have equal capacity.

LAX currently operates with 19 remote hardstand positions located on the West Pad. Passengers and their carry on baggage are transported to and from the aircraft via LAWA operated shuttle buses. These positions would be eliminated as part of Alternative D because they do not provide the highest possible level of passenger convenience. The West Pad would be reused for aircraft Remain Over Night (RON) positions and as a Hold Pad for taxiing aircraft that are instructed by Air Traffic Control (ATC) to hold on the airfield either prior to departing or after arriving.

There are also three existing remote commuter gate areas that would be eliminated under Alternative D. The 32 commuter boarding positions planned in Alternative D are located in two locations: the west side of the West Satellite Concourse and the passenger concourse located at existing Terminal 8. Figure 2.2-4, 2015 Alternative D Gate Layout and Utilization, of the Draft Master Plan Addendum illustrates each of the aircraft boarding gate positions planned as part of Alternative D.

The Airport would function with 153 contact gate positions. For the airport to function as though it had over 200 gates, more than 47 additional aircraft parking positions capable of accommodating passenger loading and unloading activities would be required. Alternative D does not plan for more than the 153 contact gate positions illustrated in Figure 2.2-4 of the Draft Master Plan Addendum. Because the number aircraft gates at LAX would be reduced to 153 after the implementation of Alternative D, this would be the primary factor limiting LAX capacity to 78 MAP.

Alternative D is consistent with policy limitations on the capacity of LAX as stated in the RTP and RAP. Although airport and roadway improvements at LAX would occur, aviation activity that is supported by Alternative D would be similar to what would occur under the No Action/No Project Alternative consistent with the 2001 RTP. These limitations at LAX would encourage the growth of aviation activity at airports other than LAX as specified in the 2001 RTP.

Please see Topical Response TR-MP-2 for a discussion of what LAWA has done to ensure consistency between the LAX Master Plan and SCAG RTP.

SAL00013-127

Comment:

4.6.1 Master Plan Commitments Lack Substance

The referenced Neighborhood Compatibility Program⁴³ is vague. The details and "teeth" of this commitment must be clarified in order to allow an assessment of its value. The Program should be linked to the Mitigation Monitoring Program, including identification of a formal role for neighborhood review in the formulation and monitoring of specific development plans at the airport/neighborhood interface.

43 2001 Draft EIS/EIR, Section 4.2..5, Page 4-116.

Response:

The content of this comment is identical to comment AL00022-139; please refer to Response to Comment AL00022-139.

SAL00013-128

Comment:

4.6.2 Other Land Use Inconsistencies

Discussion on Page 4-189 of the 2001 Draft EIS/EIR asserts that Master Plan Commitments LI-1 and DA-2 will reduce land use impacts of the Ring Road on the apartments on Morley Road to less than significant levels; however, these measures are not described in the 2001 Draft EIS/EIR or 2003 Supplemental Draft EIS/EIR, but only referenced. In fact, throughout the 2001 Draft EIS/EIR text §§-1 through 7, references are made to impacts and mitigation measures described in Appendix K, without any explanation or summary describing such impacts and mitigation measures. The 2003 Supplemental Draft EIS/EIR also provides no discussion of this issue. Since the LAX Expressway and State Route 1 (SR 1) improvements are integral features of the build Alternatives A through C, the 2003 Supplemental Draft EIS/EIR should be revised to incorporate this information in the body of the text.

Response:

Comment noted. The Supplement to the Draft EIS/EIR served to provide a comprehensive analysis of Alternative D, as well as other new important information that was not otherwise provided in the Draft EIS/EIR relative to the No Action/No Project Alternative and Alternatives A, B, and C. Alternative D does not include the LAX Expressway or ring road and there was no new important information regarding these proposed roadways that was not already presented in the Draft EIS/EIR and related appendices/technical reports. As such, there was no need or purpose to presenting information on the LAX Expressway and ring road in the Supplement to the Draft EIS/EIR. In the event any of Alternatives A through C are selected, a Mitigation Monitoring Plan will set up a monitoring or reporting plan for the identified mitigation measures adequate to describe each policy or action to be taken and to ensure its implementation. Please see Topical Response TR-APPK-1 regarding a refined analysis of LAX Expressway and State Route 1 impacts.

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SAL00013-129

Comment:

The 2003 Supplemental Draft EIS/EIR presents additional analysis of single event noise levels as mandated by a recent court ruling by the California Court of Appeal (*Berkeley Keep Jets Over the Bay Committee v. Board of Port Commissioners*, (2001) 91 Cal. App .4th 1344.). It is commendable that LAWA chose to include this evaluation so critically important in assessing impacts to land uses surrounding airports. Of particular concern are single event noise levels as they relate to school disruptions. However, inconsistencies again appear in this evaluation: Table S4.2-2 in the Land Use Section shows that 29 schools would be affected by single event noise levels, whereas Table S4.1-2 in the Noise Section shows that 50 schools would be affected by single event noise levels. These inconsistencies need to be reconciled.

Response:

Comment noted. Table S4.2-2 of Section 4.2, Land Use, and Table S4.1-2 of Section 4.1, Noise, of the Supplement to the Draft EIS/EIR were developed from data in Table S9 of Technical Report S-1, Supplemental Land Use Technical Report, of the Supplement to the Draft EIS/EIR and from Tables S31, S32, and S33 of Appendix S-C1, Supplemental Aircraft Noise Technical Report, of the Supplement to the Draft EIS/EIR.

The numbers in Table S4.1-2 represent the number of schools exposed to each of the impact categories or thresholds listed in the table. The combined total of schools exposed to one or more of these impact categories equals 31 for 1996 baseline conditions and 30 for Year 2000 conditions. However, some schools are exposed to single event noise levels exceeding more than one of these thresholds and therefore are counted more than once and are included in more than one impact category listed on Table S4.1-2. The numbers in each column of Table S4.1-2 are not intended to be added up as the result would double count some schools, thereby giving a total larger than the actual number of individual schools exposed to significant single event noise levels.

The number of schools identified in Table S4.2-2 indicates the total number of individual schools exposed to any of the three impact categories for significant single event noise levels. This number does not double count any schools, as any school that might be exposed to significant single event noise levels exceeding more than one of these thresholds is only counted once in Table S4.2-2.

In addition, during a review of Table S4.2-2 an error was found in the Year 2000 Column for LA City Single Event Effects on Schools where Schools Exposed should be 6 and in the Year 2000 Column for Inglewood Single Event Effects on Schools where Schools Exposed should be 17. This subject correction has been incorporated in Section 4.2, Land Use, of the Final EIS/EIR. This clarification does not change the conclusions presented in Section 4.1, Noise, or Section 4.2, Land Use, of the Draft EIS/EIR and Supplement to the Draft EIS/EIR.

SAL00013-130

Comment:

4.6.3 The Land Use Assurance Letter should be Disclosed

The contents of the Land Use Assurance Letter⁴⁴ should be summarized in the text and the document should describe how conflicts would be avoided. This discussion emphasizes noise compatibility considerations and minimizes the combined effects of noise, safety, air quality, lighting, and aesthetics. After acknowledging that land use compatibility is a function of these types of combined effects, very little discussion of combined effects is included in the 2001 Draft EIS/EIR or the 2003 Supplemental Draft EIS/EIR. Please identify properties that are subject to such combined effects.

⁴⁴ 2001 Draft EIS/EIR, Appendix E.

Response:

The content of this comment is essentially the same as comment AL00022-142; please refer to Response to Comment AL00022-142.

SAL00013-131

Comment:

4.6.4 Key Mitigation Measures may Not be Implemented

Substantial reliance is placed on Mitigation Measure MM-LU-1 "Implement Revised Aircraft Noise Mitigation Program." This measure is broad in scope, and depends upon the cooperation and funding of agencies outside of LAWA. Consequently, there is no assurance that LAWA will be able to implement this measure in a timely manner. Moreover, LAWA does not have an outstanding track record, as a number of commitments to properties already included within the current boundaries of the ANMP have not been fulfilled. A discussion of unmet commitments from prior actions should be provided along with an evaluation of the impacts that would result if LAWA were unable to fulfill the new commitments described in the 2001 Draft EIS/EIR and 2003 Supplemental Draft EIS/EIR.

Response:

The content of this comment is essentially the same as comment AL00022-30; please refer to Response to Comment AL00022-30.

SAL00013-132

Comment:

Mitigation Measures MM-LU-3 and MM-LU-4 dealing with single event noise levels disrupting school sessions are of particular concern. Mitigation Measure MM-LU-3 commits LAWA to conduct a study of the relationship between aircraft noise levels and the ability of children to learn that in essence allows single event noise levels to continue and monitors the effects of these impacts on schoolchildren in the affected classrooms. As stated earlier, this approach may harm the children. A more responsible and conservative approach is needed that does not have the potential to do additional harm. Mitigation Measure MM-LU-4 states that:

"Upon completion of the study required by Mitigation Measure MM-LU-3 and acceptance of its results by peer review of industry experts, any schools found to exceed a newly established threshold of significance for classroom disruption shall be incorporated into the ANMP administered by LAWA. Based on the Master Plan alternative that is ultimately approved and thresholds set forth in § 4.1, Noise, that address single overflight event noise and the ability of children to learn in the classroom, and subject to modification based on the study required by MM-LU-3 those schools listed... may be eligible for sound insulation."

Although the mitigation reads as though it is addressing the problem, it does not commit LAWA to any definable actions that would reduce impacts other than a vague reference that schools may be eligible for sound insulation. LAWA must describe mitigation measures in enough detail to commit the lead agency to an action that reduces the impact. Further, mitigation measures must be defined in enough detail to analyze the potential environmental impacts that may result from the implementation of the mitigation measure.

Response:

As part of the Master Plan process, LAWA has proposed a series of mitigation measures including Mitigation Measure MM-LU-3, Conduct Study of the Relationship Between Aircraft Noise Levels and the Ability of Children to Learn (Alternatives A, B, C, and D) that will determine what, if any, measurable relationship may be present between learning and the disruptions caused by aircraft noise at various levels. At this time specific criteria for determining these relationships have not been determined. That will be up to the experts developing the study. However, while MM-LU-3 is being completed MM-LU-1 Implement Revised Aircraft Noise Mitigation Program (Alternatives A, B, C, and D) will address those schools identified and eligible in the current ANMP.

Under mitigation measures MM-LU-3 and MM-LU-4, mitigation in the form of sound insulation or relocation would be provided for those impacted schools not already considered compatible under Title 21. This is a definable actions that would reduce potential noise impacts. While the provision of sound insulation may result in temporary classroom disruption, no significant impacts are anticipated to occur

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as a result of implementing mitigation measures MMM-LU-3 and MM-LU-4. The public schools that would be newly exposed to high single event noise levels under Alternatives A, B, C, and D compared to 1996 baseline conditions are listed on Tables S4.2-10, S4.2-14, S4.2-18, and S4.2-28, respectively of the Supplement to the Draft EIS/EIR. As described in Response to Comment AL00035-36, under the terms of "Settlement Agreement," the City of Los Angeles awarded approximately \$5.8 million to the Inglewood Unified School District to use for sound insulation of affected schools within the 65 CNEL and the Inglewood Unified School District agreed to allow an aviation easement deeming their schools compatible with the airport under Title 21 provisions. Schools significantly impacted by single event noise impacts will receive sound insulation to reduce interior noise levels to the applicable threshold noise level, unless the school is subject to an existing aviation easement. A mitigation monitoring and reporting program prepared for the approved Master Plan alternative would commit LAWA to conduct a study to determine a replacement threshold of significance for classroom disruption by both specific and sustained aircraft noise events and incorporate eligible schools that exceed the newly established thresholds into the ANMP.

SAL00013-133

Comment:

4.7 SOCIOECONOMIC ASSESSMENT

4.7.1 Productivity Variables are based on Flawed Assumptions

The 2001 assessment of Employment and Socioeconomic Impacts (and therefore the Growth Inducement Analysis as well) was substantially flawed by assumptions made at the outset of the analysis concerning productivity gains. This conclusion is directed largely at the assumption made in 2001 that productivity gains would be the same for all of the build Alternatives. In fact, productivity rates are variable over time and highly sensitive to changes in the economy's overall rate of growth. These cycles are evident in statistics over the past 50 years, which show national annual productivity growth in the range of 2.8% from 1948-1973, compared with 1.2% during the economic slowdown of 1992-1995.⁴⁵ When Gross Domestic Product growth is decelerating, productivity slows. Given the repeated emphasis throughout the 2001 Draft and 2003 Supplement to the Draft EIS/EIR that failure to pursue the expansion project would have a negative ripple effect throughout the southern California economy, it would have been more logical to link the No Project Alternative with productivity gains lower than those associated with the build Alternatives. Similarly, to the extent that Alternative D resembles the No Project Alternative it too would be associated with productivity gains lower than those associated with the remaining build. Accordingly, the SDEIS/EIR should reassess Employment and Socioeconomic impacts for Alternative D and the No Project Alternative using a lower estimate of productivity gains.

45 Alejandro Bodipo-Memba, "U.S. Productivity Surged During 1998, Hinting at Escape from 25-Year Slump," Wall Street Journal, February 10, 1999

Response:

This is not a comment on the Supplement to the Draft EIS/EIR, but rather on analysis that was included in Technical Report 5 to the Draft EIS/EIR, and it is similar to a comment on the Draft EIS/EIR by the same commenting agency. Please see Responses to Comments AL00022-146, regarding productivity changes. In addition, it is noted that in the REMI model, the passenger and air cargo capacity constraint assumptions for the Master Plan alternatives directly affect regional productivity, which is an output calculated within the REMI the model. Productivity in the calibration of the national REMI model, which is an external input to the regional model, is set at fixed rates using assumptions made by the Bureau of Labor Statistics for future forecasts.

Moreover, we are unaware of any empirical research that could provide a credible basis for assuming that productivity changes would vary by industry and by LAX Master Plan alternative. Historical changes in national and state productivity trends by industry are not sufficiently precise to adjust them in the manner suggested in the comment.

SAL00013-134

Comment:

4.7.2 Productivity Forecasts Require Further Justification

The Socioeconomic Technical Report (provided only in the 2001 Draft EIS/EIR) made note of the labor-intensive nature of many service industries, and identified the tendency toward stable or reduced productivity (and resulting job growth per unit of service) in hotels, restaurants, and numerous high-end personal, household and business services.⁴⁶ At the same time, assumptions in the Draft and 2003 Supplement to the Draft regarding the No Project Alternative show passenger volumes increasing from 71.2 MAP in 2005 and 78.7 MAP in 2015 (about a 10% gain). The Technical Report noted that the services and tourism/entertainment sectors showed the most substantial employment gains between 1972-1992 and again between 1992-1997.⁴⁷ Finally, the Report allocated substantial passenger spending on these services, particularly for hotels and dining facilities, through the 2015 horizon.

In combination, these facts would point to positive employment gains in at least those sectors for which productivity is forecast to slow - eating and drinking establishments, hotels, and amusement and recreation facilities at a minimum. Nevertheless, and in apparent contradiction of its own assessment, the Socioeconomic Technical Report forecast losses in direct LAX-related employment for both sectors between 2005 and 2015 under the No Project Alternative. Eating and drinking establishments were forecast to sustain job losses on the order of 1,725 (a 4% drop); hotels were forecast to sustain job losses on the order of 3,467 (a 7.5% drop); and amusement/recreation facilities were forecast to sustain losses on the order of 4,514 (a 14.8% drop).

An explanation is needed to justify the Technical Report forecasts of job losses that conflict with the discussion of anticipated productivity trends for hotels, restaurants, and services. Job growth in the specified service sectors should be projected.

46 Section 3.2.3.

47 Section 4.1.1.

Response:

This is not a comment on the Supplement to the Draft EIS/EIR, but rather on analysis of the No Project Alternative that was included in Technical Report 5 to the Draft EIS/EIR, and is similar to a comment on the Draft EIS/EIR by the same commenting agency. Please see Response to Comment AL00022-35, and SAL-00013-134 regarding productivity assumptions. It is also noted that in the No Project Alternative, productivity gains reduce employment because growth in passenger spending is constrained. The historical growth in passenger-related services was recorded during a period when passenger volumes at LAX were not constrained, as they would be under the No Project Alternative. Please see Response to Comment AL00022-36 regarding changes in employment directly associated with the operation of LAX.

SAL00013-135

Comment:

4.7.3 Definition of the No Project Alternative is Artificially Narrow

The artificially narrow definition of the No Project Analysis weakens the analyses contained in the Socioeconomic Technical Report. As discussed previously, the 2001 Draft EIS/EIR and the 2003 Supplement both assume that under the No Project Alternative there would be no new improvements at LAX beyond those now underway, planned, or programmed. Both CEQA and NEPA favor "worst case" assessment. In this light, it would be more reasonable and informative to anticipate that LAWA would pursue a wide range of additional improvements that would in turn boost direct and indirect employment and spending, with far different socioeconomic impacts than indicated in Technical Report estimates for the No Project Alternative. The analysis of Employment and Socioeconomic impacts should be revised to incorporate the expanded assessment of actions that may in the future be taken by LAWA in the event the project is not approved and the outcomes that could reasonably be expected to result from such actions should be addressed.

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The 2003 discussion of socioeconomic effects associated with Alternative D repeats a form of the unsupportable syllogism described in § 3.3.2. In the current section, Alternative D is concluded to have beneficial socioeconomic effects, Alternative D is described as substantially the same as No Action, and No Action is found to have adverse socioeconomic effects. In fact, an increase in construction jobs is the only socioeconomic difference between No Project and Alternative D that is acknowledged in the Supplement to the Draft EIS. Again, we believe that the inconsistency is due to misrepresentation in the description of alternatives - particularly Alternative D and the No Project Alternative.

Response:

The Draft EIS/EIR and the Supplement to the Draft EIS/EIR are intended to analyze the impacts on the environment that are associated with LAX-specific Master Plan alternatives, not actions that may or may not be taken by LAWA at other airports under its control. Please see also Topical Response TR-GEN-2 regarding the No Action/No Project Alternative.

SAL00013-136

Comment:

4.7.4 Distribution of Passenger Spending Requires Explanation

In estimating the distribution of passenger spending, §3.4.3.1 of Technical Report 5 indicated that it was assumed that LAX would represent the sole source for international traffic, based on historical data for the years 1985-1994. Additionally, the Section noted that:

"As a working assumption, it was assumed that there was no connecting traffic at any of the other 4 major airports in the region...the single exception to this rule results from the fact that Ontario 'International' Airport did serve an estimated 50,000 international passengers during late 1993 and early 1994."

It is unclear how the "working assumption" and exception were applied in estimating future contributions under the 2005 and 2015 scenarios. Did the analysis treat the 50,000 international passengers as a one-time event, or did it assume that Ontario would continue to serve 50,000 international passengers (per year) through 2015? In either case, the document should have explored the factors that allowed Ontario to successfully enter this competitive market, with the goal of assessing Ontario's ability to accept future unmet need in the region as a whole. This analysis would have been especially relevant to the socioeconomic analyses of the No Project Alternative, and may have resulted in far different conclusions. If the Socioeconomic Technical Report did base its 2005 and 2015 No Project Alternative scenarios on the assumption that Ontario would serve 0 or 50,000 international passengers (but no more), the analysis should provide a more detailed assessment of the potential role of Ontario in meeting international travel demand.

In general, and although the Technical Report promised such an assessment, the Socioeconomic Technical Report did not make any substantive effort to determine the degree to which the No Project Alternative might result in a redistribution of air services and associated economic activity to other airports in the region. As it stands, the analysis shines a very bright light on variables influencing the LAX growth scenarios, but does little to apply its powerful tools on the potential future role of other facilities in the region. This approach shortchanges the No Project Alternative. It also shortchanges the newly-proposed and preferred Alternative D. As noted above, the only socioeconomic difference between 'No Project' and Alternative D, according to the SDEIS/EIR, is construction employment. If true, then Alternative D would also be similar to No Project in its potential to redistribute non-construction air services and economic activity to other airports in the region. LAWA should expand the Supplement to the Draft EIS/EIR to take a closer look at this issue, considering the amount and type of activity that could reasonably be expected to shift within region, and the direct and indirect economic effects that might result.

Response:

This is not a comment on the Supplement to the Draft EIS/EIR, but rather on analysis that was included in Technical Report 5 to the Draft EIS/EIR, and is similar to a comment on the Draft EIS/EIR by the same commenting agency. Please see Response to Comment AL00022-151 regarding international passenger traffic at ONT. It should also be noted that the purpose of the Supplement to the Draft

EIS/EIR is to analyze the potential environmental impacts of LAX Master Plan Alternative D, but it is not intended to analyze the impacts of plans for ONT, or any other airport facilities in the region. LAWA is currently preparing separate environmental analysis of plans to expand capacity at ONT. The statements about ONT international passenger volume in Technical Report 5 to the Draft EIS/ER have no bearing on the economic impact analysis of LAX Master Plan alternatives that was included in the Draft EIS/EIR and the Supplement to the Draft EIS/EIR. This is because the economic impacts analysis of LAX Master Plan alternatives is based, in part, on the projected number of O&D international passengers in the aviation forecast specific to each LAX Master Plan alternative, and spending by those international passengers in the region. The number of international passengers at OND at the time the Draft EIS/EIR was prepared, and any changes since that time, or under various future forecasts for OND, does not affect the analysis of the contribution that the LAX Master Plan alternatives would make to the regional economy.

SAL00013-137

Comment:

4.7.5 Distribution of Regional Spending Requires Explanation

§3.4.3.1 of the 2001 Draft EIS/EIR noted,48

"Parking costs are the only local impacts attributed to Resident passengers in the current analysis...(and to) the extent that such passengers spend money at restaurant and retail establishments during the time they spend in one of the region's airports, this analysis may, to a small degree, have underestimated the impacts of Resident passengers. "

The analysis also discounted resident expenditures on transportation to and from the airport:

"To the extent that such transportation is provided by a private taxicab, limousine or shuttle service will cause some additional impacts on the local economy. This does not apply to connecting and visitor passengers, for whom these impacts have been measured. "

On the surface, these assumptions would be expected to impact regional spending estimates in a neutral manner, because it is applied to all airports in the region. However, since the analysis: (1) assumed that facilities other than LAX will be essentially limited to resident passengers; (2) discounted the retail, restaurant and travel expenditures of these passengers; and (3) measured such expenditures for connecting and visitor passengers, the net effect is to disproportionately minimize the regional spending contributions of airports other than LAX. Once again, the assumptions would cast an artificially unfavorable light on the No Project Alternative (though not, apparently, on Alternative D, though it is presented as equivalent apart from construction impacts).
48 In Footnote 32.

Response:

This is not a comment on the Supplement to the Draft EIS/EIR, but rather on analysis that was included in Technical Report 5 to the Draft EIS/EIR, and is similar to one by the same commenting agency on the Draft EIS/EIR. Please see Response to Comment AL00022-153, regarding resident expenditures. It is also noted that expenditure surveys of resident passengers do not usually account for travel to and from the originating airport due to the difficulty of obtaining accurate estimates. This is because many residents provide their own transportation and do not incur an explicit cost that can be accurately collected in a passenger survey. In addition, the economic impacts of resident transportation expenses (e.g., taxi and other for-hire transportation services) are likely to be immaterial in the context of the regional economy, as are any resident passenger transportation expenditure differences between the LAX Master Plan alternatives.

SAL00013-138

Comment:

4.8 REGIONAL TRANSPORTATION

3. Comments and Responses

All of the alternatives, including the No Action Alternative, call for a 41% increase in passenger activity and a 60% increase in air cargo at LAX. Passenger volume would increase from 56 MAP to 79 MAP, and air cargo would increase from 1.95 million tons to 3.2 million tons in only 12 years. Those amounts are greater than 95% of all other national airports and are greater than all the other Los Angeles regional airports combined!

If indeed the LAX Master Plan aims to promote meaningful growth at other regional airports, then realistic growth control measures must be included. The inland airports have abundant capacity and are crying for air service, and the LAX Master Plan must include measures that lead to region wide cooperation to move air service to those areas. The City of Los Angeles has refused to participate in activities of the Southern California Regional Airport Authority, which has generated several proposals to promote such efforts. Without active measures to move air traffic to other airports, the Master Plan serves only to create another incremental step in the unabated growth of LAX. We understand that LAWA has recently hired a consultant to market Ontario International Airport,⁴⁹ and would request that LAWA outline the goals of that marketing plan.

⁴⁹ Press Enterprise Newspaper, "Still awaiting takeoff," September 21, 2003.

Response:

The LAX Master Plan and associated EIS/EIR deal only with the proposed development of LAX. Alternative D for LAX, as detailed in the Supplement to the Draft EIS/EIR, seeks to meet the Master Plan project objectives through an emphasis on safety and security improvements, rather than capacity increases. Since the capacity of LAX is increased under Alternative D, it is incumbent on the other airports in the region to serve a larger percentage of the regional demand.

The passenger and cargo capacity of LAX under Alternative D is approximately equal to the capacity of the existing facility. The current constraint on LAX passenger capacity fall directly on the passenger due to its congested access system, terminal roadways, curb frontage, and parking facilities, as well as its improperly sized terminal and gate facilities. Without the program improvements, landside access to the airport will be extremely difficult, and during some times, will be in virtual gridlock. Alternative D presents a workable, long-term solution that provides a major benefit to the users by reworking the landside configuration and moving the constraining factor to limited aircraft gates, making the use of LAX a tolerable experience to its passengers.

The City of Los Angeles and LAWA, which control the development of LAX, Ontario, Palmdale, and Van Nuys airports, are currently preparing Master Plan updates for both Ontario and Palmdale, to play their part in addressing the anticipated regional demand. Other jurisdictions are responsible for planning and developing the other regional airports.

The growth and development plans for Ontario, including marketing plans, to serve a larger portion of regional demand, will be addressed in the context of the Ontario Master Plan update proceedings and will be made available through the EIS/EIR process for that Master Plan. Expansion at Ontario, Palmdale, or any of the other regional airports will not negate the need for modernization of LAX.

Please see Topical Response TR-RC-1 for more detail on the relationship between LAWA's planning for its three commercial service airports and the plans of other airport jurisdictions in the region.

The Southern California Regional Airport Authority (SCRAA) is a joint powers agreement among the counties of Los Angeles, Orange, Riverside, and San Bernardino, and the City of Los Angeles. The Authority was formed to develop and implement a regional approach of providing airport capacity. After dormant for many years, the SCRAA was reactivated in March 2001 to deal principally with two issues: the proposed expansion of LAX, and the proposed conversion of El Toro to a civilian airport. The decline in air travel demand due to the economic recession, the events of September 11th, the war in Iraq, and SARS has largely driven the Authority back to inactivity. Riverside County voted in July 2002 to withdraw from SCRAA. Officials from Los Angeles joined political leaders from the Inland Empire to form a new coalition in October 2003 to plan as a region for the growth of air traffic in Southern California.

SAL00013-139

Comment:

4.9 BIOLOGICAL RESOURCES

4.9.1 Review of Baseline Conditions

The SDEIS/EIR identifies eight distinctive biotic communities without clearly distinguishing among the following: naturally occurring communities; man-influenced/modified natural communities; man-created biotic situations; or areas under complete development, which no longer have biotic value for sensitive plant and animal species. The acreages of biotic habitats were rates in terms of value for sensitive species, and compared with marginal habitats, non-native habitats, and areas that are developed and no longer supporting habitats. The review indicated that the airport is largely developed, with open areas that are highly disturbed and offers little or no viable habitat for sensitive plant and animal species. The Los Angeles/EI Segundo Dunes and, to a lesser extent, the non-restructured dunes north of this area stand out as the only areas having high biological value that merits recognition and a conservation effort by LAWA. It is therefore recommended that the Master Plan include a "conservation element" dictating how the Los Angeles/EI Segundo Dunes will be managed. This goes beyond the requirements to manage the Habitat Restoration Area for the EI Segundo Blue Butterfly.

Response:

With regard to a "conservation element" for the Los Angeles/EI Segundo Dunes, the Dunes are still under the jurisdiction of the California Coastal Commission (CCC) until such time as a Local Coastal Program (LCP) is finalized by the City of Los Angeles and submitted to and approved by the CCC. Any "conservation element" for the Los Angeles/EI Segundo Dunes would have to be included in an LCP. Currently, a Long-Term Habitat Management Plan exists for the Los Angeles/EI Segundo Dunes and is the responsibility of LAWA to oversee and implement the plan. The Long-Term Habitat Management Plan for Los Angeles Airport/EI Segundo Dunes was prepared by Environmental Science Associates in association with Sapphos Environmental and Rudolf H.T. Mattoni, Ph.D for the City of Los Angeles Environmental Affairs Department where it can be found. The Long-Term Habitat Management Plan includes the management elements for the EI Segundo Blue Butterfly Habitat Restoration Area. It is understood that after certification of the Master Plan project, LAWA will continue to implement the Long-Term Habitat Management Plan. In addition to the plan, several mitigation measures for the LAX Master Plan for biotic communities and endangered species commit LAWA to undertake activities in all parts of the Los Angeles/EI Segundo Dunes to preserve and enhance the existing habitat there. Please see mitigation measures MM-BC-1, MM-BC-2, MM-BC-4 through MM-BC-13, and MM-ET-2, MM-ET-3, and MM-ET-4. In addition, the conservation element of the City General Plan states that management of city-owned property is to protect and/or enhance the survival of sensitive plant and animal species to the largest extent possible.

SAL00013-140

Comment:

4.9.2 Review of Mitigation Measures

Several mitigation measures are listed in § 4.10.8 that would, if successful, reduce potential impacts to sensitive biological resources to a less than significant level. The selection of mitigation measures will depend on which Alternative is chosen. It is expected that a mitigation monitoring program (MMP) will be developed and implemented. However, we recommend that LAWA separate the biological mitigation measures from the larger MMP and create a Conservation Program that focuses on the Los Angeles/EI Segundo Dunes and surrounding areas. This would enhance the biological program and provide LAWA with a stronger negotiating position with United States Fish and Wildlife Service on future projects.

Response:

Comment noted. LAWA will develop and implement a Mitigation Monitoring and Reporting Program necessary to reduce potential impacts to sensitive biological resources to a less than significant level. The development of a Conservation Program for the Los Angeles/EI Segundo Dunes would have to be included in a Local Coastal Program (LCP) for the Dunes. To date, the Dunes are still under the

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jurisdiction of the California Coastal Commission (CCC) until such time as a LCP is finalized by the city of Los Angeles and submitted to and approved by the CCC. Currently, a Long-Term Habitat Management Plan exists for the Los Angeles/EI Segundo Dunes and is the responsibility of LAWA to oversee and implement the plan. The Long-Term Habitat Management Plan was created to fulfill a special condition of the Coastal Commission permit (CDP No. 5-92-131) issued in 1992 for the full restoration program. The purpose of the plan is to effect a transition from active restoration of the Los Angeles/EI Segundo Dunes to long-term conservation and maintenance; it considers a range of biological, land use and administrative issues and recommends a series of actions to guide habitat management over the near- and long-term. It is understood that after certification of the Master Plan project, LAWA will continue to implement the plan. In addition to the plan, several mitigation measures for the LAX Master Plan for biotic communities and endangered species commit LAWA to undertake activities in all parts of the Los Angeles/EI Segundo Dunes to preserve and enhance the existing habitat there. Mitigation measures MM-BC-1, MM-BC-2, MM-BC-4 through MM-BC-13, MM-ET-2, MM-ET-3, and MM-ET-4 were described in the Supplement to the Draft EIS/EIR.

SAL00013-141

Comment:

Section 4.11.2 mentions that LAWA initiated a formal Section 7 consultation with USFWS on September 5, 2000. The remainder of § 4.11 discusses several mitigation measures that will be implemented to reduce impacts to listed species to below a significant level. It is not clear whether these mitigation measures are the basis for the formal Section 7 or if they have been included in the required Biological Assessment. Although completion of the Section 7 consultation process by the FAA is not required to be a part of the Draft EIS/EIR analysis, the level of analysis and detail presented in this Draft would suggest that it has been included.

Response:

Please see Response to Comment AL00022-171 regarding FAA and LAWA's Section 7 consultation with the USFWS. Section 7 consultation between the FAA, LAWA, and the USFWS began in September 2000 and the results of the consultation were considered in the development of mitigation measures. As a result of Section 7 consultation among LAWA, FAA, and USFWS, the soils containing cysts of the Riverside fairy shrimp will be relocated to property owned by the FAA and designated a habitat preserve at the former Marine Corps Air Station at El Toro, or a comparable site approved by the USFWS. As a result of extensive coordination and consultation undertaken with the USFWS, FAA and LAWA have incorporated 12 conservation measures specified in the Draft Biological Opinion issued by the USFWS. Mitigation measures were also included in the Biological Assessment Technical Report of the Draft EIS/EIR and Updated Biological Assessment Technical Report of the Supplement to the Draft EIS/EIR, both of which were submitted to the USFWS. The Draft Biological Opinion issued by the USFWS is included as Appendix F-E of this Final EIS/EIR.

SAL00013-142

Comment:

Apparently, USFWS and LAWA have not come to terms on the level of mitigation required to mitigate impacts to the Riverside Fairy Shrimp and its habitat. There is a brief mention of this divide at the top of page 4-691. The FAA is rightly concerned that the creation/restoration of fairy shrimp habitat (vernal pools) will create significant safety issues for aircraft by attracting birds (bird air strike hazards). However, the final endangered species mitigation measures and/or conservation management strategies will depend on final resolution of this issue between USFWS and the FAA.

The Draft EIS/EIR does not give an indication whether the present mitigation measures will be satisfactory to USFWS, or whether these measures will allow the FAA to complete its obligations under the Endangered Species Act. If this is the case, it should be clearly stated. If it is not, the reader needs to know that the mitigation measures have not been approved by USFWS and could change significantly before the Section 7 consultation process is completed and a Biological Opinion is issued by the USFWS.

As discussed above under comments for § 4.10.5 Master Plan Commitment, all biological mitigation measures should be integrated into a Conservation Program for LAWA with focus on the Los Angeles/EI Segundo Dunes and the Riverside Fairy Shrimp.

Response:

Please see Topical Response TR-ET-2 regarding Riverside fairy shrimp mitigation. Mitigation Measure MM-ET-1 of the Supplement to the Draft EIS/EIR included a 3:1 mitigation ratio for impacts to the Riverside fairy shrimp and its habitat. As a result of extensive coordination and consultation undertaken with LAWA, FAA, and USFWS, the USFWS has issued a Draft Biological Opinion pursuant to Section 7 of the Federal Endangered Species Act. Mitigation for impacts to Riverside fairy shrimp are in conformance with conservation measures described in the Draft Biological Opinion. Conservation Measure 5 requires the replacement of direct impacts to ephemeral wetted areas EW001, EW002, and EW006 at a ratio of 3:1. Therefore, the created vernal pool(s) will contain a minimum of 5,559 square feet of vernal pool surface area. As a result of Section 7 consultation among LAWA, FAA, USFWS, and issuance of the Draft Biological Opinion, the soils containing cysts of the Riverside fairy shrimp will be relocated to property owned by the FAA and designated a habitat preserve at the former Marine Corps Air Station at El Toro, or a comparable site approved by the USFWS. The Draft Biological Opinion issued by the USFWS is included as Appendix F-E of this Final EIS/EIR.

With regard to a "conservation program" for the Los Angeles/EI Segundo Dunes, the Dunes are still under the jurisdiction of the California Coastal Commission (CCC) until such time as a Local Coastal Program (LCP) is finalized by the City of Los Angeles and submitted to and approved by the CCC. Any "conservation element" for the Los Angeles/EI Segundo Dunes would have to be included in an LCP. Currently, a Long Term Habitat Management Plan exists for the Los Angeles/EI Segundo Dunes and is the responsibility of LAWA to oversee and implement the plan. It is understood that after certification of the Master Plan project, LAWA will continue to implement the plan.

With regard to a "conservation program" for the Riverside fairy shrimp, the FAA prepared an Endangered Species Conservation Package for the Riverside fairy shrimp (and EI Segundo blue butterfly) in support of the LAX 2015 Master Plan, submitted to the USFWS in March 2001. To account for consultation between LAWA, FAA and USFWS, and to address Alternative D (proposed since publication of the Draft EIS/EIR), a Final Endangered Species Conservation Package will be prepared by the FAA for submission to the USFWS upon securing the conservation site. The Final Conservation Package will serve to document the conservation intent of FAA, as well as streamline the permitting process for LAWA.

In addition, several mitigation measures for the LAX Master Plan for biotic communities and endangered species commit LAWA to undertake activities in all parts of the Los Angeles/EI Segundo Dunes to preserve and enhance the existing habitat. Mitigation Measures MM-BC-1, MM-BC-2, MM-BC-4 through MM-BC-13, MM-ET-2, MM-ET-3, and MM-ET-4 are described in the Supplement to the Draft EIS/EIR.

SAL00013-143

Comment:

4.9.3 Wetlands Concerns Must be Integrated

Only U.S. Army Corps of Engineers jurisdiction was found to occur within the Air Operation Area or the Los Angeles/EI Segundo Dunes; no California Department of Fish and Game (CDFG) jurisdiction was determined to occur. The permanent conversion/loss of the 1.3 acres of atypical wetlands is a significant impact that will require a 404 permit. It will also require a Section 7 consultation between the Corps and USFWS because of the presence of embedded Riverside Fairy Shrimp cysts in soil samples.

The biological concerns associated with wetlands should also be included in a Conservation Program rather than addressed as a separate biological issue for which no Master Plan commitments are made. Although there is very limited natural habitat at LAX, any loss of these remaining natural habitats will be considered significant by USFWS, CDFG, and local wildlife protection groups. It would seem an opportune time to develop a long-term management plan for biological resources on airport lands. Once in place, this plan/strategy would set policies and procedures (officially approved by the resources regulators) for the next several years. As the Draft EIS/EIR currently reads, LAWA has identified several

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biological concerns that are being addressed separately and on a one-time basis. This would leave LAWA vulnerable to future challenges as unanticipated development/programs are proposed.

Response:

The FAA's involvement in the Master Plan provides the federal nexus which triggers Section 7 consultation requirements for the presence of embedded cysts of the endangered Riverside fairy shrimp in atypical and isolated wetlands on the LAX airfield. Therefore, as required under Section 7 of the Endangered Species Act, the FAA initiated consultation with the U.S. Fish and Wildlife Service (USFWS) in June 1999 for operations and maintenance issues regarding the 1.3 acres of atypical wetlands containing embedded cysts of the Riverside fairy shrimp. Formal Section 7 consultation for the Master Plan was initiated on September 5, 2000. The FAA prepared a Biological Assessment in conjunction with the Draft EIS/EIR to address issues pertaining to Riverside fairy shrimp and El Segundo blue butterfly. To account for ongoing consultation among LAWA, FAA and USFWS, and to address Alternative D (proposed since publication of the Draft EIS/EIR), an amendment to the Biological Assessment was prepared and is provided in Appendix S-H, Updated Biological Assessment Technical Report, of the Supplement to the Draft EIS/EIR. The USFWS has issued a Draft Biological Opinion pursuant to Section 7 of the Federal Endangered Species Act. Mitigation for impacts to Riverside fairy shrimp are in conformance with conservation measures described in the draft Biological Opinion. The Draft Biological Opinion issued by the USFWS is included as Appendix F-E of this Final EIS/EIR.

With regard to the latter part of the comment, there are no natural wetlands within the Airport Operations Area (AOA) or the Los Angeles/EL Segundo Dunes to be included in a Conservation Program. Of the 52 ephemerally wetted areas within the AOA evaluated for the presence of wetland soils, hydrology, and vegetation, none of these sites were characterized by hydric soils or wetland vegetation. Nine (equivalent to 1.3 acres) of the 52 ephemerally wetted areas, those containing cysts of the Riverside fairy shrimp, were determined to be atypical wetlands pursuant to Section 404 of the Clean Water Act. These ephemerally wetted areas are not natural wetlands, but rather the result of construction activities, such as borrow and fill, in support of airport operations and expansion since 1950. The LAX Master Plan includes proposed improvements to the LAX airfield, which were determined to result in potentially significant impacts to the Riverside fairy shrimp. LAWA has proposed to mitigate these impacts through the creation of vernal pool habitat and the relocation of soils containing embedded cysts from the LAX airfield. As a result, the FAA prepared an Endangered Species Conservation Package for the Riverside fairy shrimp (and El Segundo blue butterfly) in support of the LAX Master Plan, submitted to the USFWS in March 2001. A Final Endangered Species Conservation Package will be prepared by the FAA for submission to the USFWS upon identifying and securing a suitable conservation site. The Final Conservation Package will serve to document the conservation intent of FAA, as well as streamline the permitting process for LAWA.

SAL00013-144

Comment:

4.9.4 Reference to 2001 Comments from Land Protection Partners

During 2001, the Land Protection Partners (LPP) submitted a comment letter to LAWA entitled "Review of Biological Resources Analysis in LAX Master Plan Draft Environmental Impact Statement/Environmental Impact Report" as a review of the 2001 LAX Master Plan Draft EIS/EIR (please see the original comment letter in Attachment I). Based on a preliminary assessment of points made in the LPP letter, the County of Los Angeles has concluded that their comments raise some significant issues regarding incomplete or vague project descriptions of the build alternatives, outdated CEQA analyses, questionable survey methods, questionable El Segundo Blue Butterfly population counts, underestimating impacts, and inadequate mitigation. Many of Land Protection Partners' comments echo concerns raised in this comment letter, but with a particular focus on how the concerns impact the assessment of potential biological impacts. The County endorses the points raised by LPP, which are briefly summarized below, and looks forward to reviewing LAWA's responses:

Response:

Comment noted. Please see Responses to Comments SAL00013-145 through SAL00013-150 below.

SAL00013-145

Comment:

Vague and Confusing Descriptions of the Build Alternatives: LPP noted that the Draft EIR/EIS does not give a complete project description of the build alternatives. Within the extent of the LAX Master Plan boundaries, it is unclear how LAWA proposes to use certain areas of biologically significant property. Designations such as "Airport Related" are useless in evaluating the potential biological impacts associated with that designation.

Response:

Detailed project descriptions of the build alternatives were provided in Chapter 3, Alternatives, of the Draft EIS/EIR and Supplement to the Draft EIS/EIR.

With regard to the latter part of the comment, the term "airport-related" applies to the LAX Northside Project. Impacts, and mitigation for impacts, to biological resources resulting from the LAX Northside Project were included in Section 4.10, Biotic Communities, of the Draft EIS/EIR and Supplement to the Draft EIS/EIR. Additionally, please see Response to Comment AL00033-166 regarding the "airport-related" designation and potential impacts to biological resources.

SAL00013-146

Comment:

Outdated CEQA Analysis: The Draft EIR/EIS describes the LAX Northside Project as "Collateral Development" that previously was entitled through a 1983 CEQA process. No new or updated analysis is found in the Draft EIR/EIS, even though development of this project appears to be contingent on the project alternative selected for LAX. In this light, reliance on 1983 CEQA documentation that did not consider LAX as a contingent project is problematic at best.

Response:

The LAX Northside Project is considered Collateral Development for the No Action/No Project Alternative and Alternative D, but not for Alternatives A, B, and C because the development contemplated for Alternatives A, B, and C would preclude development of the LAX Northside Project. Impacts, and mitigation for impacts, to biological resources resulting from the LAX Northside Project were included in Section 4.10, Biotic Communities, of the Draft EIS/EIR and the Supplement to the Draft EIS/EIR. Impacts to other areas from the LAX Northside Project, if developed, are considered as cumulative impacts.

SAL00013-147

Comment:

Questionable Survey Methods: Land Protection Partners' document raised questions concerning survey results, particularly with respect to the incorrect choice of survey methods. LPP noted that LAWA did not conduct general biological surveys in all habitats within the proposed project site. LPP also references impacts to 100 acres of the El Segundo Dunes habitat that was not surveyed by LAWA, even though it would be converted to a golf course under the Westchester Southside Project described in the 2001 Draft EIR/EIS.

Response:

LAWA conducted general and directed biological surveys in all habitats within the Master Plan Study area, including the 104.3 acres of non-structured dunes adjacent to and north of the Habitat Restoration Area. General, or qualitative surveys, were undertaken to document all species present within the survey area. Directed, or focused surveys, were undertaken for a particular species, namely all federal and/or state listed or other sensitive plant and wildlife species with the potential to occur within the Master Plan Study area. Surveys were performed by qualified biologists throughout 1995-1999, during seasons appropriate for each biological resource. Surveys were conducted utilizing standard survey methodologies. In addition, survey protocols for Pacific pocket mouse were

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determined through coordination in the field with the U.S. Fish and Wildlife Service. The results of biological surveys, including specific protocols, survey dates, and personnel, are documented in Technical Report 7, Biological Resources Memoranda for the Record on Floral and Fauna Resources, of the Draft EIS/EIR. In addition, the results are graphically depicted in Section 4.10, Biotic Communities, and Section 4.11, Endangered and Threatened Species, of the Draft EIS/EIR, including a biotic communities baseline map and locations of sensitive plant and wildlife species within this 104.3-acre area.

With regard to the latter part of the comment, the LAX Master Plan does not include any development of the 104.3 acres in the Los Angeles/El Segundo Dunes, with the exception of changes to FAA-required navigational aids and associated service roads currently located within the area. No golf course, hotel resort, or any other type of development is proposed in the 104.3 acres as part of the Westchester Southside Project. All references to a golf course and/or hotel resort in the Dunes originally included in Appendix J1 of the Draft EIS/EIR have been revised. Please see Appendix F-C, Errata to the Draft EIS/EIR and the Supplement to the Draft EIS/EIR, of this Final EIS/EIR.

SAL00013-148

Comment:

Questionable El Segundo Blue Butterfly Population Counts: Land Protection Partners suggests that the surveys conducted by LAWA did not use the best available scientific methods for calculating population numbers of the Federally-endangered El Segundo Blue Butterfly (ESBB). In overestimating the ESBB population, the Draft EIR/EIS gives the false impression that the ESBB is able to sustain viable populations on limited habitat, and confuses the analysis by downplaying the need for land to be kept as conservation areas.

Response:

The FAA and LAWA disagree with the commentor. Protocols used to determine El Segundo blue butterfly counts were acceptable to the U.S. Fish and Wildlife Service. Please see Topical Response TR-ET-1 regarding potential impacts to the El Segundo blue butterfly.

SAL00013-149

Comment:

Underestimates Impacts of the Proposed Project Alternatives: The methods used to determine impacts to habitat were misleading and not used accurately. LPP concluded that the combined effect of not surveying all potential habitat, using questionable survey methods, and overestimating ESBB populations resulted in a misleading impact assessment.

Response:

Please see Topical Response TR-BC-1 regarding the Habitat Evaluation Procedure (HEP) analysis and use of modified HEP methodology.

Please see Response to Comment SAL00013-147 regarding survey areas and survey methods.

Please see Topical Response TR-ET-1 regarding potential impacts to the El Segundo blue butterfly.

SAL00013-150

Comment:

Inadequate Mitigation Measures: LPP found that use of a point system to rate 'habitat units' resulted in inadequate mitigation for lost habitat. For example, the Draft EIR justifies preserving smaller areas of prime habitat in exchange for the conversion of larger areas of occupied but marginally disturbed habitat. LPP noted that species need both the space and the quality of habitat, concluding that 10 acres of prime habitat may not be adequate to sustain a population that had previously lived on 50 acres of marginally disturbed habitat.

Response:

Please see Topical Response TR-BC-1 regarding the Habitat Evaluation Procedure (HEP) analysis and use of modified HEP methodology.

With regard to the latter part of the comment, the biological requirements of sensitive species, namely the San Diego black-tailed jack rabbit and loggerhead shrike (designated state species of special concern), found within the air operations area (AOA) were researched. It was determined that the 307-acre Los Angeles/El Segundo Dunes would provide adequate space and resources to support these species. For further information, please see Response to Comment AS00005-17 regarding mitigation for impacts to the San Diego black-tailed jackrabbit and Response to Comment AS00005-18 regarding mitigation for impacts to loggerhead shrike.

SAL00013-151

Comment:

4.9.5 General Comments

The 2001 Draft EIS/EIR and 2003 Supplemental Draft EIS/EIR do not give complete project descriptions of the build alternatives. Within the extent of the LAX Master Plan boundaries, it is unclear what the disposition of certain areas of biologically significant property will be indicating designations such as "Airport Related" which are useless in evaluating the potential biological impacts associated with that designation.

Response:

Detailed project descriptions of the build alternatives are provided in Chapter 3, Alternatives, of the Draft EIS/EIR and Supplement to the Draft EIS/EIR.

With regard to the latter part of the comment, the term "airport-related" applies to the LAX Northside Project. Please see Response to Comment AL00033-166 regarding the "airport-related" designation and potential impacts to biological resources.

SAL00013-152

Comment:

LAWA did not conduct general biological surveys in all habitats within the proposed project site. As an example, the 2001 Draft EIS/EIR and 2003 Supplemental Draft EIS/EIR describe impacts to 100 acres of the El Segundo Dunes habitat that was not surveyed and would be converted to a golf course under the Westchester Southside Project.

Response:

Please see Response to Comment SAL00013-147 regarding biological surveys and a proposed golf course under the Westchester Southside Project.

SAL00013-153

Comment:

Unfortunately, given the amount of time and effort devoted to assessing baseline biological conditions, the remaining step of integrating and folding this information into a long-term Conservation Program is missing. This may be a conscious choice by LAWA management and the City of Los Angeles; however, this approach may deprive LAWA of the opportunity to gain long-term control of its own biological resources.

Response:

Comment noted. Please see Response to Comment SAL00013-139 regarding a conservation element for the LAX Master Plan.

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SAL00013-154

Comment:

4.10 ADDITIONAL ISSUES

4.10.1 Historical Resources

Illustration of the different impacts associated with the Single v. Split Viaduct LAX Expressway Alternatives should be carried forward from the Appendices to the Historic/Architectural section of the Supplemental Draft EIS/EIR.

Response:

Comment noted. Please see Response to Comment SAL00013-128 regarding the fact that it was not necessary to carry forth information on the LAX Expressway into the Supplement to the Draft EIS/EIR.

SAL00013-155

Comment:

The commitment to have a qualified architectural historian supervise noise abatement of historic properties does not assure that the historic values and character of such properties will not be altered or lost. The SDEIS/EIR should discuss this possibility and attach alternate mitigation measures or a revised significance finding, if appropriate.

Response:

The referenced Master Plan Commitment, HR-1, Preservation of Historic Resources (Alternatives A, B, C, and D) does ensure that the historic values and character of historic properties will not be altered or lost due to soundproofing activities. The commitment states that the methods employed where sound insulation is proposed for identified significant historic/architectural resources will conform with the Secretary of the Interior's Standards for Rehabilitation. As indicated in the State CEQA Guidelines, Section 15064.5(b)(3), a project that follows the Secretary of the Interior's Standards for Rehabilitation shall be considered as mitigated to a level of less than a significant impact on the historical resource. Furthermore, soundproofing involves relatively minor alterations to buildings with the replacement of windows and doors and the provision of insulating materials. These types of modifications can be feasibly achieved in compliance with the Secretary of the Interior's Standards. And finally, implementation of Master Plan Commitments will be monitored through a Mitigation Monitoring and Reporting Program.

SAL00013-156

Comment:

The 2003 Supplemental Draft EIS/EIR concludes for all the build alternatives that:

"The demolition of a historic/architectural resource is considered a significant impact at the state level that cannot be mitigated to a less than significant level without abandoning the project. A Statement of Overriding Considerations would be necessary to address unavoidable impacts on the International Airport Industrial District." 50

This is insufficient information to support an override. Revisions to the SDEIS/EIR need to explain why demolition of this historic/architectural resource is required to implement the project and what benefits will result from the project that override this significant impact.

50 2003 Supplemental Draft EIS/EIR, Section 4.9.1, page 4-443

Response:

Additional information regarding demolition of portions of the International Airport Industrial District and why it is required to implement the project is provided on page 4-436, in Section 4.9.1,

Historic/Architectural and Archaeological Resources, of the Supplement to the Draft EIS/EIR. Regarding the benefits resulting from the project that may be cited to override this impact, such benefits are not the focus of the Supplement to the Draft EIS/EIR. They will be articulated in a Statement of Overriding Considerations that will be developed for consideration during the approval process. Regarding the general benefits of the project, see Chapter 2, Purpose and Need for the Proposed Action, of the Supplement to the Draft EIS/EIR.

SAL00013-157

Comment:

4.10.2 Human Health

The analyses indicated that aircraft emissions account for about 97% of total emissions and also contribute most to emissions of individual Toxic Air Pollutants,⁵¹ yet none of the mitigation measures address aircraft emissions. Many of the mitigation measures would be expected to occur regardless of what happens with the proposed Master Plan - for example, parking pricing policies to encourage single trips or to minimize idle time at the curb, steps to encourage employee telecommuting, and expanded off-airport intermodal services to other airports. Others would have no air quality benefit - for example, where unmitigated impacts result in payments to a trust fund for unrelated community improvements.

In this context, it is difficult to understand how the HHRA determined that the build Alternatives, with mitigation, would have no significant human health impacts at either horizon year. A clarification of the assumptions that were made in order to reach this conclusion is necessary to validate this conclusion.

51 Technical Report 14a, Section 3.3.

Response:

Please see Topical Response TR-HRA-4 regarding human health mitigation strategies.

The comment refers to analyses presented in Technical Report 14a of the Draft EIS/EIR. The referenced analyses is a part of a phased approach that was used to select toxic air pollutants of concern for inclusion in the Human Health Risk Assessment. Inclusion of a chemical as a toxic air pollutant of concern did not indicate that the chemical would have health impacts; inclusion only suggested that additional analysis was warranted. Emission estimates for the analyses were generated in two phases. In Phase I, emissions were estimated for the No Action/No Project Alternative for year 2015 using previously collected data. The text referenced in the comment regarding aircraft contributions to emissions was presented with regards to Phase I analyses. The Phase I analyses were used to focus Phase II analyses on operations or sources most likely to contribute to overall emissions. In the second phase, emission estimates were refined based on inspections at LAX and interviews with LAX tenants.

Aircraft emissions account for the majority of overall emissions for several toxic air pollutants, such as acrolein. Aircraft produce almost all of the acrolein associated with the airport; therefore, acute impacts presented in the Supplement to the Draft EIS/EIR were the same under pre-mitigation and post-mitigation conditions since they are based on acrolein emissions associated with airport operations. However, this does not hold true for all toxic air pollutants. For example, aircraft and non-aircraft emissions of benzene (a carcinogen) are almost equal in the Phase I analysis, and, in the Phase II analysis, non-aircraft emissions of benzene are almost twice as high as aircraft emissions of benzene. Mitigation measures would reduce emissions of toxic air pollutants such as benzene by reducing exhaust emissions from mobile sources.

Mitigation measures currently proposed differ from those under consideration during the preparation of the Draft EIS/EIR. Recommended mitigation measures were identified in Section 4.6, Air Quality, of the Supplement to the Draft EIS/EIR to reduce impacts from airport operations and construction as well as from regional vehicular traffic under Alternatives A, B, C, and D. Mitigation measures considered in the analysis include: continued conversion of GSE to alternative fuel, multiple construction-related measures including use of alternative fuels and add-on emission control devices on construction equipment, and expansion of flyaway bus service between LAX and other locations in the South Coast Air Basin using alternative-fueled buses. These mitigation measures, in combination with other proposed mitigation measures, would reduce emissions of TAPs during LAX operations and

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construction primarily by reducing exhaust emissions from mobile sources and reducing traffic congestion near the airport, thereby reducing VOC and PM emissions.

Mitigation measure AQ-1 incorporates mitigation measures to address aircraft emissions such as development of methods and/or incentives to encourage and promote reduced-engine taxiing by aircraft moving between runways and terminal gates. Design features incorporated into the alternatives also reduce air quality impacts. For example, runway and taxiway additions and/or modifications variously incorporated into the designs for each of the build alternatives will reduce airfield delay and congestion, thereby improving efficiency of aircraft movement on the airfield and decreasing aircraft taxiing and idling times and emissions. Installation of pre-conditioned air and electrical power hookups at terminal gates would allow airlines to minimize the use of auxiliary power units (on-board turbines).

As discussed in Section 4.6, Air Quality, in the Supplement to the Draft EIS/EIR, mitigation measures are expected to reduce operational emissions of volatile organic compounds such as benzene for on-airport sources by 8 percent in the Interim Year and by 54 percent in the Horizon Year. These post-mitigation reductions in toxic air pollutant concentrations result in decreases in human health risks as discussed in Section 4.24.1, Human Health Risk Assessment (subsection 4.24.1.9) of the Supplement to the Draft EIS/EIR.

SAL00013-158

Comment:

The California Office of Environmental Health Hazards Assessment (OEHHA) evaluates non-cancer risks and has established maximum reference exposure levels (REL) for each TAP. No adverse health effects are foreseen for exposures at or below the REL. The exposure of TAP at concentrations equal to the REL represents a non-cancer hazard index level of 1.0. Exposure above a hazard index of 1.0 is considered a significant impact by OEHHA. The relationship for non-cancer health effects of Toxic Air Pollutants is shown in the following equation:

$HI = C / REL$, where:

HI = Hazard Index; an expression of the potential for non-cancer health effects

C = Annual average TAP concentration ($\mu\text{g}/\text{m}^3$)

REL = Reference exposure level (REL) for TAP; the TAP concentration at which no adverse health effects are anticipated

The Supplemental HHRA Technical Report provided as Appendix 9a in the 2003 Supplemental Draft EIS/EIR states that the REL for acrolein used in the HHRA is $0.19 \mu\text{g}/\text{m}^3$ 52 This same document further states that under Alternative "D", total acrolein concentrations might range between $14 \mu\text{g}/\text{m}^3$ and $87 \mu\text{g}/\text{m}^3$ with an overall average of $23 \mu\text{g}/\text{m}^3$. 53 Using the OEHHA equation for determining the hazard index as shown above, the resulting hazard index would range between 73.68 and 457.90, well above the OEHHA threshold of significance set at a hazard index of 1.0. Evaluation of all scenarios indicates that the hazard index for acrolein are all above the OEHHA threshold, even in the existing condition and while the Supplemental HHRA indicates that Alternative D has the lowest exposure levels of all these scenarios it is nevertheless above the threshold of significance set by OEHHA. How is it that both the 2003 Supplemental Draft EIS/EIR determined that this impact is less than significant? Revisions to the SDEIS/EIR need to be made that disclose this significant impact and either mitigate to less than significant or provide the evidence that supports a Statement of Overriding Consideration for this significant impact.

52 Technical Report 9a, Section 5.1

53 Technical Report 9a, Section 6.1.2

Response:

The commentor quotes the text as "total acrolein concentrations might range between $14 \mu\text{g}/\text{m}^3$ and $87 \mu\text{g}/\text{m}^3$ with an overall average of $23 \mu\text{g}/\text{m}^3$." In actuality, the text in Technical Report S-9a of the Supplement to the Draft EIS/EIR (subsection 6.1.2) indicates that "acute hazard indices associated with total acrolein concentrations might range from 14 to 87, with an average of 23, for locations within the study area." The text discusses total baseline acute hazard indices rather than concentrations. Incremental acute hazard indices for each build alternative and the No Action/No Project Alternative

were determined by calculating incremental acrolein concentrations for each of the alternatives. This was accomplished by subtracting baseline concentrations from acrolein concentrations for each alternative. The resulting concentrations represent the increment above current impacts that might be associated with each of the alternatives. As indicated in Section 4.24.1, Human Health Risk Assessment, and Technical Report S-9a of the Supplement to the Draft EIS/EIR, predicted maximum incremental acute hazards for Alternative D are negative for all on-airport and off-site locations compared to the 1996 baseline and Year 2000 conditions. Negative impacts indicate that predicted concentrations associated with implementation of Alternative D would be less than those predicted for 1996 baseline operations and Year 2000 conditions.

SAL00013-159

Comment:

4.10.3 Environmental Action Plan

Many of the key Master Plan Commitments and mitigation measures in the Environmental Action Plan (EAP) are broad and programmatic in nature. Many will require further study, with choices among specific options deferred to the Final EIS/EIR and other stages of the decision making process. The EAP needs to be expanded to identify when and where such subsequent environmental reviews will be required, with discussion as to how these timeframes relate to the improvement phasing plan set forth by LAWA, and to the sequence for FAA and LAWA consideration of required discretionary actions. The EAP, including all Master Plan Commitments and mitigation measures, should be refined and detailed to adequately serve as the CEQA Mitigation Monitoring Program, pursuant to Public Resources Code 21081.6.

Response:

Please see Response to Comment AR00003-63.

SAL00013-160

Comment:

4.10.4 Video-Conferencing

In the § 1.3 discussion of Alternatives to air travel, the 2001 Draft EIS/EIR notes a study by Apogee Research that contains key findings that video-conferencing has potential to satisfy (1) from 5-30% of non-discretionary travel; and (2) less than 5% of discretionary travel. The discussion in § 1.3 concludes with: "Given that 50% of LAX users are leisure travelers, it is projected that less than 5% of air travel demand at LAX could be satisfied by communication technologies in 2015. These amounts were factored into the assumptions of the LAX Master Plan forecasts." The Supplement to the Draft EIS/EIR did not resolve this error. The total amount of air travel demand at LAX that could be satisfied by communication technologies should equal the combined amounts for discretionary travel PLUS non-discretionary travel (i.e., [5-30% of demand x 50% of travel = 2.5% to 15%] + [<5% of demand x 50% of travel = <2.5%] = -2.5% - 17.5%). It seems that a higher number should be factored into the assumptions of the LAX Master Plan forecasts.

Response:

The content of this comment is identical to comment AL00022-185; please refer to Response to Comment AL00022-185.

SAL00013-161

Comment:

4.10.5 Sixty-Minute Access Zone

The Zone Boundaries shown in Figure 1-3 of the 2001 Draft EIS/EIR showing the 60-minute travel time accessibility zones for airports in southern California appear to overstate driving times for at least some

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of the airports shown. The assumptions used in developing this map need to be discussed and clarified in order to support the map, as drawn.

Response:

The accessibility figures were derived from each of the SCAG/RADAM zones to each airport in the basin. Because the RADAM zones are a geographic area the travel times are an average for the entire zone. The information is reported for AM Peak and PM Peak. The 1994 AM Peak was used for this analysis because accessibility is a passenger choice parameter that is driven by the passenger's departure flight and because the AM travel times favor outlying airports. See Figure I-3.4 in the Draft EIS/EIR for more information.

SAL00013-162

Comment:

4.10.6 Weather Conditions

The 2001 Draft EIS/EIR notes that only one of the four runways is sufficiently long to serve the largest aircraft when fully loaded under adverse weather conditions (hot days with little wind).⁵⁴ However, there is no discussion as to how many days of the year, on average, are characterized by these adverse weather conditions. There is also no discussion as to how many runways can accommodate the largest aircraft when fully loaded. Both of these issues require further explanation and investigation by LAWA.

⁵⁴ 2001 Draft EIS/EIR, Section 2.2.2, Page 2-6.

Response:

This comment is identical to comment AL00022-188. Please see Response to Comment AL00022-188.

SAL00013-163

Comment:

4.10.7 Remote Terminals

The 2001 Draft EIS/EIR includes discussions of the possibility of remote terminals. However, no analysis is undertaken to determine their location or impacts. Alternative "D" described in the 2003 Supplemental Draft EIS/EIR includes a Ground Transportation Center connected to the main terminal buildings by an Automatic People Mover that appears to fit the descriptions of remote terminals mentioned in the 2001 Draft EIS/EIR. However, it is unclear whether or not the Ground Transportation Center within Alternative "D" is the remote terminal mentioned in the 2001 Draft EIS/EIR. LAWA should clarify this in revisions to the Supplemental Draft EIS/EIR, and if there are other possibilities for remote terminals, then include a full characterization of these other remote terminals as well as a description of the baseline setting for the proposed locations, the impacts of their construction and use, and mitigation measures to address any adverse effects.

Response:

The concept of remote terminals is very similar to Alternative D, as presented in the Supplement to the Draft EIS/EIR. The environmental impacts and mitigation measures associated with the proposed Ground Transportation Center (GTC) are discussed in Chapter 4, Affected Environment, Consequences, and Mitigation Measures, of the Supplement to the Draft EIS/EIR. Alternative D is the only Master Plan alternative that includes remote landside facilities.

SAL00013-164

Comment:

4.10.8 Hydrology and Water Quality

Section 4.7 of the SDEIS/EIR inadequately addresses SUSMP and drainage issues. The environmental document does not provide sufficient information to determine what drainage impacts, if any, the project

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may have on County facilities (MTD 992, storm drain Project Number 5241, 647, 670, etc.). To properly assess drainage and SUSMP impacts and to determine appropriate mitigation, a Drainage Concept/SUSMP report will be required. We recommend that the applicant prepare a Drainage Concept/SUSMP report showing the extent of drainage and SUSMP quality impacts, and if necessary, provide mitigation acceptable to the County. The analysis should address increases in runoff, any change in drainage patterns, treatment method proposed for SUSMP regulations, and the capacity of storm drain facilities.

We also recommend that the Drainage Concept/SUSMP report should be reviewed and approved by the County of Los Angeles Land Development Division - Subdivision Plan-checking Section before the City considers its own approval. Once approved, a copy of the final Drainage Concept/SUSMP report should be included in the environmental document.

Response:

Please see Topical Response TR-HWQ-2 regarding Master Plan Commitment HWQ-1. During detailed master planning and design for the drainage system for the selected alternative, LAWA will prepare and submit a SUSMP to the City of Los Angeles Department of Public Works Bureau of Sanitation Watershed Protection Division and drainage plans and designs to the City of Los Angeles Bureau of Engineering West Los Angeles District office. LAWA will coordinate through the City Bureau of Engineering with the Los Angeles County Department of Public Works with regard to potential impacts on County drainage facilities. As explained in the Topical Response TR-HWQ-2, however, the final detailed SUSMP plan will be conducted following selection of an alternative to carry forward as determined through the EIS/EIR process.

SAL00013-165

Comment:

4.10.9 Solid Waste Generation and Landfill Capacity

Chapter 4 of the Master Plan Supplement to the Draft EIS/EIR, identifies the amount of solid waste generation as a result of construction and demolition activities of alternatives No Action/No Project, A, B, C, and D. The tonnage of waste generated from construction and demolition activities alone for Alternative D - the LAWA staff-preferred alternative - is well over 130,000 tons. Although LAWA states that it will require that contractors recycle a "specified" minimum percentage of waste materials generated during construction and demolition, a significant commitment is necessary to insure adequate mitigation of the scale of impact resulting from waste generated by this project. Therefore, the minimum percentage should be specified within the EIR, with a target of at least 50 percent of the waste diverted from disposal. Similarly, the percentage of minimum recycled content for materials used on site, and the specific diversion goals that will be required of lessors, should also be specified in the EIR.

Response:

Please see Responses to Comments AL00033-199 and AL00033-200 regarding Master Plan commitments that address construction and demolition waste.

Regarding the comment that the specific diversion goals that will be required of lessors be specified in the EIS/EIR, LAWA's solid waste program addresses solid waste reduction and diversion at the airport as a whole. Requiring lessors to meet specified diversion goals will be only one component of the overall solid waste program. Therefore, it is not necessary to specify the diversion goal that will be required of lessors at this time. The goal of the enhanced recycling program is to ensure that the Master Plan does not conflict with the solid waste policies and objectives intended to help achieve the requirements of AB 939.

SAL00013-166

Comment:

Under heading of Master Plan Commitments (§4.19.5, p. 4-534), the SDEIS/EIR proposes implementation of a more aggressive recycling program, by expansion of the existing terminal recycling program to all terminals; lease provisions requiring that tenants meet specific diversion goals; and

3. Comments and Responses

preference for recycled materials during procurement. The document should expand the discussion to include the type of material that might be targeted and the overall recycling goal.

Response:

Master Plan Commitment SW-1 is not a mitigation measure for a potentially significant, project-related environmental impact, because solid waste generation within the Master Plan boundaries would decrease under all of the Master Plan alternatives compared to baseline conditions. Instead, this commitment is a good practice to further enhance the current on-site waste reduction and recycling program, and to ensure continued commitment to the requirements of AB 939 with implementation of the Master Plan. At the Master Plan level, it is not possible to provide a greater level of specificity regarding the type of material that might be targeted. However, future environmental reviews conducted for individual Master Plan components would afford the opportunity, where appropriate, to provide greater level of detail regarding provisions included in Master Plan Commitment SW-1, including consideration of performance standards that are consistent with the solid waste policies and objectives of AB 939. As noted in the Master Plan commitment, the enhanced recycling program will be based on successful programs at other airports and facilities. The components of the enhanced recycling program -- including implementing recycling programs in terminals, developing a recycling program at LAX Northside/Westchester Southside, requiring tenants to meet specified diversion goals, and including a preference for recycled materials during procurement -- have been proven in other locations and developments. The goal of the enhanced recycling program is to ensure that the Master Plan does not conflict with the solid waste policies and objectives intended to help achieve the requirements of AB 939.

SAL00013-167

Comment:

The environmental document recognized that due to the uncertainty regarding future landfill capacity, impacts associated with cumulative increases in solid waste generation would be potentially significant (Sections 4.19.7 and 4.19.8, pages 4-537 and 4-538). Augmentation of landfill capacity is listed as a mitigation measure, however, the responsibility for implementing this mitigation measure is left to State, County, and local solid waste planning authorities. This discussion should be revised to indicate what measures the City of Los Angeles will implement to provide for the disposal of residual solid waste generated by this project and future projects within the City of Los Angeles considering the City's stated interest to close all landfills within the City's boundaries by 2006.

Response:

At this time, the City has not adopted any ordinances that would prohibit landfill disposal within the city by 2006. However, Mayor Hahn has established goals of a landfill-free city by 2006 and 70 percent waste diversion by 2020. In June, 2002, the Mayor appointed a Landfill Oversight Committee to evaluate and recommend methods to achieve these goals. A final report by the committee, issued in November, 2003, recommended a number of measures, including waste-to-energy facilities and large-scale composting, for diverting greater amounts of waste from landfills. Other measures include a pilot program to pick up recyclables from large apartment complexes throughout the city, consideration of an ordinance that would strengthen the city's Buy Recycled Products Program, and evaluation of alternative technologies for handling waste. The City is also looking into alternative waste sites.

Under the Master Plan alternatives, LAWA would continue to implement existing programs aimed at reducing waste generation, including the LAX on-site recycling program and participation in the city's diversion program. As indicated in Section 4.19, Solid Waste (subsection 4.19.3), of the Supplement to the Draft EIS/EIR, these programs allowed LAWA to reach a 67 percent diversion rate in 2000, exceeding the 50 percent reduction required by AB 939. In order to further reduce the amount of solid waste generated by the Master Plan, LAWA would implement an enhanced recycling program, which would extend recycling requirements to tenants and address the procurement of recycled materials. LAWA would also require contractors to use recycled construction materials and recycle construction and demolition waste. These programs would help achieve, and exceed, the requirements of AB 939.

SAL00013-168**Comment:****5.0 CONCLUSIONS**

There is no doubt that Los Angeles International Airport is vitally important to the City of Los Angeles, to the County of Los Angeles, to the region, and to California generally. There is an obvious and pressing need for improvements at LAX, most particularly to ensure the safety and security of future air travel. However, the County of Los Angeles believes that LAWA is proposing to implement a flawed project and that the process is further compromised by an inadequate environmental review. As documented throughout this report our concerns include (a) an inadequate security planning effort, (b) misleading statements regarding growth potential, resulting in fundamentally flawed environmental analyses, (c) improper choice of a Supplement to propose and assess an entirely new preferred project, (d) use of an unwieldy and confusing document format, (e) continued reliance on a baseline that is outdated and serves to undermine rather than illuminate understanding of project impacts, (f) wholly inadequate consideration and disclosure of Environmental Justice issues coupled with a scoping process that considered neither 2001 nor the 2003 preferred project options, (g) language suggestive of bias and advocacy and an absence of full disclosure, (h) incomplete analysis of noise and air quality and the absence of studies to establish baseline or impact-level toxic air emissions, (i) inadequate and misleading assessment of impacts on biological habitat, and (j) the failure to provide an alternative that meets stated goals and also avoids or minimizes significant impacts in the identification and assessment of Alternatives.

The problems with the 2001 and 2003 environmental documents are so serious, pervasive, and universal that the only practical remedy is to start the process over again and prepare a truly comprehensive revised EIS/EIR. The revised document would need to provide comprehensive scoping, an updated and consistent baseline, identify and assess a reasonable range of feasible alternatives, be free of internal inconsistencies, offer proper levels of analysis and explanation, and present an entirely new impact assessment that does not defer critical decisions. Only with these extensive modifications can the LAX Master Plan and associated EIS/EIR be rendered adequate.

Response:

Comment noted. Please see Responses to Comments above.

SAL00013-169

The attachment included as part of this comment letter is identical to Attachment E of comment letter AL00033; please refer to Responses to Comments AL00033-374 through AL00033-415.

SAL00014**Janssen, David****County of Los Angeles****11/3/2003****SAL00014-1****Comment:**

COUNTY OF LOS ANGELES BOARD OF SUPERVISORS FINAL COMMENTS ON LAX MASTER PLAN DRAFT SUPPLEMENTAL EIS/EIR

On behalf of the Los Angeles County Board of Supervisors, I am submitting final comments on the Supplement to the Draft Environmental Impact Statement/Environmental Impact Report (Supplemental Draft EIS/EIR) for the Los Angeles International Airport Master Plan. The Board of Supervisors approved these comments for submission at their meeting of October 28, 2003.

The Board of Supervisors looks forward to receiving a written response to the comments.

3. Comments and Responses

Response:

This comment letter includes final comments on the LAX Master Plan Supplement to the Draft EIS/EIR prepared by A. C. Lazzaretto & Associates dated October 15, 2003 that are essentially the same as the final comments on the LAX Master Plan Supplement to the Draft EIS/EIR prepared by A. C. Lazzaretto & Associates dated October 2003 contained in comment letter SAL00013; please refer to the responses to comment letter SAL00013. This comment letter also includes an attachment identical to Attachment E of comment letter AL00033; please refer to Responses to Comments AL00033-374 through AL00033-415. Please see below for responses to comments not previously received as part of another comment letter.

SAL00014-2

Comment:

Review of Biological Resources Analysis in Supplement to Draft Environmental Impact Statement/Environmental Impact Report for LAX Master Plan

This review pertains to the Federal Aviation Administration/Los Angeles World Airports Supplement to Draft Environmental Impact Statement/Environmental Impact Report ("SDEIS/EIR") for the LAX Master Plan. The scope of this review is limited to biological resources, and consequently addresses Sections 4.10 (Biotic Communities), 4.11 (Endangered and Threatened Species of Flora and Fauna), 4.12 (Wetlands), 4.14 (Coastal Zone Management and Coastal Barriers), and 4.18 (Light Emissions). The review was prepared by Dr. Travis Longcore and Catherine Rich, who are experts in the ecology and history of the natural communities that would be affected by the proposed airport expansion and in the assessment of environmental impacts under the California Environmental Quality Act, National Environmental Policy Act, and California Coastal Act. Dr. Longcore has co-authored several peer-reviewed scientific articles on the El Segundo dunes and the Los Angeles coastal prairie (including its vernal pools),¹ which both would be adversely affected by the proposed project.

The SDEIS/EIR complements, but does not replace, the original Draft Environmental Impact Statement/Environmental Impact Report ("DEIS/EIR") for the LAX Master Plan. The SDEIS/EIR does nothing to improve the fatally flawed assessment methodology for direct impacts to sensitive biological resources that was presented in the DEIS/EIR. Rather, the SDEIS/EIR provides only a trivial and meaningless change in the name of the methodology from "modified Habitat Evaluation Procedure" to "Mitigation Land Evaluation Procedure" ("MLEP"). The SDEIS/EIR attempts to improve the analysis of indirect impacts on biological resources, including the effects of light, noise, and air pollution, but the analysis is illogical and unsupported by the literature. Finally, the SDEIS/EIR presents impact analysis for the newly-formulated Alternative D.

With the exception of the analysis of Alternative D, which triggered the preparation of a Supplement, the new biological resources analysis appears to consist primarily of responses to comments on the DEIS/EIR, including those of the resources agencies and perhaps our own.² In our 2001 review, we noted the failure of the DEIS/EIR to provide an adequate assessment of the effects of light and noise on biological resources, illustrated the gross inadequacy of the "modified Habitat Evaluation Procedure," and identified contradictions in the project description. Because many of the problems that we identified in our 2001 review have not been addressed in the SDEIS/EIR, we incorporate our earlier comments by reference (see attached without appendices). This review evaluates the updated analysis of biological impacts and associated mitigation measures presented in the SDEIS/EIR.

1. Mattoni, R. T. Longcore, C. Zonneveld, and V. Novotny. 2001. Analysis of transect counts to monitor population size in endangered insects: the case of the El Segundo blue butterfly, *Euphilotes bernardino* allyni. *Journal of Insect Conservation* 5(3):197 - 206. Longcore, T., R. Mattoni, G. Pratt, and C. Rich. 2000. On the perils of ecological restoration: lessons from the El Segundo blue butterfly. Pp. 281 - 286 in J.E. Keeley, M. Baer-Keeley, and C.J. Fotheringham (eds.) *2nd Interface Between Ecology and Land Development in California*. U.S. Geological Survey, Sacramento, California. Mattoni, R., T. Longcore, and V. Novotny. 2000. Arthropod monitoring for fine scale habitat analysis: a case study of the El Segundo dunes. *Environmental Management* 25(4):445 - 452. Mattoni, R., and T.R. Longcore. 1997. The Los Angeles coastal prairie, a vanished community. *Crossosoma* 26(2):71 - 102.

2. Longcore, T., and C. Rich. 2001. Review of biological resources analysis in LAX Master Plan Draft Environmental Impact Statement/Environmental Impact Report. Land Protection Partners, Los Angeles. 27 pp. + appendices.

Response:

Please see Topical Response TR-BC-1 regarding the Habitat Evaluation Procedure (HEP) analysis and use of modified HEP methodology. Please see Responses to Comments below regarding the analysis of indirect impacts on biological resources.

The Supplement to the Draft EIS/EIR was prepared to evaluate the impacts pertaining to Alternative D. As with the Draft EIS/EIR, every attempt was made to address all possible impacts to biological resources using the best available scientific information.

SAL00014-3

Comment:

1.0 Project Description

The maps of land use for the airport properties are updated in the Supplement to depict the four Alternatives. These maps are somewhat clearer than those in the DEIS/EIR about the land use of the 100 acres of El Segundo dunes not included in the Habitat Restoration Area. While the DEIS/EIR included maps depicting this area as a golf course or resort hotels,³ the SDEIS/EIR identifies that area as "Airfield/Airport Open-Space."⁴ The description of Alternatives does not, however, provide conclusive details about the long-term disposition of this biologically important area.⁵ The long-term plans for this property are important to the analysis of mitigation measures because the SDEIS/EIR contemplates that some habitat mitigation activities will occur in this area, outside of the ~200-acre Habitat Restoration Area.⁶

We note that the depiction of the 100 acres of El Segundo dunes north of the Habitat Restoration Area as "Airfield/Airport Open Space" diverges from the previous positions articulated by the City of Los Angeles. In the staff report for issuance of a Coastal Development Permit for landscaping along Waterview Street at the northern end of this area, the City in 2001 wrote, "The Project, a narrow, landscaped area along the streets, would provide a buffer between the golf course and residential areas..."⁷ As we noted in our previous comments, the zoning for the parcels in the dunes was set at [Q]OS-1-XL in 1994, which disallows development in the dunes habitat preserve and restricts use of the remainder of the property to "a nature preserve and accessory uses only."⁸ In the Land Use section of the SDEIS/EIR, while the entire 300 acres of the El Segundo dunes are designated as "Open Space," the map refers to the "Los Angeles Airport/El Segundo Dunes Specific Plan" as the descriptor.⁹ This Specific Plan has been superseded by the 1994 zoning update, but this fact is not reflected in the various maps in the SDEIS/EIR. The restriction of the northern 100 acres of the dunes to "nature preserve and accessory uses" should be clarified in the Final EIS/EIR.

3. DEIS/EIR, Appendix J1. Biological Assessment Technical Report, Figures 8, 11, 14.

4. SDEIS/EIR, Figures S3-2, S3-4, S3-5, S3-6, S3-7, S3-8.

5. SDEIS/EIR, Section 3. Alternatives (Including Proposed Action).

6. SDEIS/EIR, MM-BC-4 through MM-BC-8, MM-BC-10 through MM-BC-13.

7. City of Los Angeles 2001. Coastal Development Permit Application No. 00-05 Final Staff Report, p. 3.

8. City of Los Angeles. Ordinance No. 169,767, effective June 12, 1994.

9. SDEIS/EIR, Figures 4.2-6, 4.2-9, 4.2-12, 4.2-15.

Response:

The LAX Master Plan does not include any development of the northern 104.3 acres of the Los Angeles/El Segundo Dunes, with the exception of changes to FAA-required navigational aids and associated service roads currently located within the area. No golf course, hotel resort, or any other type of development is proposed in the northern 104.3 acres. As described in the Draft EIS/EIR and Supplement to the Draft EIS/EIR, proposed mitigation for impacts to biotic communities may be undertaken within this area. Only accessory uses (e.g., maintenance of navigation aids) would be allowed in this area.

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Corrections to the references to a golf course and/or hotel resort in the Los Angeles/EI Segundo Dunes (originally identified in Appendix J1 of the Draft EIS/EIR), are provided in Appendix F-C, Errata to the Draft EIS/EIR and the Supplement to the Draft EIS/EIR, of this Final EIS/EIR.

SAL00014-4

Comment:

2.0 Direct Impacts

2.1 Mitigation Land Evaluation Procedure (formerly "modified Habitat Evaluation Procedure")

The modified Habitat Evaluation Procedure presented in the DEIS/EIR has been renamed the Mitigation Land Evaluation Procedure in the SDEIS/EIR.¹⁰ This methodology was rejected outright by the U.S. Fish and Wildlife Service ("USFWS") and the California Department of Fish and Game ("CDFG") in comments on the DEIS/EIR, but the SDEIS/EIR retains the methodology while simply changing the name, "to eliminate confusion associated with a similarity in the designation to an unrelated methodology developed by the USFWS."¹¹ This change in terminology does not correct the faulty assumptions of the underlying method, and does nothing to correct the deficiencies in this method that were identified by the USFWS, CDFG, and our previous review.

The SDEIS/EIR uses the Mitigation Land Evaluation Procedure to determine impacts to sensitive vegetation types and to quantify impacts to habitats of sensitive species.¹² The name change is a de facto confirmation that the "methodology" is not based on an accepted technique, the "Habitat Evaluation Procedures" ("HEP")¹³ developed by the U.S. Fish and Wildlife Service, but rather was invented for this analysis. While the HEP is an established method with a history of usage,¹⁴ the MLEP is not a recognized method for the evaluation of impacts to sensitive species or vegetation types, or the determination of mitigation ratios for such impacts. Because the SDEIS/EIR does not reprint the methodology it has renamed MLEP, further discussion of the MLEP must refer to the DEIS/EIR.

The MLEP sets habitat evaluation standards based on an "optimal" site with "a multitude of floral and faunal species."¹⁵ One would expect that each vegetation type would be compared against an optimal site of that same vegetation type, but this is not the case. Rather, the MLEP inexplicably compares all vegetation types against a valley needlegrass grassland/vernal pool complex. One might also expect that the habitat evaluation for each species would incorporate features relevant to that species' survival. This is not true either, because the habitat evaluation standards bear no relation to species requirements. For example, we compared the habitat evaluation standards in the MLEP to the habitat requirements of loggerhead shrike (*Lanius ludovicianus*) and black-tailed jackrabbit (*Lepus californicus bennettii*) (Table 1),¹⁶ and found no nexus. The MLEP assigns low values of 0.25 for vegetation types that are occupied by these species (non-native grassland/ruderal), even though this vegetation is quite good habitat for both species. Furthermore, because the MLEP compares all vegetation types against one vegetation type, the MLEP results in the false conclusion that habitat values lost by destruction of one vegetation type can be mitigated by enhancing a completely different vegetation type.

This critical failure bears repeating. The single set of standards used to evaluate all vegetation types does not reflect ecological value, either to sensitive species or as vegetation communities. This problem derives from the physical and biological criteria used to evaluate habitat and the so-called "ecosystem functional integrity" components of the analysis. Rather than developing criteria for each vegetation type, the MLEP evaluates all vegetation types against the characteristics found in a "reference site." The vegetation type chosen for this standard is that of valley needlegrass grassland/vernal pool complex.¹⁷ For some inexplicable reason, all vegetation types are measured against this standard, including southern foredune, southern dune scrub, and disturbed dune scrub/foredune. Dune vegetation does not exhibit many features found in a valley needlegrass grassland/vernal pool complex. Because dune vegetation does not have vernal pools and associated species, these vegetation dune types are assigned lower "habitat" values - 0.35 for both southern dune scrub and disturbed dune scrub/foredune, and 0.45 for southern foredune. This ranking merely illustrates that dune scrub is not good valley needlegrass grassland/vernal pool complex, but it says nothing about whether it is good dune scrub.

Table 1. Relevance of Mitigation Land Evaluation Procedure Standards to Two Sensitive Species

MLEP Standards	Relevance to value of area as	Relevance to value of area as
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	black-tailed jackrabbit habitat	loggerhead shrike habitat
TOPOGRAPHY		
Mound-depression microrelief	None. Species occurs in a variety of topographic conditions.	None
Native soils w/ slope <10%	None	None
Areas w/ period of inundation > 30 days	None. Can serve as vectors for seed dispersal between vernal pools, but not necessary for habitat.18	None
Summer desiccation	None	None
FLORA		
>10% vegetative cover	Some. Forage and cover must be present.	Some. Vegetation must support prey populations.
Native grasses >10%	None. Will forage on all manner of grasses, forbs, and shrubs.19	None
Vernal pool associated species	None	None
Listed vernal pool associated species	None	None
FAUNA		
Domination of native fauna (reproducing)	None	None
Grassland associated species (reproducing)	None	None
Sensitive vernal pool associated species	None	None
Listed vernal pool associated species	None	None
ECOSYSTEM FUNCTIONAL INTEGRITY		
Contiguity w/ wetland and State-designated sensitive terrestrial habitat	None	None
Designated sensitive terrestrial habitat Under regulatory conservation	None	None
Variety of pollinator/dispersal mechanisms present (wind, wildlife)	None. Is itself a dispersal agent.	None
Contiguous native habitat > 40 acres	Potentially important. Size of habitat, whether native or not, is important.	Potentially important. Size of habitat, whether native or not, is important.

The portion of habitat value deriving from "ecosystem functional integrity" is another wholesale creation of the DEIS/EIR, and by extension the SDEIS/EIR. The choice of standards is arbitrary, with little to do with the sensitive species and vegetation types under analysis. Whether a site is "under regulatory conservation" does not necessarily have anything do with the ecological value of its vegetation type for sensitive species. Similarly, "contiguity with state-designated habitat" is not an ecological criterion. "Variety of pollinator/dispersal mechanisms present" is oriented toward vernal pool vegetation, and the choice of "contiguous native habitat >40 acres" is arbitrary.

The MLEP fundamentally obscures the reality that sensitive plants and wildlife utilize vegetation that is not dominated by native species. Loggerhead shrikes forage in ruderal and non-native grasslands as well as in dune scrub. Jackrabbits are thriving in an area with little native plant component. Furthermore, the MLEP asserts that landscaped areas within the airport grounds contain "habitat units," even though these areas support neither sensitive vegetation communities nor sensitive species. The MLEP is therefore of no use in evaluating the impacts to native wildlife, or in devising mitigation schemes for those impacts. The MLEP is so flawed that it completely fails to establish the nexus for mitigation of impacts.

We are not saying that it would be impossible to develop a scheme to assess vegetation communities that assigns lower area equivalence to degraded vegetation. Indeed, the suggestion by CDFG that non-native grasslands be mitigated at a 0.5:1 ratio is implicit recognition of such an approach. A preliminary

3. Comments and Responses

effort to develop a "habitat hectares" scheme has been published in the scientific literature, but it is fundamentally different from the MLEP.²⁰ A valid "habitat area" approach should include the following features: 1) incremental values of habitat areas are assigned strictly on biological criteria, 2) these criteria are developed separately for each vegetation type, and 3) the results are not applied as proxies for the habitat requirements of individual wildlife species.²¹ The MLEP violates all three of these conditions. (Technically, this type of approach should not be called a "habitat area" approach, because "habitat" is a specific term that is defined relative to an individual species.²²)

10. SDEIS/EIR, p. 4-449.

11. Id.

12. DEIS/EIR, p. 4-615, SDEIS/EIR, p. 4-449.

13. U.S. Fish and Wildlife Service. 1996. Fish and Wildlife Service manual, 870 FW 1, Habitat Evaluation Procedures. [online at <http://policy.fws.gov/870fw1.html>]. U.S. Fish and Wildlife Service. 1980. Habitat as the basis for environmental assessment, 101 ESM. U.S. Fish and Wildlife Service. 1980. Habitat Evaluation Procedures (HEP), 102 ESM.

14. Johnson, T.L., and D.M. Swift. 2000. A test of a habitat evaluation procedure for Rocky Mountain bighorn sheep. *Restoration Ecology* 8(4S):47 - 56.

15. DEIS/EIR, p. 4-616.

16. Because the MLEP is the "modified HEP" with a different name, our analysis is the same as provided in our 2001 comments.

17. DEIS/EIR, p. 4-615.

18. Zedler, P.H., and C. Black. 1992. Seed dispersal by a generalized herbivore: rabbits as dispersal vectors in a semiarid California vernal pool landscape. *The American Midland Naturalist* 128(1):1 - 10. (Jackrabbits play a similar role in the vernal pool landscape.)

19. Johnson, R.D., and J.E. Anderson. 1984. Diets of black-tailed jack rabbits in relation to population density and vegetation. *Journal of Range Management* 37(1):79 - 83. MacCracken, J.G., and R.M. Hansen. 1982. Herbaceous vegetation of habitat used by blacktail jackrabbits and Nuttall cottontails in southeastern Idaho. *American Midland Naturalist* 107(1):180 - 184. Jameson, E.W., Jr., and H.J. Peeters. 1988. *California mammals*. University of California Press, Berkeley.

20. Parkes, D., G. Newell, and D. Cheal. 2003. Assessing the quality of native vegetation: the "habitat hectares" approach. *Ecological Management and Restoration* 4:S29 - S38.

21. Id.

22. Hall, L.S., P.R. Krausman, and M.L. Morrison. 1997. The habitat concept and a plea for standard terminology. *Wildlife Society Bulletin* 25:173 - 182.

Response:

Please see Topical Response TR-BC-1 with regard to further explanation of the Modified Land Evaluation Procedure, impact assessment and determination of mitigation ratios. This matter has further been clarified through coordination and consultation with the U.S. Fish and Wildlife Service. TR-BC-1 states that selected habitat variables were defined by individual habitat parameters chosen to express habitat quality of the eight biotic communities and rated on a standardized scale from 0.0 and 1.0 on a presence/absence basis, 0.0 representing non-ideal habitat conditions and 1.0 representing optimum habitat conditions; habitat units were calculated for the eight biotic communities rather than individual species themselves in order to express the ecological ability of the biotic communities to support the target species. The MLEP was not intended to meet specific species requirements but rather to express the biotic communities overall ability to support the sensitive species.

TR-BC-1 continues to state that the MLEP was intended to compare the overall habitat quality of biotic communities at LAX to the ideal habitat conditions represented by two reference sites, the Santa Rosa Plateau in Riverside County and the Carrizo Plain Natural Area in San Luis Obispo County. The Santa Rosa Plateau and Carrizo Plain Natural Area represent the target biotic community, Valley Needlegrass Grassland/Vernal Pool complex. The selected reference sites were intended to represent the Valley Needlegrass Grassland/Vernal Pool complex historically present at LAX, and were not intended to be analogous to the southern dune scrub or southern foredune plant communities present within the Los Angeles/EI Segundo Dunes.

Impacts to southern dune scrub and southern foredune within the LAX/EI Segundo dunes due to installation of navigational aids will be mitigated at a ratio of 1:1. LAWA has not proposed to restore the exact biotic community which are highly disturbed and degraded in nature, but rather, proposed to restore the biotic communities that historically dominated the area located outside of the Airfield Operations Area. Impacts to habitat within the Los Angeles/EI Segundo Dunes resulting from the

installation of navigational aids and associated service roads would be mitigated through the restoration of Valley Needlegrass Grassland and Southern Foredune within the Los Angeles/El Segundo Dunes.

The habitat variables and values chosen to represent the biotic communities were taken from the California Native Plant Society publication "Vernal Pools of Southern California". Selection of the habitat variables and values was not done arbitrarily and is described in TR-BC-1. The four habitat variables: topography/hydrology, flora, fauna and ecosystem functional integrity, were selected because all four are directly related to one another in defining the food, cover, and reproductive requirements of target species. Specifically, ecological integrity was chosen to represent the functionality and long-term sustainability of the eight biotic communities.

The impact assessment covered the areas within the Master Plan study boundaries and the Los Angeles/El Segundo Dunes, of which 75 percent of the area is bare ground, non-native grassland/ruderal and landscaped areas. These areas were rated the lowest in habitat quality in the MLEP analysis due to the absence of biological parameters directly influencing the ability of the biotic community to provide food, cover and reproductive requirements of the target species. In particular, the non-native grassland/ruderal within the air operations areas at LAX are routinely mowed or disked in compliance with Title 14 Part CFR 139 for wildlife hazards management, further reducing the suitability of these areas as habitat. Subsequently, the majority of the impact assessment involved compensation consideration given to disturbed or undesirable habitat capable of supporting few species. Mitigation for impacts to this habitat is considered adequate and proportional to the quality of the habitat. The plant community "landscaped" does have habitat value; a habitat does not have to have sensitive species present to make it of habitat value. Landscape plants provide additional nectar feeding, foraging and cover sites for a variety of arthropods including insects (Lepidoptera, Hymenoptera, Coleoptera, etc.) and spiders as well as reptiles.

The recommended preliminary scheme given in this comment to assess project impacts is not applicable to the situation at LAX because it references quality, native, undisturbed vegetation. This situation is not present within the LAX Master Plan area.

SAL00014-5

Comment:

2.2 Alternative D

The SDEIS/EIR discloses that the new, preferred Alternative D would result in direct destruction of 1.53 acres of sensitive habitat for the construction of navigational aids and associated service roads within the El Segundo dunes, both inside and outside the Habitat Restoration Area. This would include removal of 0.8 acres of disturbed foredune, 0.5 acres of disturbed grassland, and 0.2 acres of foredune.²³ The acreage may sound minimal to the casual reader, but the raw acreage does not reveal the true extent of project impacts because it conceals the spatial configuration of the development. The Biotic Communities analysis fails to reveal the geographic arrangement of the proposed construction, and does not consider this critical information in the assessment of impacts. This information about configuration is important because if the navigational aids are scattered, a greater area will be subjected to "edge effects" from adjacency to the new infrastructure and the construction. If they are clustered, then impacts will be lessened. Clustering of development is one of the basic tenets of conservation planning. Every site of disturbance within the dunes habitat is an area that is more easily invaded by exotic plants and arthropods. It is therefore troubling that the SDEIS/EIR contains no assessment of the configuration of this development footprint.

Configuration of the navigational aids on the dunes is found only in the Coastal Zone Management and Coastal Barriers section. A figure in that section reveals that the navigational aids will be installed at no fewer than 23 separate locations in two lines extending two thirds of the way across the dunes from east to west.²⁴ In addition, existing navigational aids will be removed from 12 other locations both in and out of the Habitat Restoration Area. Each new navigational aid will be 9 feet square, within a 15-foot service buffer. The total area of the new navigational aids is 0.2 acres, so the remaining 1.4 acres of identified disruption must be from new roads or other construction impacts. Therefore, from the new navigational aids alone, nearly 1,300 feet of new habitat edges will be introduced into the El Segundo dunes. It is furthermore unclear if habitat disruption from removal of existing navigational aids has been evaluated.

3. Comments and Responses

23. SDEIS/EIR, Table S4.10-4.
24. SDEIS/EIR, Figure S4.14-1.

Response:

The spatial configuration of the navigational aids proposed for Alternative D was disclosed in the Supplement to the Draft EIS/EIR in Figure S4.14-1, Location of Proposed Navigational Aids Alternative D. Clustering of the navigational aids as suggested would not be consistent with proposed runway improvements. The spatial configuration of the navigational aids is crucial to ensure the safe landing of planes approaching the reconfigured runways. The instrument landing light systems and other navigational equipment designed to support the proposed reconfigured runways have very particular location specifications that cannot be manipulated to avoid impacts on the ground. To the greatest extent feasible, potential impacts to biological resources due to the installation of service roads were avoided. The configuration of the new service roads for Alternative D was designed to minimize the amount of new road to be installed by connecting to existing service roads wherever possible. Potential edge-effects within the Los Angeles/El Segundo Dunes would be alleviated by the proposed and on-going restoration and management responsibilities of LAWA within the Dunes and Habitat Restoration Area.

With regard to the latter part of the comment, there will be no habitat destruction associated with removal of existing navigational aids. The above-ground light standards will be removed from their cement pads, and the pads left in place.

SAL00014-6

Comment:

The impact analysis for Alternative D uses the flawed MLEP to calculate "habitat units" that will be lost for various sensitive species. These habitat units are essentially meaningless; the actual acres of lost habitat should be the basis for impact assessment. According to the SDEIS/EIR the following sensitive species will experience habitat loss in the following amounts: black-tailed jackrabbit, 23.76 acres; western spadefoot toad (*Spea hammondi*), 8.97 acres; loggerhead shrike, 83.25 acres.

The area of impacts to black-tailed jackrabbit is actually much larger than 23.76 acres. The area currently occupied by this species will be used as a construction staging area, which will eliminate far more habitat than the parking garage.²⁵ In addition, the mitigation measure for this species proposes relocating all of the jackrabbits to the El Segundo dunes. The resulting total loss of habitat is therefore closer to the 118.75 acres described for the other Alternatives.

Loss of habitat for jackrabbits, loggerhead shrikes, and western spadefoot toads constitutes a significant impact because the losses would appreciably diminish the ranges of these rare species. LAX supports the only population of jackrabbits in west Los Angeles and indeed, in most of the Los Angeles basin. LAX also supports one of the last western spadefoot toad populations in the Los Angeles basin. Surveys in 2003 for breeding loggerhead shrikes recorded fewer than six pairs within the Los Angeles basin (Kimball Garrett, Los Angeles County Museum of Natural History, pers. comm.), and the species has disappeared in recent years from regularly surveyed sites at Holy Cross Cemetery, Madrona Marsh, and other Los Angeles locations (Professor Hartmut Walter, UCLA Department of Geography, pers. comm.). All three of these species are on the verge of extirpation within a large cismontane geographic area, making any impacts to the populations at LAX highly significant. Cumulative impacts to these species, from the proposed project and other projects in the area, including the Catellus West Bluffs development, are highly significant.

25. SDEIS/EIR, Figure S4.20-1.

Response:

Please see Topical Response TR-BC-1 regarding the Habitat Evaluation Procedure (HEP) analysis and use of modified HEP methodology.

With regard to impacts to the black-tailed jackrabbit within the LAX airfield, please see Response to Comments AS00005-17. The impact and acreage of the parking garage was included during impact

calculations. In addition, a buffer was included with construction and grading impact calculations to ensure the impacts were not underestimated.

With regard to mitigation and relocation of the jackrabbit (only one jackrabbit was observed at LAX during surveys), please see Response to Comments AS00005-17. For a discussion of impacts to and mitigation for loggerhead shrike, please see Response to Comment AS00005-18. Please see Response to Comment AL00033-394 for a discussion of relocation of western spadefoot toad to more natural habitats to reduce impacts.

Potential cumulative impacts to the jackrabbit, loggerhead shrike, and western spadefoot toad have been analyzed in the Draft EIS/EIR and Supplement to the Draft EIS/EIR. Mitigation measures to reduce potential impacts to these species to below the level of significance were described in the Draft EIS/EIR and Supplement to the Draft EIS/EIR.

SAL00014-7

Comment:

The impact analysis for Alternative D (and the other Alternatives) does not address the "bomb disposal site" located within the Habitat Restoration Area. Consultants to LAX previously recommended that this site be moved as part of the Master Plan process so that the ongoing adverse impacts to sensitive habitats (including scraping of restored areas, and disposal of debris within restored areas) could be avoided.²⁶

26. DEIS/EIR, Technical Report 7. Biological Resources Memoranda for the Record on Floral and Faunal Surveys, p. 509.

Response:

Alternative D (and the other Alternatives) does not propose any impacts to the Los Angeles/EI Segundo Dunes, including the Habitat Restoration Area, other than those from the installation of navigational aids and associated service roads. Activities referred to in this comment (within a "bomb disposal site") were undertaken once in 1995, and have not occurred again since that time. This single maintenance activity is not considered an "ongoing adverse impact" to sensitive habitat. The commentor is correct that the above-mentioned Technical Report 7 suggests the bomb disposal site be moved to another part of the Los Angeles/EI Segundo Dunes outside of the Habitat Restoration Area in order to assure protection of the important ecological resources there. However, all areas of the Los Angeles/EI Segundo Dunes are potentially subject to ecological restoration activities under Alternative D (and the other Alternatives), thus rendering the suggestion irrelevant. Furthermore, relocation of the bomb disposal site to an area outside of the Los Angeles/EI Segundo Dunes poses an unacceptable risk to human lives.

SAL00014-8

Comment:

The impact analysis does not provide a sufficient discussion of chemicals that would be used for dust suppression. The SDEIS/EIR suggests the use of "nontoxic" soil binders to reduce dust, but the compatibility of these chemicals with habitat restoration and biological communities is unknown or not reported, and so cannot be evaluated.

Response:

The use of non-toxic soil stabilizer is one of many possible options to reduce construction-generated dust offered in the Supplement to the Draft EIS/EIR. Should the use of soil stabilizer be necessary, it would be applied only in temporarily inactive construction areas, on disturbed soil that has been manipulated for construction purposes. It would not be applied to areas that are not within the construction footprint.

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SAL00014-9

Comment:

3.0 Indirect Impacts

The SDEIS/EIR provides additional discussion of the effects of light and noise on biological resources. While presenting marginally more information, the analysis and conclusions on both these topics are lacking in logic and scientific support.

Response:

Comment noted. The analyses in the Supplement to the Draft EIS/EIR and the Final EIS/EIR related to the effects of light and noise on biological resources were conducted by qualified biologists, and were supported by available scientific literature, discourse with experts, and other available resources (results of field surveys conducted at LAX).

SAL00014-10

Comment:

3.1 Artificial Night Lighting and Wildlife

Discussion of the impacts of artificial night lighting on wildlife is hampered by the confusing use of terminology in the SDEIS/EIR. The issue is routinely described as an analysis of "light emissions," and the magnitude of lighting is described in foot-candles ("fc"). The difficulty with this is that foot-candles (or the SI equivalent lux) are measures of illumination within an area, not the emission of light from a source. Light emissions should be described in terms of luminance. Both illumination and luminance are relevant to assessment of the biological impacts of artificial lighting. Luminance is primarily associated with attraction and repulsion of animals, while illumination primarily results in orientation and disorientation.²⁷ Analysis of lighting should therefore clearly distinguish between illumination and luminance in considering impacts to wildlife.

27. Health Council of the Netherlands. 2000. Impact of outdoor lighting on man and nature. Health Council of the Netherlands, The Hague.

Response:

The term "light emissions" was used only to describe section 4.18 of the Draft EIS/EIR and Supplement to the Draft EIS/EIR pertaining to the construction of new structures or modifications of existing structures that emit light. Impacts of light to wildlife were discussed in Section 4.10, Biotic Communities, and Section 4.11, Endangered and Threatened Species of Flora and Fauna, of the Supplement to the Draft EIS/EIR. Lighting impacts and current conditions were discussed in terms of foot-candles (fc), a measure of illumination, pursuant to the Draft LA CEQA Thresholds Guide. The only new sources of light within the Los Angeles/EI Segundo Dunes are the proposed replacement navigational aids for the realigned runways. Similar navigational aids that are currently in the Los Angeles/EI Segundo Dunes do not appear to adversely affect sensitive species at LAX through the attraction or repulsion of animals (a consequence of luminance). The primary concern relative to light emissions in the Los Angeles/EI Segundo Dunes is the spillover of light from the proposed employee parking garage, and therefore the analysis was conducted in terms of illumination.

SAL00014-11

Comment:

The analysis of lighting impacts from all Alternatives lacks relevant spatial information to reach meaningful conclusions. For example, the baseline conditions within the dunes Habitat Restoration Area are described as ranging from 0.004 fc to 0.26 fc.²⁸ For all build scenarios, the SDEIS/EIR predicts that illumination will increase by 0.34 fc. The spatial distribution of this increase is not described, which makes it difficult to discern how large an area will be subjected to increased lighting from the project.

28. SDEIS/EIR, p. 4-452.

Response:

Illumination would potentially range from 0.344-0.6 fc within the Los Angeles/El Segundo Dunes in areas where sensitive receptors are located, such as key locations within the Habitat Restoration Area (HRA). The Los Angeles/El Segundo Dunes as a whole would not be subject to such increases in illumination. Key locations, called illuminance receptor locations, within the HRA were selected and analyzed as areas where the LAX Master Plan project has the greatest potential to increase illumination and affect sensitive receptors. Sensitive receptors are areas whose use is such that additional light exposure, typically at night, may cause disruption in normal activities or privacy. Lighting assessments determined the greatest potential increase in illumination in the area of illuminance receptor location 1C, located within the southern portion of the HRA, near the crest of the backdune (Tables 2 and 4 of Technical Report 9, Light Emissions Technical Report). Lighting on the crest of the backdune and the eastern portion of the backdune (area of the HRA immediately adjacent to Pershing Drive) would be primarily from spillover from street lights along Pershing Drive. The spillover covers an area of approximately 3.1 acres, which consists of 1.5 percent of the total acreage of the HRA (Section 4.10, Biotic Communities, of the Supplement to the Draft EIS/EIR). This particular area where spillover on the Dunes is most apparent has consistently had observations of the highest numbers of El Segundo blue butterflies. This is an indicator that current levels of spillover light are not adversely affecting the species. At other illuminance receptor locations (there are 10 locations within the southern portion of the HRA) light increases would not necessarily be geographically limited to the specific location of the receptor. A total area of increase in illumination in the Habitat Restoration Area cannot be definitively determined, however, as distance from the potential light source increases, the illuminance would decrease.

SAL00014-12

Comment:

The SDEIS/EIR tries to reach the conclusion that current lighting levels have no adverse influence on wildlife. This conclusion is not supported by the facts. First, all lighting levels within the dunes were recorded during a night with a clear sky. Light reflected by clouds or fog is at a minimum on clear nights; ambient illumination may increase substantially on overcast or foggy nights.²⁹ The characterization of the baseline conditions does not therefore adequately represent lighting impacts, given the frequency of these meteorological conditions along the coast.

29. Moore, M.V., S.M. Pierce, H.M. Walsh, S.K. Kvalvik, and J.D. Lim. 2000. Urban light pollution alters the diel vertical migration of *Daphnia*. *Verhandlungen der Internationalen Vereinigung für Theoretische und Angewandte Limnologie* 27:779 - 782.

Response:

A reasonable effort was made to measure representative baseline light conditions under the most common meteorological situations. Baseline condition measurements throughout LAX were collected over the course of three days in late December to early January under a variety of meteorological conditions: clear sky, partly cloudy, overcast, and hazy/smoggy. Baseline measurements at the Los Angeles/El Segundo Dunes were collected on a night when the sky happened to be clear.¹

LAWA has examined and investigated cloud and fog conditions at LAX, and has determined that meteorological conditions are highly variable depending on the time of year as well as from year to year. The Western Regional Climate Center reports an average of 37 days (24-hour periods) per year of heavy fog at LAX. Heavy fog is defined as an observation with ¼ mile visibility or less sometime during the day. Days with heavy fog most often occur from October to January, but all months of the year have an average of at least one day of heavy fog. Additionally, the average number of cloudy days at LAX (based on daylight hours) is 103, and the average number of clear days is 147. Cloudy is defined as 8/10 to 10/10 tenths sky cover, and clear has zero to 3/10 average sky cover.²

Information regarding cloud cover at nighttime is more difficult to obtain, however, LAWLA has determined that nighttime overcast conditions at LAX are common but not necessarily the prevalent condition at LAX. Annually at LAX, sky coverage (based on hourly observations) between 4 to 7 a.m. is classified as overcast 44 percent of the time (the best indication we have of nighttime conditions). Sky coverage varies greatly throughout the year, for example, overcast conditions occurred approximately

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31 percent to 32 percent of the time from 4 to 7 a.m. in January and approximately 52 percent of the time during the same hours in July.³

Any effect on night measurements of illuminance due to meteorological conditions is expected to be minimal. It is possible that overcast or foggy conditions may slightly increase ambient illumination, however, there is no evidence to suggest that current lighting conditions, under any meteorological conditions, have an adverse effect on wildlife at LAX.

1. Technical Report 9. Light Emissions Technical Report. LAX Master Plan EIS/EIR, January 2001.

2. Western Regional Climate Center (WRCC). www.wrcc.dri.edu/

3. Ashby, Jim. Personal Communication. Western Regional Climate Center (WRCC), 2215 Raggio Parkway Reno, Nevada 89512.

SAL00014-13

Comment:

Second, the biological analysis asserts that only nocturnal and crepuscular species could be affected by artificial night lighting. This conclusion reveals a failure to understand basic ecology and an ignorance of the scientific literature. One of the common effects of artificial night lighting is to extend the activity period of a diurnal species into the nighttime hours. This has been well documented for birds,³⁰ and is so notable in reptiles that animals exhibiting such behavior have been characterized as using the "night light niche."³¹ In another example, seals extended foraging time on salmon by using the lights from a bridge overhead.³² Extended activity times for diurnal species results in disruption of interactions with other species. Species with extended activity periods may 1) subject other species to increased predation, 2) increase competition with nocturnal and crepuscular species, and 3) be subject to additional predation. The outcome of these altered species interactions will be positive, neutral, and negative for different members of the community, be they diurnal, crepuscular, or nocturnal. One experimental investigation reports the outcome of increased foraging time allowed by artificial lighting for butterfly larvae. The higher growth rate associated with longer photoperiod was offset by significantly higher predation on the butterfly larvae from the primary parasitoid species.³³ The SDEIS/EIR errs dramatically in claiming that diurnal species would not be affected by artificial night lighting.

30. Goertz, J.W., A.S. Morris, and S.M. Morris. 1980. Ruby-throated hummingbirds feed at night with the aid of artificial light. *Wilson Bulletin* 92:398 - 399. Freeman, H.J. 1981. Alpine swifts feeding by artificial-light at night. *British Birds* 74(3):149. Hill, D. 1990. The impact of noise and artificial light on waterfowl behaviour: a review and synthesis of the available literature. British Trust for Ornithology Report No. 61, Norfolk, United Kingdom. Frey, J.K. 1993. Nocturnal foraging by scissor-tailed flycatchers under artificial light. *Western Birds* 24(3):200. Negro, J.J., J. Bustamante, C. Melguizo, J.L. Ruiz, and J.M. Grande. 2000. Nocturnal activity of lesser kestrels under artificial lighting conditions in Seville, Spain. *Journal of Raptor Research* 34(4):327 - 329. Thurber, W.A., and O. Komar. 2002. Turquoise-browed molmot (*Eumomota superciliosa*) feeds by artificial light. *Wilson Bulletin* 114(4):525 - 526.

31. Schwartz, A., and R.W. Henderson. 1991. Amphibians and reptiles of the West Indies: descriptions, distributions, and natural history. University of Florida Press, Gainesville.

32. Yurk, H., and A.W. Trites. 2000. Experimental attempts to reduce predation by harbor seals on out-migrating juvenile salmonids. *Transactions of the American Fisheries Society* 129(6):1360 - 1366.

33. Gotthard, K. 2000. Increased risk of predation as a cost of high growth rate: an experimental test in a butterfly. *Journal of Animal Ecology* 69(5):896 - 902.

Response:

LAWA has investigated the scientific literature used to support the statements in this comment and has prepared the following response to include additional pertinent ecological information in support of the results and conclusions drawn by the scientists who conducted the research.

As a result of the analysis of scientific literature, LAWA has determined that artificial night lighting may potentially affect the activities of diurnal species, however, the extent or significance of these affects on species behavior is not well understood, and appears to be species specific.

In the article by Thurber and Komar (2002), the researchers state that despite the tremendous increase in artificial night lighting during the last century, remarkably few bird species appear to have adapted their feeding behavior to include evening feeding. In fact, this behavior has been observed in only a few diurnal bird species. Their study species, the turquoise-browed Motmot (which is also crepuscular) was only observed feeding at night in one location, suggesting that this species behavior has not spread through the population.

In the article by Yurk and Trites (2000), the night feeding activities of harbor seals under two lighted bridges was most effectively deterred by using an acoustic harassment device, and not simply turning off the lights on the bridge. In the article by Negro et al. (2002), the nocturnal activity of lesser kestrels that inhabit illuminated, historic buildings in Seville, Spain was determined to be an important factor in permitting the large kestrel colonies to continue to thrive in the City despite development and encroachment. The researchers suggest that further studies are needed to assess the actual effect of nocturnal activity on adult kestrel foraging strategy and the long-term survival on the population.

In the article by Gotthard (2000), the trade-off between growth rate and predation risk in a temperate butterfly was examined. Larval growth rates in this butterfly are known to be highly plastic in relation to the daylength they experience during larval development. The researcher manipulated daylength (artificial lighting under a controlled laboratory setting) in order to manipulate butterfly growth rates and assess predation risk by a predatory heteropteran bug. This experiment was not designed to test the effects of artificial night lighting on butterfly populations, nor does it draw any conclusions on the potential effects of increasing artificial lighting on butterfly populations.

In the article by Goertz et al. (1980), observations were made to verify the nocturnal feeding activity of ruby-throated hummingbirds on night blooming flowers in the illuminated flower beds of a Ruston, Louisiana homeowner. The authors concede that the extent that resident or migratory hummingbirds make use of artificial man-made light sources to feed at night is poorly documented. It is suggested that this kind of nocturnal feeding may be more common than realized in the presence of illumination combined with certain night blooming flowers around human domiciles and cities in general.

In the article by Frey (1993), two scissor-tailed flycatchers were observed in nocturnal foraging on unidentified flying insects in an area illuminated by a street-light in College Station, Texas. The author does not make any conclusions on the potential effects of increasing artificial lighting on flycatcher populations.

None of the articles referenced in this comment and further described above provide evidence that artificial lighting has any adverse effects on the wildlife species present at LAX. While these articles present important scientific information, the results and conclusions may not be directly applicable to LAX.

Species within the LAX Master Plan boundaries that are nocturnal or have the potential to be active after sunset have been analyzed with respect to effects of light in Section 4.10, Biotic Communities, of the Supplement to the Draft EIS/EIR. Other sensitive wildlife species at LAX include: San Diego horned lizard, loggerhead shrike, Trask's snail, Belkin's dune fly, globose dune beetle, and south coast dune beetle. San Diego horned lizard and loggerhead shrike were observed during directed surveys in 1998, and the other species mentioned above were observed during directed surveys from 1996 to 1998. These species were determined to be present in multiple numbers in spite of more than 25 years of artificial lighting in their habitat.

SAL00014-14

Comment:

Third, the SDEIS/EIR does not discuss the relevant literature to develop thresholds to determine adverse impacts from lighting. Rather, it draws on the rather illogical statement that because sensitive species are present in the dunes area with existing light levels, the light does not adversely affect these species.³⁴ Presence of a species in a degraded habitat does not mean that the habitat is not degraded. The conclusion of no impact from existing lighting cannot be drawn without knowing the density of sensitive species in the absence of artificial night lighting. Even using the measurements taken on a clear night for the SDEIS/EIR, artificial illumination on the dunes reaches 0.26 fc (2.8 lux), which is an order of magnitude greater than that provided by a full moon (~0.1 lux). The claim that

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illumination of this magnitude does not affect wildlife is untenable, given the known influences of lunar cycles on wildlife behavior. For example, scorpions stay closer to their burrows during the full moon.³⁵ Other animals, including snakes,³⁶ small mammals,³⁷ lagomorphs,³⁸ and bats,³⁹ similarly avoid foraging during the full moon to avoid the increased predation risk. With areas of the dunes subjected permanently to illumination brighter than that of a full moon, the conclusion that this baseline condition causes no impacts is not supported by scientific evidence. Even the dimmest illumination found in the baseline conditions at the dunes (0.004 fc = 0.043 lux) is still greater than the light of a quarter moon (0.01 lux), let alone a moonless clear night (i.e., starlight only with no light pollution; 0.001 lux), or a moonless overcast night (i.e., no starlight with no light pollution; 0.0001 lux).

34. SDEIS/EIR, p. 4-453.

35. Skutelsky, O. 1996. Predation risk and state-dependent foraging in scorpions: effects of moonlight on foraging in the scorpion *Buthus occitanus*. *Animal Behaviour* 52(1):49 - 57.

36. Clarke, J.A., J.T. Chopko, and S.P. Mackessy. 1996. The effect of moonlight on activity patterns of adult and juvenile prairie rattlesnakes (*Crotalus viridis viridis*). *Journal of Herpetology* 30(2):192 - 197.

Klauber, L.M. 1939. *Rattlesnakes: their habits, life histories, and influence on mankind*. Second edition. Vol. 1. University of California Press, Berkeley.

37. Lima, S.L. 1998. Stress and decision making under the risk of predation: recent developments from behavioural, reproductive, and ecological perspectives. *Advances in the Study of Behavior* 27:215 - 290.

38. Gilbert, B.S., and S. Boutin. 1991. Effect of moonlight on winter activity of snowshoe hares. *Arctic and Alpine Research* 23(1):61 - 65.

39. Rydell, J. 1992. Exploitation of insects around streetlamps by bats in Sweden. *Functional Ecology* 6:744-750.

Response:

Impacts to biological resources, including indirect ones from light, were analyzed with respect to CEQA thresholds of significance. As indicated on page 4-457 of the Supplement to the Draft EIS/EIR, significant impacts to biotic communities would occur if indirect changes in the environment that may be caused by a particular build alternative would potentially result in "[interference] with habitat (e.g., from the introduction of noise, light) such that normal species behaviors are disturbed to a degree that may diminish the chances for long-term survival of sensitive species, pursuant to the Draft L.A. CEQA Thresholds Guide." The best evidence that current light emissions do not adversely affect sensitive species, such that their chances for long-term survival is diminished, is the long-term presence of sensitive species at the Los Angeles/El Segundo Dunes in spite of the current lighting conditions (0.004 to 0.26 fc).

The portion of the Los Angeles/El Segundo Dunes that is subject to spillover light from Pershing Drive (the light resulting in the highest reading for the Habitat Restoration Area, 0.26 fc) is very small, only 3.1 acres (only 1.5 percent of the total acreage of the Habitat Restoration Area). As indicated on page 4-452 of the Supplement to the Draft EIS/EIR, this area has consistently had the highest number of observations of El Segundo blue butterfly during over a decade of monitoring efforts. This is the best indication that illumination has not adversely affected the biological resources in that area. Determination of the density of sensitive species in the dunes in the absence of artificial night lighting is not possible due to the presence of FAA-required navigational aids and the fact that the Los Angeles/El Segundo Dunes are surrounded by highly urbanized areas.

LAWA has investigated much of the scientific literature used to support the statements in this comment. Analysis has revealed that the effects of night lighting on the activities of species are not well understood, may include a multiplicity of environmental and/or biological factors, and appear to be species-specific. For example, the article by Skutelsky (1996) states that environmental factors such as temperature, wind precipitation, as well as illumination, may affect the behavior of the scorpion. The author concludes that because most scorpions detect prey by detecting air and surface vibrations rather than by vision, illumination is not likely to have a direct affect on their foraging behavior. Adult scorpions were noticed to be less active on moonlit nights, however, humidity may also play an important role in determining adult scorpion behavior. In contrast, juvenile scorpions were often seen foraging in illuminated conditions during twilight and early morning.

The commentor also cites an article by Clarke (1996) discussing the effects of moonlight on rattlesnake activity. The author found that adult prairie rattlesnakes significantly increased nocturnal activity in the open as simulated moonlight intensity decreased, possibly to avoid detection by predators, while

juvenile snakes appeared to be unaffected by variations in nocturnal illumination. Clarke concludes, however, that while moonlight appears to play a role in shaping the activity patterns adopted by adult prairie rattlesnakes, it is probably superceded by factors such as temperature, level of hunger, and reproductive state.

Lima (1998) is cited by the commentor with regard to small mammal avoidance of foraging during the full moon. This article states that the brighter portion of a lunar cycle represents a period of elevated risk for animals hunted by predators like owls, and cites recent studies that have demonstrated that small nocturnal mammals are relatively inactive under bright moonlight.

In the article by Rydell (1992) insect foraging of bats around streetlamps in Sweden was investigated, and makes no mention of bat foraging habits in relation to the phases of the moon (the statement for which the commentor cites this article for support). Rydell found that various species of bats showed different tendencies to feed around streetlamps in the study area. Specifically, it was determined that observations of bats near streetlights were correlated with the species' (genus') average wing loading, average speed in straight flight, the duration of the most common echolocation pulses used in search flight, and the most common pulse repetition rate in search flight. These correlations imply that only those species that fly relatively fast and straight and use echolocation pulses suited for long-range detection of insects were likely to be found near streetlamps. Rydell concludes that illuminated streets and roads seem to be relatively profitable for bats that are adapted to exploit this habitat.

While some of these articles indicate a correlation between species behavior and the phases of the moon, there is no evidence in these works to suggest that a change in artificial lighting will have a significant adverse effect on biological resources at LAX.

SAL00014-15

Comment:

With these natural illumination levels in mind, it becomes evident that impacts from additional light created by the project will be significant to wildlife. All project Alternatives would increase illumination within the Habitat Restoration Area so that illumination would range from 0.344 - 0.6 fc (3.7 - 6.5 lux). This illumination is 37 to 65 times brighter than that of a full moon. Given that the wildlife species of the dunes evolved for hundreds of thousands of years with, and are adapted to, a natural light regime with a maximum illumination of the full moon, and some wildlife species may detect and respond to illuminations below 0.01 or even 0.0001 lux,40 an increase of 0.34 fc (3.6 lux) constitutes a significant adverse impact.

40. Tarano, Z. 1998. Cover and ambient light influence nesting preferences in the Tungara frog *Physalaemus pustulosus*. *Copeia* 1998(1):250 - 251.

Response:

As stated in Technical Report 9, Light Emissions Technical Report, of the Draft EIS/EIR, illuminance under full moon conditions is estimated as 0.03 fc. Illumination would potentially range from 0.344-0.6 fc within the Los Angeles/El Segundo Dunes in areas where sensitive receptors were located, such as key locations within the Habitat Restoration Area (HRA). The Los Angeles/El Segundo Dunes as a whole would not be subject to such increases in illumination. The commentor states that illumination within the HRA would increase 37 to 65 times brighter than a full moon. However, according to the International Committee on Illumination, the potential increase in lighting may only be that of 11 to 20 times brighter (in particular locations). Notwithstanding, the affects of lighting on species and their activities within these affected areas may not be considered detrimental or adverse, but may be positive or neutral under these conditions (please see Response to Comment SAL00014-13 and SAL00014-14).

LAWA has also reviewed the scientific literature cited in this comment, and has determined that the results of the study were species specific (and this species does not inhabit the Los Angeles/El Segundo Dunes) and do not provide evidence that species capable of detecting and responding to illumination in their environment would be adversely impacted by such illumination. Tungara frogs are extremely common in South and Central America, living in wetlands and disturbed areas. The light measurements analyzed in this laboratory experiment (0.003 lux and total darkness) were considered within the illumination range of maximum activity of the tungara frog (which was why the frogs detected and responded to the light). The results of the study demonstrated that frogs chose to lay eggs in

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covered sites under dim light conditions to protect themselves from predation. This was observed as a common, natural occurrence under field conditions as well. The authors do not conclude that the response of frogs to changes in lighting conditions would result in any long-term adverse impact to the species.

SAL00014-16

Comment:

3.2 Noise and Wildlife

In our 2001 comments on the DEIS/EIR, we requested that the impact of noise on wildlife be analyzed. The SDEIS/EIR presents an analysis, but it is lacking in scope and logic.

The scope of the analysis of noise impacts is limited in the SDEIS/EIR to sensitive species only. While these impacts are important, this scope is unduly narrow, because it ignores impacts to wildlife species not designated as "sensitive" that are found in rare natural communities (also called "sensitive habitats"). Rare natural communities, such as southern foredune, dune scrub, and valley needlegrass grassland, are important for both their flora and fauna. It would defeat the purpose of protecting such sensitive habitats if impacts to the wildlife in those habitats are not analyzed. The noise analysis should therefore be expanded to consider impacts to the wide range of wildlife found in the sensitive habitats at LAX, and not limited to only those individual species designated as sensitive.

Response:

Comment noted. Please see Response to Comment SAL00014-21 regarding potential noise impacts to sensitive and listed wildlife species. LAWA is responsible for identifying and mitigating impacts to sensitive and listed wildlife species as required by CEQA and NEPA. Noise impacts are analyzed with regard to the following sensitive species: loggerhead shrike, western spadefoot toad, San Diego horned lizard, silvery legless lizard, burrowing owl, and black-tailed jackrabbit. Because the areas of open space affected by an increase in noise from LAX Master Plan improvements projects are not large in relation to the range of non-listed and non-sensitive species throughout the Los Angeles region, any impacts on non-listed species there should not affect the vitality of those species. In addition, LAWA will restore Southern Foredune and Valley Needlegrass Grassland plant communities historically present within the Los Angeles/EI Segundo Dunes Habitat Restoration Area. These restored habitats and the species which occupy them will be managed in perpetuity.

SAL00014-17

Comment:

The logic of the noise analysis is also flawed. This is exemplified by the conclusion that, "Based on the analysis of existing noise levels at locations occupied by sensitive species, and the presence of sensitive species within these areas, it appears that current noise conditions do not adversely affect sensitive species at LAX."⁴¹ Again, as is the case with the analysis of artificial night lighting, insufficient information is available in the SDEIS/EIR to draw this conclusion. If the density of sensitive species without elevated noise levels were known, and those densities remained the same with elevated noise, then perhaps a conclusion of no impact could be reached. But the SDEIS/EIR does not report density of occupation by any sensitive species (except EI Segundo blue butterfly, *Euphilotes bernardino allyni*) and presents no comparison to suggest that densities would be the same in the absence of the noise associated with the fourth largest airport in the United States. Without these critical parts of a logical argument, the conclusion that existing noise does not affect sensitive species at LAX is unfounded.

⁴¹ SDEIS/EIR, p. 4-453.

Response:

Please see Response to Comment SAL00014-21 regarding potential noise impacts to wildlife species. LAWA is responsible for identifying and mitigating impacts to sensitive and listed wildlife species only pursuant to CEQA and NEPA. Noise impacts, however, were also analyzed with regard to the following sensitive species: loggerhead shrike, western spadefoot toad, San Diego horned lizard, silvery legless lizard, burrowing owl and black-tailed jackrabbit (due to their status as California Species of Special Concern status). Analysis of noise levels associated with Alternatives A,B,C and D determined that

impacts to sensitive wildlife species as compared to baseline conditions would not result in significant adverse impacts to those species, primarily because Lmax in occupied habitat would decrease compared to baseline conditions. In addition, mitigation for impacts to habitat occupied by the western spadefoot toad, black-tailed jackrabbit, and loggerhead shrike involve the relocation of these species to an off-site mitigation location, or relocation to/utilization of habitat within the Los Angeles/El Segundo Dunes (an area where Lmax is below baseline conditions under all build Alternatives). In addition, the scientific name for the El Segundo blue butterfly is *Euphilotes battoides allyni*.

SAL00014-18

Comment:

Beyond the faulty conclusion that current noise levels do not affect sensitive species at LAX, the SDEIS/EIR also asserts that increased noise would not affect sensitive species. This conclusion is a result of the inappropriately narrow scope of the analysis and a failure to consider reasonable thresholds for noise effects. A rather exhaustive body of literature is referenced, but glossed over by the SDEIS/EIR, that illustrates the adverse impacts of airport noise on vertebrates, even at levels far below the thresholds in the SDEIS/EIR. Chronic noise, even at low levels, is associated with elevated stress hormone levels, higher blood pressure, faster heart rates, and other physiological effects.⁴² As a result, birds, mammals, and other vertebrates may show anatomical differences (smaller body size, enlarged adrenal glands) from prolonged exposure to noise.

42. Mancini, K.M., D.N. Gladwin, R. Vilella, and M.G. Cavendish. 1988. Effects of aircraft noise and sonic booms on domestic animals and wildlife: a literature synthesis. U.S. Fish and Wildlife Service National Ecology Research Center, Ft. Collins, Colorado. NERC-88/29. 88 pp.

Response:

An extensive literature review and research was conducted to assess the impact of increased noise on sensitive wildlife species and vertebrates in the Supplement to the Draft EIS/EIR. No physical evidence of adverse effects of noise has been found in sensitive wildlife species observed at LAX. Table S4.10-10, Levels of Noise Causing Disturbance for Sensitive Fauna, within the LAX Master Plan Boundaries and Section 4.10.4.1 of the Supplement to the Draft EIS/EIR clearly defined the CEQA thresholds of significance. According to this table, the level at which noise becomes a disturbance to the spadefoot toad, the silvery legless lizard, the San Diego horned lizard, and the jack rabbit is 95 decibels. As described in Section 4.10.4.2 of the Supplement to the Draft EIS/EIR, there are no CNEL or DNL above 95 decibels. The only increase in Lmax resulting in greater than 95 decibels would occur at grid point F06, located north of the North airfield. None of the species listed above were observed in the vicinity of grid point F06. Therefore, there will be no impacts to sensitive wildlife.

SAL00014-19

Comment:

A study of the influence of aircraft overflights on birds is cited in the SDEIS/EIR, noting that "there were no major differences in the nesting productivity of the most abundant species, and the nesting success was high and similar for both the control site and the test site."⁴³ This reference is rather disingenuous, because it neglects to inform the reader that the Alaska study site experienced Lmax below 70 dB(A) while the Lmax at LAX ranges 90 - 140 dB(A) under the various Alternatives. This represents a considerable difference, because decibels are measured on a logarithmic scale.

43. Rozell, K.B. 2001. Effects of military overflights on nesting neotropical migrant birds. Alaska Bird Observatory, Fairbanks.

Response:

Please see Response to Comment SAL00014-20 regarding noise impacts on breeding birds. The only species determined to be breeding within the Los Angeles/El Segundo Dunes and possibly the north and south airfield during spring 1998 breeding bird surveys was the loggerhead shrike due to the observation of recently fledged loggerhead shrikes. The study performed at the Alaska Bird Observatory, used as a reference on the effects of noise increases on bird nesting productivity, states the maximum noise level at the test site was 80.8 decibels, considerably lower than the maximum noise level at LAWA. The Lmax recorded at LAX during 1996 ranged from 90 to 140 decibels over the four

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Alternatives. None of the species included in this literature synthesis are similar enough to loggerhead shrike to be able to determine effects on loggerhead shrike from increase in noise. The most substantial increase in noise occurs at grid point F06, located in the north airfield. Two observations of loggerhead shrike were made near grid point F06, and one pair of loggerhead shrike may be nesting in the north airfield. The increase in noise at grid point F06 could potentially have an impact on the breeding pair, and requires the consideration of mitigation measures. Mitigation measures MM-BC-1, MM-BC-4, and MM-BC-5 discussed impacts to 22.88 habitat units of loggerhead shrike habitat, compensation, restoration and improvement to 22.88 habitat units for nesting and foraging loggerhead shrike habitat as a result of noise impacts to nesting loggerhead shrikes. As a result of implementation of these mitigation measures, noise impacts to loggerhead shrike are reduced to below a level of significance.

SAL00014-20

Comment:

Road noise, which is several orders of magnitude quieter than aircraft noise, has been documented to exert an adverse impact on breeding birds. Of 45 bird species investigated in woodlands in The Netherlands, 33 showed significantly depressed breeding density in response to increased noise levels near roads. All species in the small passerine families Sylviidae, Fringillidae, and Emberizidae were affected by noise.⁴⁴ Empirical measurement of the threshold value triggering decreased density in woodlands shows that for all bird species combined the threshold value is 42 - 52 dB(A), with individual species exhibiting thresholds as low as 36 dB(A) and as high as 58 dB(A).⁴⁵ Furthermore, years with overall low population densities showed lower threshold levels. Similar research has been conducted for grasslands. Overall, this research shows that breeding bird habitat is degraded at noise levels as low as 36 dB(A).⁴⁶

44. Reijnen, R., R. Foppen, and G. Veenbaas. 1997. Disturbance by traffic of breeding birds: evaluation of the effect and considerations in planning and managing road corridors. *Biodiversity and Conservation* 6:567 - 581.

45. Reijnen, R., R. Foppen, C. ter Braak, and J. Thissen. 1995. The effects of car traffic on breeding bird populations in woodland. III. Reduction of density in relation to the proximity of main roads. *Journal of Applied Ecology* 32:1S7 - 202. Reijnen, R., and R. Foppen. 1995. The effects of car traffic on breeding bird populations in woodland. IV. Influence of population size on the reduction of density close to a highway. *Journal of Applied Ecology* 32:481 - 491. Reijnen, R., R. Foppen, and H. Meeuwsen. 1996. The effects of traffic on the density of breeding birds in Dutch agricultural grasslands. *Biological Conservation* 75:255 - 260.

46. Reijnen, R., R. Foppen, and H. Meeuwsen. 1996. The effects of traffic on the density of breeding birds in Dutch agricultural grasslands. *Biological Conservation* 75(3):255 - 260. Reijnen, R., R. Foppen, and G. Veenbaas. 1997. Disturbance by traffic of breeding birds: evaluation of the effect and considerations in planning and managing road corridors. *Biodiversity and Conservation* 6(4):567 - 581.

Response:

During breeding bird surveys conducted in April, May and June 1998, southwestern willow flycatcher, American Peregrine falcon, least Bell's vireo, California least tern were determined to not be breeding within the LAX Master Plan Study Area or the Los Angeles/El Segundo dunes. The only species determined to be breeding within the Los Angeles/El Segundo Dunes, and possibly the north and south airfield, was loggerhead shrike. This determination was due to the observation of recently fledged loggerhead shrikes. The Los Angeles/El Segundo Dunes is a City of Los Angeles designated preserve area with restricted access to vehicles. The level of road noise within the Dunes will remain at current levels and will not impact breeding birds within the LAX/El Segundo Dunes.

SAL00014-21

Comment:

Mammals are likewise vulnerable to impacts from chronic airport noise:

Only a few studies of the physiological effects of noise on rodents have involved wild animals. A field study by Chesser et al. (1975) involved two populations of house mice near the end of a runway at Memphis International Airport. Adult mice also were collected from a rural field 2.0 km from the airport

field. Background noise levels at both fields were 80 - 85 dB. Noise levels of incoming and outgoing aircraft at the airport field averaged 110 dB, with the highest reading reaching 120 dB. Total body weights and adrenal gland weights of mice from the fields were measured. Additional mice were captured from the rural field, placed in the laboratory, and exposed to 1 minute of 105-dB recorded jet aircraft noise every 6 minutes to determine if noise was the causative factor. Control mice were not subjected to noise. After 2 weeks, the adrenals were removed and weighed. Adrenal gland weights of male and female mice from the airport field were significantly greater than those of mice from the rural field. The noise-exposed mice in the laboratory study had significantly greater adrenal gland weights than the control mice. After ruling out stress factors, such as population density, Chesser et al. (1975) concluded that noise was the dominant stressful factor causing the adrenal weight differences between the two feral populations.⁴⁷

While house mice are of no regulatory concern, native small mammals on the El Segundo dunes include harvest mouse, *Reithrodontomys megalotis*, and desert wood rat, *Neotoma lepida*, which are locally significant. But again, the SDEIS/EIR does not analyze these impacts because it concentrates only on sensitive species, and not on the full range of wildlife species in sensitive habitats.

47. Mancini, K.M., D.N. Gladwin, R. Vilella, and M.G. Cavendish. 1988. Effects of aircraft noise and sonic booms on domestic animals and wildlife: a literature synthesis. U.S. Fish and Wildlife Service National Ecology Research Center, Ft. Collins, Colorado. NERC-88/29. 88 pp.

Response:

Pursuant to the California Environmental Quality Act and the National Environmental Policy Act, LAWA has addressed mitigation for environmental impacts to sensitive and listed wildlife species. LAWA is responsible for addressing impacts to one mammal species, the black-tailed jackrabbit. According to the analysis performed in the Supplement to the Draft EIS/EIR (which was based primarily on the Mancini et. al. article cited by the commentor), the significance threshold for noise impacts on the jackrabbit is 95 decibels. There are no CNEL or DNL above 95 decibels. The only increase in Lmax resulting in greater than 95 decibels occurs at grid point F06, located north of the North airfield. No black-tailed jackrabbits were observed in grid point F06 therefore, there are no significant impacts from noise to the black-tailed jack rabbit.

SAL00014-22

Comment:

The scientific literature provides ample evidence to conclude that the sensitive habitats at LAX are degraded by noise from airport operations and that increased noise would constitute a significant adverse impact.

Response:

Please see Response to Comment AS00005-8 regarding noise levels in sensitive habitats. There will be no increase in noise in the sensitive habitat (the Los Angeles/El Segundo Dunes) at LAX.

SAL00014-23

Comment:

4.0 Mitigation Measures

The SDEIS/EIR, because it relies on the MLEP to formulate mitigation measures for impacts to sensitive species and biotic communities, contains deeply flawed mitigation measures.

The SDEIS/EIR reports that all of the proposed project Alternatives will destroy four seasonal ponds occupied by western spadefoot toads on the south airfield. These populations number at least several hundred adults and all sites would be destroyed by the various project Alternatives. The SDEIS/EIR estimates occupied area as 8.97 acres of ephemerally wetted areas and adjacent upland habitats. Spadefoot toads require upland habitats surrounding their aquatic habitat.⁴⁸ It is unclear how upland habitats were measured for the SDEIS/EIR. Critically important in the analysis is that the species is found in four separate areas. Even though the areas are close to each other, the existing configuration of habitat patches is important to reduce risk to the species from a catastrophic event (e.g., chemical

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spill). Depending on the separation of the pools, there may still be genetic exchange among the populations in each. These risk dynamics should be considered when evaluating the impact on the species and potential mitigation measures.

48. Ruibal, R., L. Trevis, and V. Roig. 1969. The terrestrial ecology of the spadefoot toad *Scaphiopus hammondi*. *Copeia* 572 - 584.

Response:

Western spadefoot toad occurs in the following three locations on the air operations area (AOA): a man-made basin near the hot-drill site, a road-side ditch along the perimeter road that parallels Imperial Highway east of the electric power step-down station, and a plastic-lined ditch paralleling the perimeter road east of Pershing Drive. These locations exist as highly disturbed areas where the risk of contamination from road materials, leaks, and spills is common. LAWA, in consultation with CDFG and the USFWS, has determined that the relocation of western spadefoot toad to a more natural setting poses less of a risk to their survival than leaving them in their current location. Preparations at any mitigation site shall include a thorough evaluation by LAWA to ensure that the site is safe from contamination and predators and has sufficient habitat including upland areas to support the relocated population. In addition, evaluation of potential mitigation sites shall include the consideration of risk dynamics such as the geographic location and configuration of vernal pool habitat. The selection of an appropriate mitigation site and the development of the relocation and monitoring plan shall incorporate any risk-spreading specifications indicated by the CDFG and USFWS.

With regard to the measure of upland habitat, protocol surveys for the western spadefoot toad were conducted at the request of the USFWS to determine the location and extent of habitat utilized by the species. The extent of habitat utilized by the western spadefoot toad considered 2 factors: 1) The surface area of ephemeral wetted areas (pools) and 2) adjacent upland habitat. Upland habitat was delineated as the area surrounding the occupied pools required to support the hydrologic regime of those pools.

SAL00014-24

Comment:

Loss of the LAX population of western spadefoot toads would cause a significant restriction of the range of the species. Because of the significance of the LAX population to the range of the species, mitigation areas should be as close as possible to the existing sites. The first choice should be within the 100 acres north of the Habitat Restoration Area where vernal pools were found historically.⁴⁹ This site would not require land acquisition and would be consistent with achieving other mitigation goals within this area. Furthermore, the biological consultants for the LAX Master Plan recommend that this site be restored with vernal pools.⁵⁰ The second priority for creation of habitat and reintroduction of western spadefoot toad is the West Bluffs site. While this site is currently graded for development, the owner is willing to sell the property, which historically supported appropriate vernal pool habitat. The area of the reintroduction site must at least equal the area occupied at LAX. Given the difficulty of restoring habitat and establishing rare species, a 3:1 mitigation ratio for pool surface area would be more appropriate. This surface area must be accompanied by surrounding upland habitat at a ratio of 10 to 15 acres for each acre of pool surface area. Ideally the mitigation pool surface area would be divided among at least three pools to minimize the effects from a possible catastrophic event.

49. Mattoni, R., and T.R. Longcore. 1997. The Los Angeles coastal prairie, a vanished community. *Crossosoma* 26(2):71 - 102.

50. DEIS/EIR, Technical Report 7. Biological Resources Memoranda for the Record on Floral and Faunal Surveys, p. 508.

Response:

With regard to the loss of western spadefoot toad at LAX causing a "significant restriction of the range of the species," it is important to note that since 1990, there have been sightings of western spadefoot toad in the following counties: Butte, Placer, Yolo, Sacramento, San Joaquin, Calaveras, Alameda, Stanislaus, Madera, Merced, San Benito, Fresno, Monterey, Kings, Tulare, San Luis Obispo, Kern, Santa Barbara, Ventura, Los Angeles, Orange, Riverside, and San Diego (<http://sacramento.fws.gov>). The relocation of western spadefoot toad tadpoles to a suitable mitigation site outside of the LAX Master Plan boundaries (including the Los Angeles/El Segundo Dunes) will not only compensate for the

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loss of habitat on a local level, but provide compensatory habitat within the region, therefore not significantly diminishing the range of the species.

With regard to possible relocation sites for the western spadefoot toad, the creation of vernal pool habitat within the northern 104.3 acres of the Los Angeles/El Segundo Dunes has been determined inappropriate pursuant to FAA Wildlife Hazards Management Guidelines. The FAA has stated that the presence of vernal pools is technically infeasible due to the attractive nuisance they would represent for birds and the corresponding threat to public health and safety through the heightened risk for bird strikes. The "second priority" site identified in this comment, the West Bluffs site (a.k.a. Ballona Bluffs), has also been investigated by LAWA and has been determined infeasible. LAWA approached the owner of the Ballona Bluffs regarding the potential purchase of the site to facilitate vernal pool restoration. The property owner, Catellus, is only willing to consider sale of the 44-acre parcel in its entirety at a price of \$50 million dollars. The cost exceeds the practical ability of LAWA to accomplish such a purchase and thus renders the site infeasible.

Lastly, LAWA and the FAA, in consultation with CDFG and USFWS, have determined the mitigation ratio of 3:1 to be appropriate for vernal pool creation. Vernal pool creation will occur within a portion of the mitigation site, and the remaining area will be of appropriate size to act as the contributing watershed to support the vernal pool(s). The size of the mitigation site will be at least equivalent to the area occupied by western spadefoot toad at LAX (approximately 9 total acres).

SAL00014-25

Comment:

Mitigation for impacts to Riverside fairy shrimp (*Branchinecta sandiegoensis*) should use the same pool system as developed for the western spadefoot toad.

Response:

Mitigation for impacts to the Riverside fairy shrimp and western spadefoot toad will utilize the same vernal pool system. As noted in this comment, the scientific name for Riverside fairy shrimp is not *Branchinecta sandiegonensis*, but rather *Streptocephalus wootonii*. The author's use of *Branchinecta sandiegonensis* is a reference to San Diego fairy shrimp. San Diego fairy shrimp are not present within LAX Master Plan boundaries.

SAL00014-26

Comment:

The SDEIS/EIR suggests that the impact of destroying at least 83 acres of habitat for loggerhead shrike can be mitigated by enhancing habitat within the El Segundo dunes. As proposed, this mitigation measure will not be successful. It suggests that the loss of 83 acres of habitat can be offset by enhancing habitat within 300 acres of existing, occupied habitat. The SDEIS/EIR presents no evidence that the 300 acres of the El Segundo dunes could support a greater density of shrikes. Surveys of the El Segundo dunes in 1995 and 1998 showed this area to be occupied by breeding shrikes.⁵¹ An average of six individuals per survey were seen within the Habitat Restoration Area in 1995.⁵² Territory size for loggerhead shrikes on the Channel Islands is large, 34 ha (~84 acres),⁵³ while mainland territories are somewhat smaller, 4.4 - 16.0 ha (~10.9 - 39.5 acres).⁵⁴ Assuming the Habitat Restoration Area supports three pairs of breeding shrikes, the territory size would be ~27 ha (~66.7 acres). Experts familiar with shrikes and the El Segundo dunes doubt that the mitigation measure would be successful in increasing shrike density in this occupied habitat (Professor Hartmut Walter, UCLA Department of Geography, pers. comm.).

51. DEIS/EIR, Technical Report 7. Biological Resources Memoranda for the Record on Floral and Faunal Surveys, p. 227.

52. DEIS/EIR, Technical Report 7. Biological Resources Memoranda for the Record on Floral and Faunal Surveys, pp. 469 - 483.

53. Scott, T.A., and M.L. Morrison. 1990. Natural history and management of the San Clemente loggerhead shrike. *Proceedings of the Western Foundation for Vertebrate Zoology* 4:23 - 57.

54. Miller, A.H. 1931. Systematic revision and natural history of the American shrikes (*Lanius*). *University of California Publications in Zoology* 38:11 - 242.

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Response:

Please see Responses to Comments AS00005-18 and AL00033-392 regarding potential impacts and mitigation for potential impacts to loggerhead shrike. The home range of a loggerhead shrike ranges from 11-40 acres, depending on food resource availability. The 307-acre Los Angeles/El Segundo Dunes will provide adequate nesting and foraging habitat for the estimated five pairs of breeding loggerhead shrikes. Even considering five breeding shrike pairs with a home range of approximately 40 acres, the 307-acre Dunes preserve will be adequate to support these birds.

SAL00014-27

Comment:

Only one of the three proposed enhancement activities (removal of roads) could be conducted within the Habitat Restoration Area. The other enhancement activities would be conducted outside the Habitat Restoration Area. If enhancement will occur outside the Habitat Restoration Area, then the mitigation measure must establish that restored areas will be protected permanently as natural habitat. The SDEIS/EIR fails to state that mitigation areas outside of the Habitat Restoration Area will be permanently protected.

Response:

As described in the Draft EIS/EIR and Supplement to the Draft EIS/EIR, proposed mitigation for impacts to biotic communities may be undertaken within the northern 104.3 acres of the Los Angeles/El Segundo Dunes, outside of the Habitat Restoration Area. The northern 104.3 acres will be designated a nature preserve and only restricted uses (e.g. maintenance of navigational aids) would be allowed in this area.

SAL00014-28

Comment:

Enhancement to improve habitat for loggerhead shrikes might also have adverse consequences on other species. Shrikes are fond of Jerusalem crickets as forage.⁵⁵ The Jerusalem cricket found at the El Segundo dunes is a sensitive endemic species.⁵⁶ This is meant only to illustrate that artificially increasing the density of one species is not necessarily consistent with management for other species or for maximum biological diversity. Similarly, as discussed below, enhancement to support a large population of jackrabbits would conflict with the provision of habitat for El Segundo blue butterflies.

55. Myers, H.W. 1922. Western birds. The Macmillan Company, New York, p. 249.

56. Mattoni, R.H.T. 1990. Species diversity and habitat evaluation across the El Segundo sand dunes at LAX. Los Angeles Department of Airports, Los Angeles.

Response:

Loggerhead shrike do not exclusively forage on Jerusalem crickets, nor do Jerusalem crickets spend significant portions of time above ground where they would be visible to loggerhead shrike. Jerusalem crickets burrow in sand to feed on plant roots. In addition, the Jerusalem cricket has no formal state or federal listing, nor is it a California Department of Fish and Game Species of Special Concern. There is no scientific evidence to support the statement that improved habitat for the loggerhead shrike would result in adverse impacts to the Jerusalem cricket.

With regard to the latter part of the comment, only one jackrabbit was observed during surveys within the LAX Master Plan area, indicating that the population is likely to be very small. The 104-acre portion of the Los Angeles/El Segundo Dunes north of the current Habitat Restoration Area will provide adequate mitigation and habitat for the single or few relocated jackrabbit, and will not compromise or conflict with habitat management for the El Segundo blue butterfly.

SAL00014-29

Comment:

The proposed mitigation for impacts to black-tailed jackrabbits involves relocation from a ruderal grassland to the Habitat Restoration Area, which contains southern dune scrub and foredune scrub vegetation. It is likely that this mitigation measure will not succeed. First, the 200 acres (81 ha) of the Habitat Restoration Area will support a lower density of jackrabbits than the open grassland they now inhabit. Black-tailed jackrabbits are generalist herbivores, and therefore can survive in a range of vegetation types. The density of jackrabbits differs, however, with the composition of the vegetation. Sites that have very high grass cover relative to shrubs and forbs support far greater densities. For example, a steppe habitat with 59% grass, 10% forb, and 31% shrub cover supported 18.4 jackrabbits per ha, and density decreased with increasing shrub cover to 1.4 individuals per ha at 91.0% shrub cover.⁵⁷ Because the Habitat Restoration Area is intended to support scrub habitats, jackrabbits could only persist at a far lower density than they do in their current habitat at the Airport Operations Area, meaning a much larger area would be required to support the population. Furthermore, the SDEIS/EIR does not consider the possible reasons that black-tailed jackrabbits are no longer present on the dunes, even though they were present historically. For some reason the population was extirpated, and unless the forces that caused the extirpation are removed, the mitigation will fail. We see two possible explanations. First, the small population size within the Habitat Restoration Area was vulnerable to random events simply because it was small. If this is true, then the relocation will eventually fail unless the dunes are managed to maintain a larger population size to the detriment of other sensitive species on the dunes, including El Segundo blue butterfly. A second possible explanation for the disappearance of jackrabbits from the dunes can be deduced from the timing of their extirpation. According to surveys in the DEIS/EIR, jackrabbits died out (or were killed) sometime between surveys in 1978 and 1988.⁵⁸ The other major change in the mammal fauna between 1978 and 1988 was the appearance of the non-native red fox as a breeding resident on the dunes. Red fox are recorded predators of black-tailed jackrabbits, so the invasion and success of this predator may have resulted in the elimination of jackrabbits. If this is true, any jackrabbit relocation program must be accompanied by a humane red fox (and feral cat/dog) control program.

57. Johnson, R.D., and J.E. Anderson. 1984. Diets of black-tailed jack rabbits in relation to population density and vegetation. *Journal of Range Management* 37(1):79 - 83.

58. DEIS/EIR, Technical Report 7. Biological Resources Memoranda for the Record on Floral and Faunal Surveys, p. 493.

Response:

Please see Response to Comment AS00005-17 regarding impacts to the San Diego black-tailed jackrabbit. Red fox control programs shall be implemented in all black-tailed jackrabbit mitigation areas. Jackrabbits are habitat generalists and are found in a wide variety of habitats, but are primarily found in arid, open regions with shortly trimmed grass for visualization of approaching predators. The control of red fox should allow for sufficient growth of the San Diego black-tailed jackrabbit population to a size that would adequately decrease the likelihood of its extirpation from the Los Angeles/El Segundo Dunes.

SAL00014-30

Comment:

Mitigation for Lewis' evening primrose (*Camissonia lewisii*) does not ensure that a replacement population of the species will be created, only that more individuals will be grown on the El Segundo dunes, where the species is already found. In addition to establishing a numerical goal for the number of individuals to be replaced, mitigation should ensure that the area occupied by the species will increase by at least the 2.5 acres that would be lost. Because there is a risk-spreading benefit in the disjunct configuration of the impacted population, the mitigation site should be geographically distinct from currently occupied sites.

Response:

The areas occupied by Lewis' evening primrose east and west of Pershing Drive are approximately 150 feet apart and most likely represent one inclusive population. The area east of Pershing Drive occupied

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by Lewis' evening primrose is relatively small (300 plants within 2.5 acres) and close to the occupied area of the Los Angeles/EI Segundo Dunes (including 9,051 plants within the 200-acre Habitat Restoration Area) and thus, the current configuration does not provide a substantial risk-spreading benefit. Nonetheless, establishment of a 2.5-acre mitigation site for Lewis' evening primrose shall be delineated within an area of the Los Angeles/EI Segundo Dunes currently unoccupied by the plant (i.e. a geographically distinct area from currently occupied habitat). Seeds shall be planted and the area monitored and managed for the presence of Lewis' evening primrose (please refer to MM-BC-2 in Section 4.10, Biotic Communities, of the Supplement to the Draft EIS/EIR). Approximately half of the 74.6 acres of Disturbed Dune Scrub/Foredune considered for restoration currently do not support Lewis' evening primrose and would be considered for potential mitigation sites. Mitigation shall remain within the Los Angeles/EI Segundo Dunes because the dunes are afforded protection pursuant to the LA City Ordinance that created the EI Segundo Blue Butterfly Habitat Restoration Area.

SAL00014-31

Comment:

Mitigation Measure MM-ET-4 describes actions to mitigate impacts to EI Segundo blue butterfly from Alternative D. It contains the following provisions, summarized and quoted from here, that deserve comment based on our previous experience⁵⁹ with such mitigation efforts: 1) avoid flight season for construction, such that construction occurs between October 1st and May 31st, 2) mitigate the number of plants of coast buckwheat at 1:1 ratio, 3) "salvage existing coast buckwheat plants and any larvae on the plant or in the soil below the plant that would be removed," and 4) salvage any EI Segundo blue butterfly larvae from plants that are not salvaged.⁶⁰ While it may seem intuitive to avoid construction during the adult flight season, the species may indeed be more vulnerable at other times because individuals are in diapause as pupae in the sand beneath the plants. While flying adults can escape physical disturbance in the environment, pupae cannot move to avoid being crushed. If the Section 7 consultation with USFWS results in a "no jeopardy" determination, the following strategy would reduce impacts to the butterfly. Plants that will be impacted should be carefully removed in the late Spring before adult butterflies eclose by cutting them at the surface of the sand. This minimizes disturbance to pupae in the duff and sand below. Then construction should be delayed until after the ensuing flight season. Butterflies that emerge to find their plants gone will be forced to emigrate to nearby habitat. If desired, the affected areas can be searched for pupae after the flight season to locate any pupae in multiple-year diapause. Relocation of mature coast buckwheat plants is not a cost efficient means of mitigation. Most plants will die, and the butterfly would be better served by restoring more habitat with container plants. Given the timing of the construction phase, the existing measure incorrectly refers to salvage of larvae at a time when only pupae would be found. Finally, mitigation at a 1:1 ratio for plants is insufficient. The mitigation ratio for direct impacts to this rare natural community should be at a 5:1 ratio on an area basis rather than a per plant basis. The impacts to 0.24 acres of occupied EI Segundo blue butterfly habitat (which will be scattered across the Habitat Restoration Area) should be mitigated by restoration of 1.25 acres of the vegetation type in similar topoclimatic configuration. Impacts to backdune areas should be mitigated by restoring backdune vegetation, not by planting a remote foredune area as contemplated by the mitigation measure.

59. Longcore, T., R. Mattoni, and A. Mattoni. 2003. Final report for Palos Verdes blue butterfly pupal salvage on Palos Verdes and San Pedro housing, San Pedro, California. The Urban Wildlands Group, Los Angeles (Department of the Navy Letter Agreement # N68711-02-LT-C3001). 9 pp.

60. DSEIS/EIR, p. 4-494.

Response:

Please see Topical Response TR-ET-1 regarding potential impacts to the EI Segundo blue butterfly (ESB) for further discussion of mitigation measures MM-ET-2 and MM-ET-4.

Relocation of mature buckwheat plants to subsite 23 of the Habitat Restoration Area is suitable mitigation for impacts to the ESB. The flight and mating season of the ESB occur simultaneously during the same period, June 14 through September 30, varying from 4-8 weeks in any given year depending on temporal changes. ESB mate continuously during this time and females are consistently laying eggs. Eggs are laid on buckwheat flowers and stems and develop in 3-5 days. Larvae remain concealed on buckwheat stems, leaves, and feed on flowerheads from 14-21 days completing their development by descending below ground within the duff and shallow leaf litter layer beneath the buckwheat plant. It is here they begin to pupate and enter a stage of diapause (a state of inactivity to

pass through unfavorable periods, usually winter months). All pupae typically descend, pupate and are below ground by late September.¹ Pupae emerge as adults during the onset of the flight season in June, finishing the life cycle. Pupal diapause and emergence correlates with the seasonal bloom period of coastal buckwheat, coinciding life history development and food resource availability.²

Pupae burrow only 7 - 12 cm below the base of the plant. Removal and relocation of the entire plant and its root structure will ensure survival of the plant and persistence of pupae. Removal of 3-6 inches of duff below impacted buckwheat plants will ensure collection of viable pupae but also the organic matter required for plant growth and pupae survival. The timing of buckwheat plant relocation will be during the spring time, prior to the flight season, when soils are moist and removal will cause the least amount of stress to the plants. The pupae will be removed and relocated along with the host plant. Also, all larvae will be relocated along with the host plant, should larvae remain concealed on the flowering parts of the buckwheat plants during the short larval development phase of approximately 21 days. Buckwheat plants will not be removed by cutting at the base as to not remove any of its root structure and potentially affect the chemical, edaphic and other triggers that allow pupae to emerge in synchrony with the blooming period of the particular plant under which they reside. Relocation of the pupae and host plant to the designated ESB mitigation site, subsite 23, prior to the flight season will allow for normal ESB development and life cycle completion.

Relocation of mature coast buckwheat plants has proven to be successful. ESB adults have shown to use outplanted buckwheat plants of prime age and flower production. Buckwheat seedling mortality within the first two years after outplanting is typically greater than 50 percent, but surviving seedlings appear to thrive and flower successfully.³ ESB adults have been observed perching and feeding on buckwheat as early as the second year of plant growth. Research has shown plants must be at least 3 or 4 years old before producing enough flowers for successful larval development, making the three year minimum relocation requirement prior to grading adequate for plant sustainability.⁴ Removing and relocating buckwheat plants and the underlying duff layer to an area with neighboring buckwheat plants will be adequate mitigation for potential impacts to pupae, larvae and adult ESB. Furthermore, cost was not a factor in determining mitigation for impacts to ESB.

The timing of construction required for installation of navigational aids will take place during the non-flight season, October 1 through May 31, as to not disturb the adult ESB. The timing of the construction phase will occur during a time when only pupae are present. Pupae can remain in diapause for up to two years therefore, the salvage of plants will most likely coincide with pupae development.^{5,6} Impacted buckwheat plants and pupae will be relocated to subsite 23 of the Habitat Restoration Area, out of the grading area and therefore avoided.

A mitigation ratio of 1:1 is adequate to reduce the impact to buckwheat plants to below the level of significance. Mitigating per plant is applicable because ESB occupy a small area typically centered around a small localized buckwheat location. In addition, restoration areas in the Los Angeles/El Segundo Dunes include southern foredune scrub and backdune, both providing additional buckwheat plants and supplemental, suitable habitat for ESB. Subsite 23 has a large enough available area to fulfill the mitigation requirements. Subsite 23 currently supports ESB and subsequent to the spring relocation of buckwheat plants prior to the flight season, subsite 23 will continue to provide ESB's reproductive, feeding and cover requirements.

1. United States Fish and Wildlife Service, 9 September 1998. Recovery Plan for the El Segundo Blue Butterfly (*Euphilotes battoides allyni*). Region 1, U.S. Fish and Wildlife Service, Portland, Oregon.

2. Ibid.

3. R.A. Arnold, 1990. Ecology and Conservation of Two Endangered Southern California Butterflies. Entomological Consulting Services. Contact: 104 Mountain View Court, Pleasant Hill, CA 94523.

4. Ibid.

5. R.A. Arnold, Ph.D., June 1986. Studies of the El Segundo Blue Butterfly-1984. State of California Resource Agency, Department of Fish and Game. Inland Fisheries, Administrative Report No. 86-4.

6. United States Fish and Wildlife Service, 9 September 1998. Recovery Plan for the El Segundo Blue Butterfly (*Euphilotes battoides allyni*). Region 1, U.S. Fish and Wildlife Service, Portland, Oregon.

3. Comments and Responses

SAL00014-32

Comment:

5.0 Conclusion

The full DEIS/EIR, including the new Supplement, fails to provide a realistic assessment of the impacts of the proposed project on biological resources, including sensitive species and rare natural communities. The centerpiece of the analysis of direct impacts is a fatally flawed methodology. This methodology confuses the distinction between habitat and vegetation type, and even fails to account for differences between vegetation types. The assessment of indirect impacts relies on illogical assertions (e.g., if a habitat is degraded for a species then further degradation will have no adverse impact), and fails to consider the scientific literature and its application to the impact analysis.

The magnitude of the LAX Master Plan development and its impacts to wildlife habitat for all four Alternatives, combined with the regional setting and cumulative impacts from development in the City of Los Angeles, lead to the conclusion that implementation of the Master Plan will have significant adverse impacts on biological resources. The mitigation measures proposed to offset these impacts are wholly insufficient to reduce these impacts to a less than significant level.

Response:

The Final EIS/EIR accurately describes the impacts of the proposed project on biological resources. With regard to the methodology used to evaluate impacts to biotic communities, please see Topical Response TR-BC-1. With regard to the assessment of indirect impacts on biological resources, please see Response to Comment SAL00014-9.

With regard to cumulative impacts, please see Response to Comment AL00033-404. The mitigation measures described in this Final EIS/EIR shall mitigate for all impacts to biological resources and endangered and threatened species to levels below CEQA thresholds of significance.

SAL00015 Taylor, Christy Shute, Mihaly & Weinberger LLP 11/4/2003

SAL00015-1

Comment:

I. LAVA and the FAA Cannot Proceed Based on the 2003 Draft Master Plan Addendum and the Supplement to the Draft EIS/EIR Because the Documents are Legally Inadequate and Perpetuate Serious Flaws Previously Identified with Regard to the 2001 Master Plan and the Draft EIS/EIR.

Our review and the analysis by our expert consultants has identified errors, miscalculations, flawed methodology, and incorrect assumptions which, taken together, render the Supplement and the Draft EIS/EIR as a whole, inadequate under the California Environmental Quality Act ("CEQA") and National Environmental Policy Act ("NEPA"). Our comments cover the 2003 Draft Master Plan Addendum ("Addendum"), the Supplement, and the associated Appendices and Technical Reports. These documents fail to disclose the extent of the adverse environmental impacts of the Master Plan alternatives and, in particular Alternative D.

Response:

Comment noted. Please see Responses to Comments SAL00015-2 through SAL00015-333 below.

SAL00015-2

Comment:

A fundamental issue, as set forth in Section II below, is the capacity of Alternative D. The capacity of the airport, in particular the number of passengers served, directly affects the levels of the environmental impacts of the airport, the most obvious being traffic congestion, air pollution, and noise. In asserting that Alternative D would serve no more than 78 million annual passengers ("MAP"), however, LAVA

never conducted the gate capacity analysis necessary to determine the physical capacity of the airport configuration being proposed in Alternative D. Based on our own expert evaluation, a gate capacity analysis clearly demonstrates that the capacity of Alternative D significantly exceeds 78 MAP. The entire environmental analysis of the Supplement therefore hinges on an erroneous assumption regarding the number of passengers to be served under Alternative D, resulting in a serious understatement of the level of adverse impacts.

Response:

As stated in Section E1.3, Aircraft Gate Assignments, in Appendix E Alternative D Airside Analysis, of the Draft LAX Master Plan Addendum detailed gate capacity analysis has been conducted. All flights in the 2015 design day schedule for Alternative D were assigned to a gate to determine future terminal loadings and to simulate airside operations. Aircraft gate assignments were made based on the user allocation and maximum gate size assumptions. Ranges of minimum intergate times, dependent on airline group, were assumed between gate uses. The minimum intergate times used in the other alternatives were also applied in this alternative. The results of the Alternative D gate assignments and the utilization of each gate throughout the day are shown on Figures E-5 and E-6.

SAL00015-3

Comment:

As set forth below in Section III, the analysis of adverse impacts continues to be inadequate in numerous other regards, which we discuss following the organization of the Supplement. As a preliminary matter, we have the following general comments regarding the analysis throughout the documents:

Response:

Comment noted. Please see Responses to Comments SAL00015-4 through SAL00015-10 and SAL00015-12 through SAL00015-107 below.

SAL00015-4

Comment:

- The impacts discussions are improperly cut off at the year 2015, a mere twelve years away. LAX causes significant regional environmental impacts on traffic, air quality, and noise in particular, and with the passage of time those areas continue to worsen. Cutting the analysis off at 2015 artificially reduces the full scope of impacts, resulting in a failure to disclose the true environmental impacts over the life of this project.

Response:

The Draft Master Plan and Draft Master Plan Addendum use the 2015 planning horizon year as the point in the future when the improvements proposed under each of the five alternatives would be completed, and would occur in light of the regional aviation demands projected for 2015. The year 2015 was selected in 1995 at the initiation of the LAX Master Plan process in order to provide for a 20-year planning horizon. The Draft EIS/EIR and the Supplement to the Draft EIS/EIR use the 2015 planning horizon year to evaluate environmental impacts and future considerations projected to occur at buildout of the Master Plan. Based on each of the four build alternatives being projected to be complete by 2015, it is most meaningful and appropriate to evaluate the project's buildout impacts in 2015. Using an analysis year beyond 2015 would not accurately and meaningfully present the impacts of the proposed project, since buildout of the project would have occurred in 2015 and changes in environmental conditions between 2015 and some other more distant year may be for reasons independent of the Master Plan. As such, the Draft EIS/EIR and the Supplement to the Draft EIS/EIR should not, and do not, evaluate the impacts of the LAX Master Plan at buildout for any year other than 2015.

3. Comments and Responses

SAL00015-5

Comment:

- The Supplement's descriptions of the particular elements of Alternative D and the No Action/No Project Alternative contain a number of inaccuracies, fail to provide key information and directly conflict with information in other LAWA documents. These problems are particularly pronounced with regard to the description of existing and proposed LAX cargo facilities.

Response:

Comment noted.

SAL00015-6

Comment:

- The Supplement relies on a problematic baseline for its analysis. As we explained in our comments on the Draft EIS/EIR, the 1996/97 baseline utilized in that document was improper because it ignored substantial development that took place at LAX after 1996/97. The Supplement properly acknowledges some of that development, including: Southern Airfield Complex taxiway improvements, terminal expansion/improvement projects, a new remote commuter terminal, remote aircraft parking and boarding facilities near the west end of LAX, and a new 989-stall parking structure. The Supplement improperly discounts those changes as "minor" modifications having no real impact on the airport's capacity. The document takes the position that the projects can therefore be added to the baseline without changing the results of the analysis in the EIS/EIR. This is incorrect. The projects at issue were undertaken as part of an overall effort by LAWA to increase the capacity of LAX, they were undertaken outside of the Master Plan process and without any of the necessary environmental review. As a result, there has been no public acknowledgment, much less mitigation, of the environmental impacts associated with those projects. This is unacceptable under CEQA and NEPA. LAWA and the FAA cannot, therefore, simply include the projects in the baseline. They must evaluate, acknowledge and mitigate for the impacts of those projects.

Response:

Please see Topical Response TR-GEN-1 regarding baseline issues. As indicated in the topical response, the Draft EIS/EIR normally used the date of July 1997, the date on which the NOP was published, as the baseline date for its environmental analysis. When a full year's worth of data is appropriate for describing the existing environmental setting, data were normally used from 1996 - the last full year before the date of the July 1997 NOP. Although the Supplement to the Draft EIS/EIR presented information pertaining to Year 2000 conditions and, in some cases, disclosed material differences in the impact analysis using Year 2000 as a basis of comparison, the Supplement to the Draft EIS/EIR continued to rely on 1996 as the baseline for determining the significance of impacts. Therefore, it is inaccurate to state, as the commentor does, that the Supplement to the Draft EIS/EIR added projects to the baseline.

As indicated in Chapter 3, Alternatives (subsection 3.2.1), of the Supplement to the Draft EIS/EIR, the projects reported in the Supplement to the Draft EIS/EIR were each accounted for in the Draft EIS/EIR as part of the future No Action/No Project Alternative. Please see Topical Response TR-GEN-2 regarding No Action/No Project Alternative assumptions. As indicated in the topical response, the No Action/No Project Alternative was defined to include, consistent with the provisions of NEPA and CEQA, all construction projects that are reasonably foreseeable in the absence of Master Plan approval, and operational changes that are likely to occur in response to increasingly restrictive LAX capacity limitations. The topical response addresses the environmental review associated with these projects. As indicated in the topical response, projects included in the No Action/No Project Alternative that have not yet undergone environmental review would be subject to such review prior to their implementation. Please also see Responses to Comments AL00033-51 and SAL00015-13.

SAL00015-7

Comment:

- The analysis fails to update information regarding cumulative impacts. In the years that have passed since the drafting of the Draft EIS/EIR, there have been changes in the cumulative and regional situation, in such areas as air quality, traffic congestion, etc., and new information is available and should be utilized regarding proposed projects and other cumulative conditions, which will have impacts on local and regional environmental resources.

Response:

Please see Responses to Comments AR00003-21 and AL00018-19 regarding the evaluation of cumulative impacts in the Draft EIS/EIR and Supplement to the Draft EIS/EIR.

SAL00015-8

Comment:

- Mitigation measures included in the Supplement are inadequate, as pointed out below and in our technical reports. In many instances mitigation is assumed or stated to be adequate without sufficient assurance of future funding. Unfunded improvements, especially of expensive roadway infrastructure, cannot be assumed to mitigate impacts. In other instances, mitigation measures suggested are unenforceable. Reliance by the Supplement on unfunded infrastructure and unenforceable mitigation results in a failure to disclose the true scope of the environmental impacts.

Response:

Please see Response to Comment AR00003-63. There are no requirements under CEQA or NEPA that funding sources for mitigation measures be specified. A specific funding plan has not yet been prepared for the Master Plan; however, it is anticipated that a joint funding effort would be pursued, involving Federal and State grants and other efforts. Much of the project would likely be funded with airport-generated revenues, such as concession fees, landing fees, revenue bonds, leases, and passenger facility charges (PFCs). It is not anticipated that any local tax revenue would be used for this project. Also, please see Topical Response TR-ST-2 regarding the airport's funding abilities outside of the airport. Please note that CEQA requires a mitigation monitoring or reporting program be adopted for this project to ensure the implementation of all required mitigation measures.

SAL00015-9

Comment:

- With regard to the Southern Airfield, we are concerned that LAWA is improperly pursuing development of improvements outside of and segmented from the Master Plan process. The Southern Airfield improvements are a key component of the Alternative D proposal advanced as a means of addressing the problem of runway incursions on Runways 25L-8R and 25R-8L. LAWA's own documents indicate, however, that the agency has, in fact, already committed to undertaking the project. See Attachment 11, LAWA's significant and irrevocable commitment of resources to the southern runway complex modifications is wholly inappropriate. CEQA and NEPA require analysis, disclosure, and mitigation of impacts before such decisions.

Response:

For purposes of responding to this comment it is assumed that the commentor is referring to Runways 25L-7R and 25R-7L, as it would be impossible to build a 25-8 runway.

According to attachment 11, provided by the commentor, Los Angeles World Airports (LAWA) was undergoing a design effort of the south airfield center taxiway improvement. The south airfield center taxiway is a key component of Alternative D. CEQA and NEPA require analysis, disclosure, and mitigation of impacts for final program approval. Construction cannot and would not begin prior to program approval.

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Design work and engineering of program components may begin prior to program approval and may aide the environmental review process, as more accurate environmental analysis may be available. Typically 10 percent to 30 percent of design work and engineering, depending on project complexity, is performed in advance so that environmental impacts can be accurately gauged. Additional engineering and design may be performed at the direction of the airport at its own risk since the result of said analysis might result in changes to the original plan.

SAL00015-10

Comment:

- Similarly, we note that Los Angeles has already initiated the process to procure detailed airport engineering and design work for Alternative D, at a cost of millions of dollars in addition to the millions already spent. See Attachment 17. This raises two separate legal issues.

- In much of the Supplement, there is an insufficient level of detail provided to fully disclose the environmental impacts and to design appropriate mitigation measures. The detailed subsequent planning must be carefully reviewed to ascertain whether it raises the need for additional environmental analysis.

- The devotion by Los Angeles of significant sums of money to push forward Alternative D with detailed design review prior to completion of the CEQA/NEPA process would violate the requirement that a lead agency take no action that commits it to a course of action before the completion and consideration of the final environmental analysis. Such funding would increase the momentum toward plan approval, and make it more difficult for decision makers, following a careful review of the environmental and other issues, to make changes in the plan or vote against its approval.

Response:

The Draft EIS/EIR and the Supplement to the Draft EIS/EIR, which in conjunction with comments received during the review periods and the responses to those comments constitute the Final EIS/EIR, provide a programmatic level of analysis for each of the five alternative being considered for the LAX Master Plan. If, and as, individual projects under the selected alternative advances toward implementation, the potential environmental effects of each project will be evaluated in light of the LAX Master Plan Final EIS/EIR to assess whether the potential impacts have been adequately addressed. Additional detailed environmental analysis will be completed and will undergo public review and comment in accordance with the requirements of NEPA and CEQA, as appropriate. The more detailed analysis will include additional specification of mitigation measures, where appropriate. The level of detail to which such additional environmental analysis can be conducted and the specificity of additional mitigation measures are largely dependent on the level of detail and specificity provided in the proposed project plans. As illustrated in Figure S3-15 of the Supplement to the Draft EIS/EIR, LAWA anticipates the design and construction of project components to begin as early as late-2004. Accordingly, LAWA is in the process of preparing detailed design plans for improvements anticipated under the LAX Master Plan in the interest of completing necessary improvements in a timely manner, recognizing that certain elements of the Master Plan require substantial lengths of time to complete the necessary detailed engineering and design plans. LAWA recognizes that such work is being conducted "at-risk" given that the selection and approval of one of the Master Plan alternatives has yet to be made by the Los Angeles City Council, and there is no assurance at this time that Alternative D will be approved. Once the City Council takes action on the selected alternative, the FAA will prepare a Record of Decision relative to an Airport Layout Plan (ALP) that depicts the City Council's decision. The FAA has not yet made a decision as to which alternative is its preferred alternative.

SAL00015-11

Comment:

II. Master Plan Alternative D As Currently Proposed Would Expand LAX's Capacity Significantly Over 78 Million Annual Passengers.

One of LAWA's primary stated purposes in designing Master Plan Alternative D, as explained in the Addendum and the Supplement, was to address environmental concerns by developing an alternative with a capacity to serve no more than 78 million annual passengers (MAP), the capacity of the current

airport (and therefore the No Action/No Project Alternative). The analysis in the Addendum and Supplement indicates that the capacity of Alternative D is 78.9 MAP, and the impacts analyses discussing the impacts of Alternative D rely on that basic assumption.

The issue of retaining the 78 MAP capacity of the airport is of such paramount importance that El Segundo retained an eminent expert in airport design and capacity to study the LAWA materials and provide an independent evaluation of the capacity of Alternative D. The report of Professor Adib Kanafani, Capacity Analysis of Aircraft Gate Positions, Los Angeles International Airport Master Plan Alternative D, is included as Appendix A to Attachment 7 to this letter.

Professor Kanafani concluded, after extensive review of LAWA's documents and personal communications with LAWA and its professional consultants, that LAWA did not conduct a capacity analysis of the proposed terminal and gate configuration. LAWA's assertion that Alternative D would serve no more than 78 MAP was based not on the physical ability of the gate configuration to serve passengers, but on market assumptions regarding the reactions of airlines and of the air transportation market to the configuration proposed in Alternative D. This analysis fails to reveal the actual physical capacity of the airport, and cannot be used as a representation of the capacity of Alternative D.

In fact, as LAWA's own documents show, Alternative D was designed to handle about the same number of aircraft operations in 2015 as Alternative C, which according to LAWA would serve 89 MAP (Table S3-1). The difference in the annual passenger projections calculated by LAWA for Alternatives C and D is based on LAWA's assumptions that under Alternative D, the airlines would essentially fly smaller planes with fewer seats and fewer passengers. LAWA's conclusion that Alternative D would serve only 78 MAP is also the result of several inconsistent assumptions and erroneous calculations, which are identified in Professor Kanafani's report.

For example, LAWA's stated assumptions include a reduction in commuter flights under Alternative D (Addendum, section 3.3.3) as more of the demand for commuter service is met by other airports. However, in deriving its passenger projections, LAWA assumes larger numbers of small commuter planes under Alternative D. Addendum Table 3.3-1. Elsewhere LAWA uses an incorrect conversion factor to convert peak day operations to annual operations, a factor which is at odds with both current reality and LAWA's assumptions regarding future trends. LAWA's analysis also assumes the use of outdated aircraft and old seating configurations, rather than projecting the future use of aircraft currently on order by airlines.

In the absence of any actual gate capacity analysis by LAWA, Professor Kanafani undertook what LAWA did not provide, i.e. a calculation of the number of passengers that could be served at LAX under Alternative D, based on the proposed number and mix of types of gates. His analysis, set forth in full at Appendix A to Attachment 7, concludes that the true gate capacity of Alternative D exceeds the stated 78 MAP, and is conservatively estimated at about 87 MAP.

Professor Kanafani also analyzed the airfield improvements that are proposed under Alternative D, and concluded that based on those improvements alone the capacity of Alternative D was as high as, or higher than, that of Alternative C. As set forth more fully in Attachment 7, the extensions of the runways and other improvements to the airfield design all tend to enhance capacity by improving operations and reducing delays. Further, other aspects of the design of Alternative D, such as the terminal area and the parking provided, appear to be excessive for 78 million annual passengers and would accommodate more. Moreover, a review of LAWA's own tables regarding reductions in delays under Alternative D supports the conclusion that Alternative D would have a capacity similar to that of Alternative C.

In addition, as described in the Addendum and Supplement, the sequencing of airport improvements under Alternative D contains no assurances that current gate positions and other facilities would be decommissioned before new facilities come on line. This omission leaves the door open for the total number of usable gates to greatly increase beyond what is analyzed in the Supplement. For example, the West Satellite Concourse is proposed for construction in Phase II, while the demolition of TBIT and conversion of the north terminal to linear facilities is in Phase III. In the period between completion of Phase II and the demolition called for in Phase III, the airport's capacity would substantially exceed the reported 2015 capacity.

In order for Alternative D to fulfill its stated purpose of retaining capacity at 78 MAP, significant revisions, including a reduction in the number of gates, would be required. LAWA should develop very specific phasing provisions to assure that actual capacity does not exceed 78 MAP, such as eliminating

3. Comments and Responses

old gate positions before new gates become operational. Reduction of other facilities such as terminal space and excess parking should also be considered. Unless such revisions are incorporated into the airport plan, its capacity will far exceed the stated 78 MAP. Meanwhile, the environmental analysis of Alternative D, which is based on the stated capacity of 78 MAP, is inadequate under CEQA and NEPA in that it fails to provide public disclosure of the impacts of the actual capacity of the plan.

Response:

Alternative D is designed to serve approximately 78.9MAP in 2015, the level of passenger activity identified by Southern California Association of Governments (SCAG) for LAX in the 2001 Regional Transportation Plan (RTP). Alternative D would encourage the development and use of regional airports to serve local demand by constraining the facility capacity at LAX to approximately the same aviation activity levels identified in the No Action/No Project Alternative. The passenger activity that would be expected in 2015 with Alternative D was determined based on the design of the Alternative D gate facilities and the projected airline response to the constrained facilities. Please see Section 3.3, Alternative D - Enhanced Safety and Security Plan (subsection 3.3.2), of the Supplement to the Draft EIS/EIR for more detailed discussion.

Gate capacity analysis has been conducted to determine the physical capacity of the airport configuration being proposed in Alternative D. Please see Response to Comment SAL00015-2.

If the commentator doesn't accept that market conditions and factors affect the volume of passengers served at LAX why does their proposed capacity analysis ignore the available gate capacity between 12:00 AM and 6:00 AM daily? If market factors don't have an affect on the volume of air traffic served, then 25 percent more capacity is immediately available at LAX.

Market factors influence airport activity. The analysis conducted for the LAX Master Plan process acknowledges this fact and clearly articulates a reasonable market-based activity scenario that is consistent with the LAX Master Plan forecast and design day activity forecasts used to evaluate the impacts of each alternative.

As described in Section 3.3, Alternative D - Enhanced Safety and Security Plan (subsection 3.3.2), of the Supplement to the Draft EIS/EIR, commuter operations would likely be reduced from 1996 levels, consistent with the forecasts for No Action/No Project Alternative and Alternative C, in order to maximize the number of passengers that could be served with a limited number of operations.

The commentator focuses only on the number of operations in the market segment while ignoring the corresponding fleet changes and associated passenger levels. In the case of commuter activity, there was a significant decrease in the number of operations between 1996 and 2000. The commentator fails to acknowledge that during the same time period commuter passengers increased from 2.76 million in 1996 to 2.92 million in 2000. This change resulted from the abandonment of the LAX market by 19 seat aircraft.

The constrained activity level of 78.9 MAP forecast for Alternative D in 2015 remains within the range in each table and chart presented in Professor Kanafani's report referred to by the commentator.

Ultimately, the conclusions drawn by the report are arbitrary and based on invalid predictive use of select portions of data presented in the Draft Master Plan Addendum. However, the report's results, in every case, conclude that a possible outcome is the same as presented in the Draft Master Plan Addendum. The report arbitrarily continues to highlight the upper limit of potential passenger activity in the aforementioned report without acknowledging its own results showing a range of possible outcomes that include the number presented in the Draft Master Plan Addendum and, additionally, activity levels even lower than those forecast in the Draft Master Plan Addendum.

It appears that the report's results validate the constrained forecast passenger activity level of 78.9 MAP for LAX Master Plan - Alternative D's 153-gate airport presented in the Draft Master Plan Addendum and Supplement to the Draft EIS/EIR.

SAL00015-12

Comment:

III. The Supplement to the Draft EIS/EIR Understates the Adverse Environmental Impacts of LAX Master Plan Alternative D and Fails In Numerous Other Ways to Satisfy Legal Requirements for Environmental Review.

On behalf of El Segundo, this firm previously submitted extensive comments on the Draft Master Plan and EIS/EIR circulated by LAWA and the FAA in 2001. See September 18, 2001 Comment Letter prepared by Shute, Mihaly & Weinberger LLP ("September 2001 Comment Letter"). Those comprehensive comments identified numerous fundamental flaws in both the plan and the environmental document. LAWA and the FAA have not yet released any response to those comments, and for the most part, the Supplement and Addendum ignore them.

The principle purpose of the Addendum and the Supplement appears to be the introduction and analysis of a new preferred Master Plan option: Alternative D. Additionally, the Addendum and the Supplement contain some additions and changes to the information and analysis in the 2001 Draft Master Plan and EIS/EIR. The Addendum and the Supplement do not, however, eliminate the problems identified in public comments on the 2001 Draft Master Plan and EIS/EIR. In fact, the Supplement's analysis generally perpetuates the same problems seen in the 2001 analysis. The comments presented in our September 2001 Comment Letter regarding flaws in the environmental analysis of Alternatives A, B, C and the No Action/No Project Alternative, remain salient and apply to the Supplement's analysis of Alternative D. Therefore we incorporate those prior comments, as applicable to Alternative D, by this reference. We do not repeat prior comments in full here.

Simply stated, the Addendum and the Supplement, like the 2001 Draft EIS/EIR and Master Plan, fail to satisfy the legal requirement that LAWA and the FAA disclose the impacts of the proposed development. As detailed below, the documents are flawed in their basic design, methodology, analysis of impacts, and approach to mitigation. They misstate impacts, inflate project benefits and generally appear to be intended as advocacy documents in support of Alternative D. In short, they do not meet the requirements of CEQA and NEPA.

Response:

Comment noted. Written responses are provided for all comments previously submitted by Shute, Mihaly & Weinberger in September 2001 regarding the Draft EIS/EIR. Those responses are provided in Responses to Comments AL00033-1 through AL00033-442.

SAL00015-13

Comment:

A. The Project Description is Fundamentally Flawed.

1. The Supplement to the Draft EIS/EIR Relies on a Problematic Baseline for its Analysis.

Our comments on the 2001 Draft EIS/EIR noted that the 1996/97 baseline utilized by LAWA and the FAA was inaccurate in that it did not include substantial development and changes that have taken place at LAX since 1996/97. See our September 2001 Comment Letter at 34-39. Apparently recognizing this problem, LAWA and the FAA have included some revised baseline information in the Supplement. See Supplement at 3-5, Appendix S-B. This new baseline discussion acknowledges that LAWA has undertaken and completed a significant number of airport modification projects outside of the Master Plan process, since 1996/97. While this is clearly an improvement over LAWA's earlier refusal to acknowledge the existence of those projects in its environmental review document, it does not resolve the basic legal problem.

Specifically, the projects at issue were approved and undertaken without any of the necessary environmental review. As a result, there has been no public acknowledgment, much less mitigation, of the environmental impacts associated with those projects. This is unacceptable under CEQA and NEPA. LAWA and the FAA cannot include in the Master Plan baseline projects recently completed in

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disregard of NEPA and CEQA. They must instead evaluate, acknowledge and mitigate for the impacts of those projects.

The Supplement attempts to downplay the seriousness of the above-described baseline problem by characterizing the post-1996/97 projects as minor. See Supplement at 3-5 through 3-6 and Appendix S-B at 42. In fact, as illustrated below, these recent changes at LAX have been significant and have resulted in significant environmental impacts.

LAWA acknowledges that seven South Airfield Complex taxiway improvements have been put into operation since 1996/97. See Appendix S-B at 42. According to the Supplement, those improvements consist of five new taxiways (A4, C3, WF, WG and T), the widening/repaving of high-speed exit taxiway T and a seventh undisclosed project. Appendix S-B at 42. These taxiway projects improved the operational efficiency and capacity of the Southside Airfield Complex and therefore increased the overall airside capacity of LAX. See Exhibit 4.20(B) to September 2001 Comment Letter. This increased capacity resulted in potentially significant environmental impacts in areas such as noise, traffic and air quality. Nothing in the Supplement acknowledges or evaluates those impacts as it should. To the contrary, the Supplement simply concludes, without support, that the projects were "modest." Appendix S-B at 42. This is not the case. LAWA's own documents acknowledge that the taxiway WG, WF and T project were very costly and were undertaken in order to increase the efficiency and capacity of the Southern Airfield Complex. See Exhibit 4.20(B) to September 2001 Comment Letter.

The Supplement acknowledges that a number of terminal expansion/improvement projects have been completed since 1996/97 and purports to adjust the project baseline to include these projects for CEQA purposes. See Supplement Appendix SB at 42-45. For example, LAWA acknowledges that it allowed American Airlines to construct a new remote commuter terminal with 13 new aircraft parking spaces, and that this project freed up a key position in Terminal 4. *Id.* at 45. LAWA approved this capacity-enhancing project without the necessary environmental review. See our September 2001 Comment Letter at 38-39. The 2001 Draft EIS/EIR treated this remote commuter terminal project not as part of the baseline, but rather as part of the No Action/No Project Alternative (and not part of any of the build alternatives). This treatment of the remote commuter terminal project and LAWA's current effort to include that project in the environmental baseline after the fact are both improper under CEQA and NEPA. LAWA and the FAA must instead evaluate, disclose, and mitigate the environmental impacts of this capacity-enhancing project. The other terminal expansion/improvement projects described in the Supplement should also be treated in this way.

Figure S9 in Appendix S-B to the Supplement indicates that in 1997, boarding facilities were completed for the remote aircraft gates located near the west end of LAX. This addition of new gates is a significant example of how LAWA has increased the capacity of LAX facilities recently, outside of the Master Plan process and without the necessary environmental review. The Supplement acknowledges this substantial expansion project but does so only in Figure S9 to Appendix S-B. The project is not described anywhere in the text of the Supplement. As such, the Supplement does not indicate how many remote aircraft gates were added, how many are now located near the west end of LAX, or how these gates have impacted the overall capacity of LAX. In light of these deficiencies, the Supplement does not provide information required under CEQA and NEPA and necessary to inform the public and decision-makers. See CEQA Guidelines § 15002(a); 40 CFR 1500.1(b) (NEPA Regulations).

Appendix S-B to the Supplement acknowledges that LAWA has recently added 686 new parking spaces in the Central Terminal Area by constructing a new 989-stall parking structure in place of an existing 295-stall surface parking lot. Supplement Appendix S-B at 45. As the documents attached hereto as Attachment 10 demonstrate, this major new \$18 million parking structure (Parking Structure 6) was improperly approved and constructed by LAWA without any environmental review. In the Draft EIR/EIS, the Parking Structure 6 project was treated as an element of the No Action/No Project Alternative, but not part of any of the build alternatives. Supplement Appendix S-B at 45. This contributed to one of the Draft EIR/EIS's pervasive and most serious flaws: overstating the capacity increase and environmental impacts associated with the No Action/No Project Alternative relative to the build alternatives, in violation of CEQA and NEPA. The Supplement's acknowledgment of the Parking Structure 6 project and inclusion of that project in the year 2000 baseline discussion does not correct this fundamental problem in the Draft EIR/EIS's project description, description of the No Action/No Project Alternative, and definition of the build alternatives.¹

The Supplement's baseline update is also incomplete as it relates to airport facility modifications because it stops at the year 2000. The document claims that the year 2000 is the most recent "normal"

year for which complete data is available for airport operations and that subsequent years are "abnormal" due to the events of September 11, 2001. Even assuming that this logic is correct for airport operations because the demand for air travel dropped off after September 11, 2001, the logic does not hold for physical airport facilities. LAWA has continued with airport facility modification and expansion projects since 2000. Those projects are not, however, adequately acknowledged or evaluated in the Supplement. The airport projects completed since 2000 should all be described and acknowledged in the Supplement so that LAWA and the FAA can properly evaluate and mitigate for the environmental impacts of those projects.

1 In addition to the Parking Structure 6 project and the other examples described above, Appendix S-B provides other examples of recently-completed projects improperly included in the description of the No Action/No Project Alternative, and not the build alternatives. Such examples include cargo facilities (Singapore, Mercury Air Cargo, FedEx and Cargo Building A); major land acquisitions (Manchester Square and Belford areas); and airfield improvements (southside taxiway projects).

Response:

Please see Topical Response TR-GEN-1 and Response to Comment SAL00015-6 regarding the baseline used in the Supplement to the Draft EIS/EIR. As indicated in those responses, although the Supplement to the Draft EIS/EIR presented information pertaining to Year 2000 conditions and, in some cases, disclosed material differences in the impact analysis using Year 2000 as a basis of comparison, the Supplement to the Draft EIS/EIR continued to rely on 1996/1997 as the baseline for determining the significance of impacts. The projects that were implemented between 1996 and 2000 were never identified as Master Plan projects. It is not the purpose of the Supplement to the Draft EIS/EIR to evaluate the environmental impacts of these projects. Projects included in the No Action/No Project Alternative are not required, under NEPA or CEQA, to have been previously approved in order to be considered reasonably foreseeable, nor is the status of the environmental review of such projects a determinative factor. For those projects that have not yet been approved, but that are reasonably foreseeable in the absence of Master Plan approval, environmental review would be required prior to their implementation. Please also see Topical Response TR-GEN-2 regarding No Action/No Project Alternative assumptions.

Regarding the comment that taxiway improvements undertaken since 1996/1997 were capacity-enhancing, the commentor equates improved efficiency of the airfield with increased overall capacity at the airport. Improvements to airfield safety and efficiency do not always result in airport capacity enhancement. The seven improvements to the south airfield at LAX, including the extension of Taxiway C over Sepulveda Boulevard (identified by the commentor as a seventh undisclosed project) are not necessarily capacity enhancing. For example, the extension of Taxiway C over Sepulveda Boulevard allows taxiing aircraft to continue along a defined course to their destination on the airfield while potentially making fewer turns. The ability to more directly route aircraft from one point on the airfield to another point saves fuel, reduces opportunities for pilot error, and reduces the potential for incursion with surface vehicles. These improvements do not result in an overall increase in airport capacity. Taxiways T, WF, WG, C3, and A4 were all, as described in Appendix S-B, Page 42, of the Supplement to the Draft EIS/EIR, modest and are, in fact, not capacity enhancing. The primary function of these airfield improvements is to aid in the ability of ground controllers to guide aircraft to their destination via more direct routing and/or provide improvements to runway exits minimizing runway occupancy times thus allowing for the safer, more efficient flow of aircraft during peak periods. The commentor references LAWA Resolution No. 20460 (included as Exhibit 4.20(B)), dated November 24, 1998, which states that Taxiways WF, WG and T would improve airfield safety and enhance the efficiency of airfield operations. The above referenced material does not state that the aforementioned taxiways would expand overall airport capacity. Taxiways C3 and A4 provide access between primary taxiways and Airport Operations Area Non-Movement Areas. Additional access points to non-terminal, non-movement areas could not be considered an increase in overall airport capacity and are typically carried out to improve airfield safety in areas where there are increased interactions between taxiing aircraft and parked aircraft, vehicles, ground crew, buildings, and other stationary objects. Regarding the American Eagle, and other remote commuter terminals, please see Response to Comment AL00033-52.

The comment that the addition of boarding facilities was not acknowledged in the text of the Supplement to the Draft EIS/EIR is incorrect. Figure S9 in Appendix S-B of the Supplement to the Draft EIS/EIR is also provided as Figure S3-3 in Chapter 3 of the Supplement to the Draft EIS/EIR. The

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commentor states that new gates were constructed as part of this improvement. This is a misrepresentation of the facilities that existed and were modified. The construction of the boarding facilities did not create new aircraft boarding gates or aircraft parking positions, but instead provided enhancements in passenger comfort and convenience primarily by providing a shelter for passengers to shield them from the weather between the time they exit a bus and board awaiting aircraft, or vice versa. A separate environmental analysis was completed prior to commencement of this project. The results of this analysis determined that there was no capacity increase inherent in this project. Therefore, this cannot be considered in increase in the capacity of LAX facilities.

Regarding projects undertaken at LAX subsequent to 2000, these projects were independent of the Master Plan. Environmental review of these projects was also conducted independent of the Master Plan. As with the projects implemented between 1996/1997 and the Year 2000, it is not the purpose of the Supplement to the Draft EIS/EIR to evaluate the environmental impacts of non-Master Plan projects implemented by LAWA. The rationale for using Year 2000 for a comparison of baseline conditions is provided in Appendix S-B, Existing Baseline Comparison Issues - 1996 to 2000.

SAL00015-14

Comment:

2. The Description of Alternative D in the Supplement to the Draft EIS/EIR is Plagued by Serious Flaws.

a. Remote Gates

The Master Plan Addendum and Supplement imply and indicate at various points that under Alternative D, remote aircraft parking and gate positions now existing at the west end of LAX (i.e., the Remote West Pad Gates) would no longer be considered or counted as available for purposes of Alternative D. See Master Plan Addendum at D-6, Table 2.2-3, 2-27, 2-32. This decision not to count those parking and gate positions would be appropriate if and only if those remote gates and aircraft parking positions are to be permanently eliminated under Alternative D. Unfortunately, although the Master Plan description of Alternative D speaks of "replacing" the remote gates, it does not contain any concrete commitment or plan for the removal and elimination of the parking and gate positions. See Master Plan Addendum at 2-28. To the contrary, the Master Plan indicates that those remote gates will remain in use until at least 2013. See Master Plan Addendum at D-6. Moreover, Supplement Figure ES-5, which depicts Alternative D in 2015, continues to show the remote gates at LAX's west end. See Attachment 7, pp. 11-12.

In order to be consistent with the Supplement's capacity assumptions (and all of the environmental analyses conducted for Alternative D based on that assumed capacity), LAWA would have to abandon and demolish the remote parking area and gates. To do so, the Master Plan and Supplement should include provisions requiring that abandonment and demolition. The Master Plan and Supplement should also describe and analyze the potential impacts of any intended uses for the land now used for the remote gate area following decommissioning of the remote gates. For example, the remote gate area would apparently be an ideal location for development of the proposed new employee parking structure at LAX's west end, given that it is an already disturbed area. If LAWA were to develop the proposed employee parking structure at the location currently occupied by the remote gates, it could avoid the environmental problems (e.g., wetlands impacts, endangered species impacts) associated with the currently-proposed site for the employee parking structure.

Response:

Comment noted. The existing remote aircraft gates at the west end of the Airport would no longer be used as aircraft gates for passenger loading and unloading if Alternative D is constructed. Portions of the existing west remote pad would be demolished in order to accommodate construction of modifications to the north airfield, specifically Taxiways D, E, and Runway 6R/24L. Further demolition of the existing concrete would be costly and have negative environmental impacts, which LAWA is committed to avoiding.

The remaining pavement would be used for Remain Over Night (RON) parking positions, temporary aircraft maintenance parking, departure holding and arrival gate clearance holding. Several airlines that operate commercial service to LAX from Asia schedule extended time between the arrival and departure of their aircraft. Those aircraft that would remain at LAX for extended periods of time would

be stored on the west remote pad in order to free contact gates for use by other airlines that have an immediate need for a contact gate. Additionally, several airline maintenance facilities exist at LAX. Maintaining the west pad would allow the aircraft maintenance operator's additional locations to position aircraft awaiting maintenance procedures in addition to each maintenance operator's ramp area. Lastly, maintaining the west pad for holding aircraft would allow aircraft experiencing delay a safe location on the airfield to hold for departure or arrival gate clearance without interfering with ground operations at LAX which could exacerbate congestion.

The maintenance of the west pad after the implementation of Alternative D for aircraft parking for departure holds, arrival holds, maintenance operations and RON positions would not constitute additional gate capacity. As described in the Supplement to the Draft EIS/EIR, all aircraft passenger loading and unloading would occur at the contact gates that exist or would be constructed as part of Alternative D. The gates at the west pad would remain in use until 2013, as this is the point at which the construction of the north linear concourse and the rework of TBIT is expected to be completed. Please see Figure S3-15 of the Supplement to the Draft EIS/EIR. Further, note the depiction of the west pad in Figure ES-1, No Action/No Project Alternative, versus the depiction of the west pad in Figure ES-5, Alternative D-2015, both in the Supplement to the Draft EIS/EIR. In Figure ES-1 the existing remote hold rooms and passenger loading and unloading infrastructure is illustrated, as it currently exists with parked aircraft. Figure ES-5 illustrates that the existing infrastructure for passenger loading and unloading would be removed and that the pad would not be used for passenger loading and unloading. This should help illustrate the difference between a penalty box type hold pad and a remote gate area.

As described in the Supplement to the Draft EIS/EIR, the west ramp will not be utilized as aircraft gates for passenger loading and unloading. Therefore, the analysis contained in the Supplement to the Draft EIS/EIR correctly identifies the west ramp area as apron as depicted in Figure ES-5 of the Supplement to the Draft EIS/EIR. The apron area now occupied by the west remote gates would provide needed aircraft holding and parking positions after implementation of Alternative D without having to construct additional apron area. The west aircraft gate area was determined not to be a suitable location for construction of an employee parking lot.

Please also see Response to Comment SAL00015-323.

SAL00015-15

Comment:

b. Century Cargo Complex

Table 2.5-2 in the Master Plan Addendum, which describes the cargo facilities proposed as part of Alternative D, contains a number of serious problems that must be addressed. Table 2.5-2 lists an existing cargo building in the Century Cargo Complex as having a square footage of zero. Is this an error? What building is this referring to? Table 2.5-2 also includes two blank lines in its listing of existing cargo facilities in the Century Cargo Complex. These blank lines give the impression that information regarding existing facilities has been deleted or inadvertently excluded from the table. Is this case? Table 2.5-2 and Figure 2.5-1 in the LAX Master Plan Addendum show only one (55,000 square-foot) proposed new cargo facility in the Century Cargo Complex as part of Alternative D. Is this proposed building the cargo facility referred to elsewhere in LAWA documents as Cargo Building B?

Table 2.5-2 and Figure 2.5-1 in the LAX Master Plan Addendum show the 153,000 square foot cargo facility in the Century Cargo Complex as an "existing" cargo facility, despite the fact that the building does not appear in the description of facilities existing at the 1996/97 baseline. See 2001 DEIS/EIR at Figure 3-4. The explanation for this is apparently that LAWA built the 153,000 square foot facility (known as Cargo Building A) in the years since 1997. According to the Supplement Appendix S-B (Existing Baseline Comparison Issues - 1996 to 2000), the structure opened in 1999. Appendix S-B at 46. That Appendix also notes that construction of Cargo Building A was "accounted for in the 2001 DEIS/EIR as part of the future No Action/No Project Alternative." This approach is wholly improper. First, because LAWA was in the middle of the Master Plan process when it constructed Cargo Building A, it should have included the project in one or more of the build alternatives in the Master Plan, so that it could be considered as part of LAWA's overall scheme to modify the airport. CEQA Guidelines § §

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15003(h), 15378. At the very least, construction of Cargo Building A should have been subjected to environmental review outside of the Master Plan process, which it was not.

Figure 2.5-1 in the LAX Master Plan Addendum is somewhat unclear regarding the status of and plans for several cargo facilities within the Century Cargo Complex. The approximately 80,000 square foot building known as the TWA Building is shown on Figure 2.5-1 using black outlines, but is not colored like the other existing facilities. The 25,000 square foot Air New Zealand Building is similarly shown on Figure 2.5-1 with black outlines and without coloring like the other existing facilities. Does LAWA commit as part of Alternative D to demolish these cargo facilities? If so, when? If not, the buildings should be shown and analyzed as existing facilities in the Master Plan Addendum and Supplement.

Figure 2.5-1 in the LAX Master Plan Addendum indicates that the approximately 57,000 square-foot facility in the Century Cargo Complex known as Air Freight Building 8 is an existing cargo building that will continue to exist under Master Plan Alternative D. LAWA's Capital Improvement Program for fiscal years 2001 to 2003 indicated that Air Freight Building 8 would be demolished. See Attachment 8 hereto. This is particularly important because LAWA appears to have previously relied on this demolition (and the associated reduction in cargo facility square footage) as an offset to the construction of new cargo facilities, by arguing that there would be no resulting net increase in cargo capacity. See Exhibit 3(M) to our September 2001 Comment Letter. As such, it would be improper for LAWA to retain Air Freight Building 8 under Alternative D or any other alternative.

Figure 2.5-1 in the LAX Master Plan Addendum also shows the approximately 52,000 square-foot building in the Century Cargo Complex known as Air Freight Building 3 (or the American International Building) as an existing structure. LAWA has previously committed to demolish the structure as part of its Century Cargo Complex redevelopment project. See Exhibit 3(M) to our September 2001 Comment Letter. Retention under Alternative D would, again, be inconsistent with LAWA's prior commitment. This reversal is particularly inappropriate because LAWA has relied on the demolition to support its argument that the Century Cargo Complex redevelopment project involved no net increase in square footage.

Figure 2.5-1 in the LAX Master Plan Addendum shows just one new cargo facility in the Century Cargo Complex under Master Plan Alternative D: a 55,000 square foot structure. This facility would be located on the same site previously slated by LAWA for development as part of the Century Cargo Complex redevelopment project. Under that plan, LAWA was to build a much larger 150,000 square foot cargo building referred to as Cargo Building B. See Exhibit 3(M) to our September 2001 Comment Letter. Does LAWA propose, as part of Master Plan Alternative D, to abandon its prior plans for construction of the larger facility?

As the above comments make clear, LAWA and the FAA have not clearly or adequately explained the relationship between the new preferred Master Plan Alternative D, existing cargo conditions, and various previously proposed cargo projects (e.g., the Century Cargo Complex redevelopment project). In order to provide full and adequate disclosure, LAWA and the FAA must explain the following: (1) What are/were all of the distinct elements of the Century Cargo Complex redevelopment project? (2) Which of the elements of the Century Cargo Complex or development project have already been implemented? (3) what elements of the project are now incorporated into Alternative D? and (4) what elements of the project would be abandoned under Alternative D?

Response:

No information was inadvertently excluded from Table 2.5-2 in the Draft Master Plan Addendum. The line in Table 2.5-2 listing 0 square feet represents that, since the 1996 Baseline was established, the TWA cargo building has been demolished. There were nine existing cargo facilities in the Century Cargo Complex at the outset of the Master Plan process in 1996 but only eight remain. Regarding Cargo Building B, it is unclear as to which "LAWA documents" the commentor is referring. The 55,000-square-foot cargo building proposed for the Century Cargo Complex in Alternative D is not the same structure as the 150,000-square-foot Cargo Building B proposed Fiscal Years 2001 to 2003 CIP. Cargo Building B, as proposed in the Fiscal Years 2001 to 2003 CIP, has not yet been constructed and the 55,000-square-foot structure proposed in Alternative D would be constructed in its place if the Master Plan were approved.

Though LAWA was and continues to be in process of developing a Master Plan for LAX, it has not yet been adopted. Improvements to LAX continue to occur during development of an airport master plan. The Asiana Cargo Facility, also known as Cargo Building A, was subject to environmental review prior

to construction. The project was determined to be categorically exempt from CEQA as a replacement project.

The TWA cargo and Air New Zealand buildings have been demolished. The corresponding figure in this Final EIS/EIR has been revised.

As described in both the Supplement to the Draft EIS/EIR and the Draft Master Plan Addendum, Alternative D would include the construction of a 55,000-square-foot cargo facility in the Century Cargo Complex while the 57,000-square-foot Air Freight Building 8 and the 52,000-square-foot Air Freight Building 3 would be retained. The 150,000-square-foot Cargo Building B, as proposed in the Fiscal Years 2001 to 2003 CIP, is not proposed to be constructed in Alternative D as described above. Further, the Fiscal Years 2001 to 2003 CIP describes that a contract for renovation of Air Freight Building 8 had been awarded and that construction was scheduled to begin September 8, 1998. This supersedes the previously planned demolition of Air Freight Building 8 for the foreseeable future but does not imply that demolition of Air Freight Building 8 would not be sought at a later date. The summary of commitments contained in the Fiscal Years 2001 to 2003 CIP does not indicate any reliance on demolition.

Each of the cargo facility elements of Alternative D impacting the Century Cargo Complex is outlined in Chapter 2.5 of the Draft Master Plan Addendum. None of the changes to the Century Cargo Complex proposed in Alternative D have been implemented. Alternative D, as described in both the Supplement to the Draft EIS/EIR and the Draft Master Plan Addendum, is accurate and correctly identifies the proposed developments in the Century Cargo Complex.

The No Action/No Project Alternative, as described in the Draft EIS/EIR, summarized a series of planned cargo facility improvements that were reasonably foreseeable in the absence of Master Plan approval. Some of the cargo facility improvement projects highlighted in the Draft EIS/EIR have been constructed while others have been suspended. The approximate total net increase in cargo building square footage presented in the Draft EIS/EIR for the No Action/No Project Alternative was 431,000 square feet, which would provide LAX with a total cargo building square footage of approximately 2,342,000 square feet. As described in the Draft Master Plan Addendum and the Supplement to the Draft EIS/EIR, Alternative D would enhance LAX safety and security while constraining airport capacity to approximately the same capacity of the No Action/No Project Alternative. The cargo facilities proposed as part of Alternative D would be equal to that of the No Action/No Project Alternative and total approximately 2,342,000 square feet. In the event that the LAX Master Plan is not approved, LAWA would conduct environmental review for proposed cargo facility projects not previously approved prior to their implementation.

Please see Response to Comment AL00033-51 for additional discussion of the Century Cargo Complex.

SAL00015-16

Comment:

c. Southern Cargo Complex

Fig. 2.5-1 to the Addendum to the Master Plan indicates that under proposed Master Plan Alternative D, a 39,000 square-foot cargo building would be built in the Southern Cargo Complex - West on a site just west of Sepulveda Boulevard. This is inconsistent with another proposal for development of the same site for which LAWA recently released a draft negative declaration entitled "Mercury Air Group FBO Negative Declaration (April 2003)." That Negative Declaration is attached hereto as Attachment 9. It describes the proposed relocation of Mercury Air Group's operations to the Southern Cargo Complex - West site, including the area the Master Plan proposes to develop with a new 39,000 square foot cargo building. The proposed Mercury Air Group development would include demolition of existing buildings on that site (B-4 Hanger and Air Freight Building 12) and construction of a new building. This inconsistency must be explained or eliminated.

Figure 2.6-1 in the Addendum to the Master Plan depicts proposed ancillary facilities under Alternative D and shows a 121,000 square-foot General Aviation facility located along Imperial Highway at the eastern end of the Southern Cargo Complex - West. This General Aviation use proposal is inconsistent

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with the Mercury Air Group proposal to use the same site for aircraft parking and a potential fuel farm. See Attachment 9 at Figure 4. This inconsistency must be explained or eliminated.

Response:

Comment noted. Development of two cargo facilities totaling 99,000 square feet is proposed for the South Cargo Area in Alternative D. As noted by the commentor, the Mercury Air Group Negative Declaration is inconsistent with this plan. The Draft Master Plan Addendum is a program level document. Therefore, if the redevelopment of the eastern portion of this site were to occur as described in the Mercury Air Group Negative Declaration, the two proposed cargo facilities would be combined into one cargo facility totaling 99,000 square feet on the western portion of the cargo area. Such a determination would be made at the project level.

Likewise, the Mercury Air Group FBO is a General Aviation Facility, which is also proposed under Alternative D for the remaining portion of the site depicted in the Mercury Air Group Negative Declaration. Development of the FBO would be consistent with the GA Facility proposed under Alternative D.

Regardless of this issue, the environmental analysis contained within the Supplement to the Draft EIS/EIR remains accurate.

SAL00015-17

Comment:

d. LAX Northside Development

As part of Alternative D, LAWA proposes to proceed with development of the so-called LAX Northside Development Project subject to a daily vehicle "trip cap" of 3,152 a.m. and 3,040 p.m. trips. Master Plan Addendum at 2-117. This daily trip cap is significantly lower than the traffic levels projected for the original LAX Northside Development. Id. The square footage of development proposed for the LAX Northside under Alternative D is, however, identical to that of the original LAX Northside Development. Id. at 2-117 to 2-118. Neither the Supplement nor the Master Plan Addendum adequately explains how a development of the same size can stay within a much reduced trip cap. In fact, that basic assumption is wholly unsupported by evidence and undermines the validity of the environmental impacts analysis (e.g., traffic, air quality). (For further discussion see report of Tom Brohard & Associates, Attachment 2 hereto, pp. 3-4, 9 [noting in addition an apparent error with respect to the direction of the a.m. cap]).

Moreover, the fact that the Supplement includes traffic generation levels in its analysis of the No Action/No Project Alternative that are higher than those included in its analysis of Alternative D underscores the document's bias against the No Action/No Project Alternative. LAWA's decision to assume lower traffic generation numbers for Alternative D is not supported by evidence in the documentation, and improperly makes the impacts of the No Action/No Project Alternative appear more significant by comparison.

Response:

As was indicated in the Supplement to the Draft EIS/EIR relative to describing the nature and amount of development that would occur in the LAX Northside, full development of the 4.5 million square feet of development that is currently entitled could not occur under Alternative D, based on the proposed trip cap. The exact nature and amount of land uses that could occur under this trip cap has not been determined. For the purpose of evaluating the impacts associated with Alternative D, a conservative assumption of 4.5 million square feet of future development was assumed in LAX Northside for all environmental disciplines except traffic and traffic-related air quality and noise. This analysis approach and assumption relative to future development of LAX Northside under Alternative D was clearly stated in several places within the Supplement to the Draft EIS/EIR, including, but not limited to, Tables ES-2 and S3-2 (see Note 6 in both tables), page 3-48, 4-195, and the utility impacts tables (i.e., energy consumption, water demand, wastewater generation, etc.).

The traffic generation rates used for the LAX Northside area under Alternative D are different from those used for LAX Northside under the No Action/No Project Alternative because, based on the proposed trip cap, it is anticipated that the nature and amount of development occurring in LAX Northside under Alternative D are anticipated to be similar to those of the proposed Westchester Southside project.

SAL00015-18

Comment:

3. The Supplement to the Draft EIS/EIR Relies on a Flawed Description and Analysis of the No Project Alternative.

a. LAX Northside Development

The 2003 Master Plan Addendum and the Supplement to the Draft EIS/EIR perpetuate a serious problem regarding the so-called LAX Northside Development. As we explained in our 2001 comments on the Draft EIS/EIR, it was improper to assume development of the massive LAX Northside Development as part of the No Action/No Project Alternative, and doing so artificially inflated the apparent intensity of development under the No Action/No Project Alternative. See September 2001 Comment Letter at 32-34. The additional information and analysis provided in the Supplement illustrates that the document suffers from this same flaw as the Draft EIS/EIR. See Supplement at 3-6. The problems associated with inclusion of the LAX Northside Development in the No Action/No Project Alternative are further exacerbated by the fact that the build alternatives analyzed in the DEIS/EIR assume development less intensive than the LAX Northside Development. Alternative D, for example, assumes that the LAX Northside Development would not proceed as originally approved, but would instead proceed at a less intensive level. See Supplement at 3-47 through 3-48 (assuming that development would produce approximately 50% less traffic than under the LAX Northside Development). The clear result is a strong tendency in the EIS/EIR to overstate the impacts of the No Action/No Project Alternative relative to the build alternatives including Alternative D. This is improper under CEQA and NEPA.

The Master Plan Addendum also states that "Alternative D of the LAX Master Plan identifies the LAX Northside Development as the baseline for additional development north of the airport." See Addendum at 2-114 (emphasis added). This is inconsistent with the approach of the Supplement. As explained above, the Draft EIS/EIR and the Supplement both treat development of the LAX Northside as part of the No Action/No Project Alternative, not the baseline. The baseline described in the Supplement does not include any development of the LAX Northside because that area is not developed. The fact that the Master Plan Addendum incorrectly refers to LAX Northside Development as part of the baseline betrays a pervasive problem with the environmental review documents: their repeated efforts to downplay the apparent intensity and severity of the proposed build alternatives by inflating and overstating the intensity and impacts of the No Action/No Project Alternative, so that the build alternatives will look less problematic by comparison.

Response:

Comment noted. Please see Response to Comment TR-GEN-2 regarding No Action/No Project Alternative assumptions. The referenced comments from the commentator's September 2001 letter are designated AL00033-48 through AL00033-50. Regarding the reference in the Master Plan Addendum, this statement was an error. The text has been revised in the Errata to the Draft Master Plan Addendum. The Draft EIS/EIR and Supplement to the Draft EIS/EIR are consistent in their characterization of the 1996 baseline, which does not include the LAX Northside development.

SAL00015-19

Comment:

b. Imperial Terminal

Figure ES-1 in the Supplement (depicting the No Action/No Project Alternative, 2015) shows the Imperial Terminal, an existing passenger terminal located along the Imperial Highway, as an existing cargo building. This is incorrect. As the April 2003 negative declaration for the Mercury Air Group FBO shows, the Imperial Terminal is a passenger terminal supporting passenger charter flights. See Attachment 9 at A-9, Fig. 3.

3. Comments and Responses

Response:

Figure ES-1 in the Supplement to the Draft EIS/EIR incorrectly depicts the Imperial Terminal as an existing cargo facility, which is a graphical error. The corresponding figure of this Final EIS/EIR has been revised. Table 2.5-2 in of the Master Plan Addendum correctly identifies the two existing cargo facilities in the South Cargo Area and does not include the Imperial Terminal in the total existing cargo area calculations. Therefore, the environmental analysis contained in the Supplement to the Draft EIS/EIR is accurate.

SAL00015-20

Comment:

c. Southern Cargo Complex

Figure ES-1 in the Supplement indicates that LAWA and the FAA are assuming that under the No Action/No Project Alternative, the existing B-4 Hanger and Air Freight Building 12 in the South Cargo Complex - West would be demolished and replaced by substantial new cargo buildings. This assumption is inconsistent with information contained in the Mercury Air Group FBO Negative Declaration (April 2003), attached hereto as Attachment 9. That document indicates that much more modest development is actually proposed for the site of the existing B-4 Hanger and Air Freight Building 12 in the Southern Cargo Complex - West. LAWA and the FAA make the contrary assumption in the Supplement that more intense and substantial development will occur in the South Cargo Complex - West, even if none of the Master Plan alternatives is approved (i.e., in the No Action/No Project Alternative). This assumption is unreasonable and again artificially inflates the apparent intensity of, and environmental impacts associated with, the No Action/No Project Alternative.

Figure ES-1 in the Supplement, which depicts the No Action/No Project Alternative in 2015, is not clear in its representation of cargo facilities. First, the shades of brown chosen for existing terminal buildings, existing cargo buildings and proposed cargo buildings are so similar as to be essentially the same. As a result, it is impossible to discern what category various buildings fall into (i.e., existing terminal buildings, existing cargo buildings or proposed cargo buildings). Moreover, unlike Figures ES-2, 3, 4 and 5, which show the Master Plan build alternatives, ES-1 does not use the abbreviations "EC" and "PC" to label proposed cargo (PC) buildings and existing cargo (EC) buildings. Together, these problems with Figure ES-1 in the Supplement make it inadequate and misleading.

Response:

Comment noted. Demand for development of additional cargo facilities would occur regardless of whether the Mercury Air Group FBO is constructed on this portion of the South Cargo Area. As a program level document the Supplement to the Draft EIS/EIR illustrates additional development of cargo facilities within the South Cargo Area. Project level planning would determine the precise location of proposed cargo facilities within the South Cargo Area. Construction of the Mercury Air Group FBO would not prevent the development of additional cargo facilities from occurring within the South Cargo Area though such development may occur further west within the South Cargo Area. This does not change the environmental analysis contained within the Supplement to the Draft EIS/EIR. The data presented in the Supplement to the Draft EIS/EIR remains accurate.

SAL00015-21

Comment:

4. LAWA is Improperly Pursuing Development of Southside Airfield Improvements Outside of and Segmented from the Master Plan Process and Draft EIS/EIR.

According to the Supplement, a central component of Alternative D would be the modification of the southern runway complex (Runways 25L-8R and 25R-8L) to address the problem of runway incursions. Supplement at ES-17; Draft Master Plan Addendum at 2-10 to 2-11. These modifications would include relocation of Runway 25L-8R to the south and construction of a new center taxiway between Runways 25L-8R and 25R-8L. Id. The documents attached hereto as Attachment 11 demonstrate that LAWA is already committed to undertaking these modifications outside of and separate from the Master Plan. LAWA's July 2003 Quarterly Project Status Report notes, for example, that LAWA has already commenced detailed design work for the project and expects to complete that design work in January

2004. LAWA then proposes to commence construction, which is scheduled to be complete in December 2005.

This significant and irrevocable commitment of resources to the southern runway complex modifications demonstrates that LAWA has already decided to pursue that project regardless of the outcome of the Master Plan process. This constitutes an improper precommitment and/or improper segmentation of the southern runway complex modifications from the rest of the Master Plan. See CEQA Guidelines § 15004(b)(2) (prohibiting taking actions that commit agency to course of action, foreclose alternatives or mitigation measures prior to completion of environmental review); CEQA Guidelines § 15378(a) (definition of "Project" includes the "whole of an action"); 40 C.F.R. 1501.2 (NEPA Regulations). Moreover, as illustrated by the analysis in Attachment 7 hereto, the Supplement does not provide the necessary information and analysis of the design options and environmental impacts of the southern runway complex proposal. LAWA and the FAA could not legally approve that project based on the Supplement.

Response:

Please see Response to Comment SAL00015-9.

SAL00015-22

Comment:

5. The Analysis in the Draft EIS/EIR Improperly Ceases at 2015.

The Draft EIS/EIR is also fundamentally flawed because it fails to look far enough into the future and therefore fails to acknowledge significant and foreseeable environmental impacts. The analysis in the Draft EIS/EIR abruptly stops in the year 2015. No information, analysis or mitigation is provided for impacts occurring in years beyond 2015. This is improper because it is reasonably foreseeable that the proposed Master Plan would have specific environmental impacts in years after 2015 (i.e., more than twelve (12) years in the future). See CEQA Guidelines § 15064(d) (requiring consideration of all project-related impacts that are "reasonably foreseeable"). The EIS/EIR fails to take these impacts into account.

This problem has arisen in part because of the delay since LAWA and the FAA released the Draft EIS/EIR. In an apparent recognition of this delay, the Supplement drops all year 2005 analysis provided in the Draft EIS/EIR. It nonetheless retains 2015 as the horizon for analysis. Instead, LAWA and FAA should have shifted the entire analysis out into the future, looking at at least two study years that are approximately ten years apart to better illustrate the impacts of the project during and after construction (e.g., 2015 and 2025). The short-sighted nature of the analysis is particularly obvious when one considers that the 2001 Southern California Association of Governments ("SCAG") Regional Transportation Plan ("RTP") has a horizon year of 2025, ten years beyond that considered in the Supplement. See Supplement at 4-86.

Response:

Please see Response to Comment SAL00015-4 regarding the use of 2015 as planning horizon year and a concomitant impact analysis year.

SAL00015-23

Comment:

B. The Impacts Analysis in Chapter 4 of the Supplement Is Inadequate in Numerous Respects.

1. Noise

The noise generated by the operations at LAX greatly affect the residents of El Segundo. Parts of El Segundo lie within the 70 dB CNEL, and even the 75 dB CNEL, noise contours around LAX. Supplement, Fig. S4.1-2. Although the Supplement contains new information regarding all Master Plan alternatives in response to prior comments, the noise analysis remains insufficient to disclose the extent of the impacts on El Segundo residents and to formulate adequate mitigation measures. Attachment 1 to this letter, a detailed technical report by Aviation Systems, Inc., describes numerous errors,

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discrepancies, and flaws in the Supplement's noise analysis. Among those of greatest concern are the following:

Response:

Comment noted. The noise analysis was done in complete compliance with appropriate FAA and scientific principles including FAA Order 1050.1D and Order 5050.4A. Whereas, single event levels were addressed in order to meet requirements set forth for CEQA evaluations by the California Court of Appeal. Mitigation measures are addressed in Section 4.1, Noise, and Section 4.2, Land Use, of the Draft EIS/EIR and Supplement to the Draft EIS/EIR. Supporting technical data and analyses are provided in Appendix D and Technical Report 1 of the Draft EIS/EIR and Appendix S-C and Technical Report S-1 of the Supplement to the Draft EIS/EIR.

SAL00015-24

Comment:

- We previously commented that the use of 1996 noise levels as a baseline was improper because noise levels have dropped somewhat since 1996 as a result of newer and quieter aircraft. The Supplement provides information about noise levels in 2000 that confirms that average noise contours in El Segundo were smaller in 2000 than 1996. See e.g., Supplement p. 4-16 ["in the areas north and south of the airport, which are more influenced by takeoff noise than approach noise, the contours are substantially reduced from 1996 baseline conditions..."]; graphically portrayed in Figure 4.1-2. Yet the Supplement continues to use 1996 as the baseline year. This results in understating the significance of noise impacts in El Segundo, because the worsening of noise levels in 2015 is being compared to a baseline that is worse than the currently existing conditions. This is exacerbated by the further reduction in noise, due to reduced operations, in later 2001 and 2002. The Supplement uses average noise levels and reports the combined totals (within the entire airport noise impact area) of the numbers of homes and other properties "newly exposed" to significant adverse noise impacts. E.g., Tables S4.1-25, S4.1-26. The use of these gross numbers in combination with the outdated baseline, which showed noise levels in El Segundo worse than the 2000 levels, results in understating the future adverse noise impacts of the planned airport operations on El Segundo. As such this approach is deceptive and a violation of CEQA's and NEPA's requirement that impacts be fully disclosed.

Response:

The 1996 environmental baseline for the Draft EIS/EIR includes many of the noisier Stage 2 aircraft that were phased out in the year 2000. Please see Subtopical Response TR-N-1.3 regarding use of 1996 Baseline noise levels from which to measure increases associated with proposed alternatives and Topical Response TR-GEN-1, regarding the use of 1996 as the environmental baseline. The Supplement to the Draft EIS/EIR, in Sections 4.1, Noise, and 4.2, Land Use, analyzes and compares Year 2000 conditions with baseline conditions for the No Action/No Project, and Alternatives A-D.

SAL00015-25

Comment:

- In response to previous comments, the Supplement provides some information addressing the noise impacts of "single events." However, the information in the Supplement fails to satisfy the requirements of *Berkeley Keep Jets Over the Bay Committee v. Board of Port Commissioners*, 91 Cal.App.4th 1344 (2001). The Court of Appeal in that case stressed the need to provide information in a form that is useful to residents surrounding an airport in helping to evaluate the impact of future increased air traffic on their daily lives, in particular the interference with sleep and conversation, by individual "single events" of aircraft takeoffs and landings. *Id.* at 1372-83. "Single event" noise is defined as the noise associated with one and only one event. The methodology of the Supplement, however, continues to use only an averaging technique, rather than disclosing individual "single events." The Supplement should have provided noise contours for each individual takeoff and landing, giving residents important information about the noise impact, frequency, and timing of those "single events," enabling them to evaluate the significance of those impacts on sleep, conversation, and quality of life. See e.g. September 2003 Draft Supplemental Environmental Impact Report, SCH No. 1994113039, for Oakland International Airport ADP, pp. 3.3-28 to 3.3- 37, discussing and mapping noise footprints for individual aircraft types and flight paths. The Oakland SEIR, prepared in response to court judgment, is available at www.oaklandairport.com/seir. Such information would also enable LAWA to evaluate appropriate

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mitigation measures, such as noise abatement departure procedures like those in place today at John Wayne Airport. Instead, the Supplement subsumes all the single events into an "average" contour (the so-called 94 dB SEL contour). This meaningless device perpetuates the time-averaged noise impact methodology used earlier in the Draft EIS/EIR. The environmental analysis for this project should include single event noise contours for each aircraft type on each flight track and their frequency and times of occurrence. Without such information, the analysis remains insufficient and the level of disclosure of impacts does not satisfy legal requirements.

Response:

Comment noted. As stated on page 139, Section 6, Single Event Noise Analysis in Appendix S-C1, Supplemental Aircraft Noise Technical Report, of the Supplement to the Draft EIS/EIR while the Court of Appeal ruled that the effects of single events should be addressed, it did not mandate specific standards for the determination of the significance of those impacts, leaving the determination of precisely what types of impacts and the establishment of thresholds of significance to the project sponsor, based on the sponsor's own assessment of what is locally meaningful. Therefore, LAWA has conducted its own evaluation of the anticipated effects of its proposed development actions on the single event noise levels in the environs of LAX to meet requirements set forth for CEQA evaluations by the California Court of Appeal. First, based on the anticipated expansion of cargo facilities and the forecast growth in nighttime operations under the various development alternatives, as well as public comments received during the review of the Draft EIS/EIR, the potential for the public to be awakened at night was selected for single event evaluation. The second category selected for evaluation, also based on public comment and on continuing national and international research, is the ability of children to learn while exposed to high noise levels of aircraft noise events. Please see Subtopical Response TR-N-3.7 regarding SNA departure procedures. While the commentor may disagree on the methods that were used to determine nighttime awakenings, they were based on the widely accepted 1997 FICAN Report, Effect of Aviation Noise on Awakenings from Sleep. Please see Section 6, Single Event Noise Analysis, of Appendix S-C1, Supplemental Aircraft Noise Technical Report of the Supplement to the Draft EIS/EIR for single event noise thresholds of significance. Additionally, single event impacts for a variety aircraft are identified in Section 6, Typical Noise Footprints of the Operating Fleet of Appendix D, Aircraft Noise Technical Report, of the Draft EIS/EIR.

SAL00015-26

Comment:

- LAWA formulates a significance threshold of 10 percent of residents being awakened from sleep once every 10 days. There is no documentation justifying the selection of either 10 percent or 10 days. Very loud noise events below this threshold, while treated by LAWA as insignificant, may nonetheless be highly significant to residents awakened from sleep. For this and other reasons use of this threshold results in failure to disclose significant impacts. The Draft SEIR for Oakland Airport's ADP recognized that the significance of sleep disturbance varied among individuals and noise events, and considered, reported and analyzed noise events at 90, 85, and 80 SEL.

Response:

While the court ruled that the effects of single events should be addressed for CEQA purposes, it did not mandate specific standards for the determination of the significance of those impacts, leaving the determination of precisely what types of impacts and the establishment of thresholds of significance to the project sponsor, based on the sponsor's own assessment of what is locally meaningful. Therefore, LAWA has conducted its own evaluation of the anticipated effects of its proposed development actions on the single event noise levels in the environs of LAX to meet requirements set forth for CEQA evaluations by the California Court of Appeal. The commentor is correct in stating that a loud noise event that occurs less frequently than once in ten days may be considered significant by an individual, the FICAN curves used to select the 10 percent awakening threshold is representative of large samples of populations exposed to a variety of awakening situations. Because the FICAN approach was based on statistically reliable evaluations, the noise level associated with the 10 percent awakenings level was selected by the sponsor for its standard for significance. This percentage is generally consistent with the 11.6 percent of the population that would be highly annoyed by cumulative noise at the 65 CNEL level. Since the court left to the airport sponsor the appropriate approach to address single event noise, communities may differ in the standards selected for local application. Please see Section 6.1, Nighttime Awakenings Analysis of Appendix S-C1, Supplemental Aircraft Noise Technical Report, of the Supplement to the Draft EIS/EIR for a description as to how LAWA selected its Sound Exposure Level

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(SEL). The information discussed in the Supplement to the Draft EIS/EIR is not intended for use at other airports, without careful consideration of the similarities and dissimilarities of the other airports with LAX. Because the specific factors contributing to the noise impacts vary among airports, the appropriate single event measures and their thresholds of significance for LAX may not necessarily be the same as those for an airport developed on a new site, or for a small airport located in a rural or suburban setting, or even for another large urban airport with a different set of operating characteristics. Although the single event measures and their thresholds of significance for LAX may not be appropriate for other airports, it should be noted that the Draft Supplemental EIR (SEIR) for Oakland's Airport Development Program also utilized FICAN's sleep disturbance curve to estimate potential sleep disturbance. See SEIR, Tables 3.3-6 and 3.3-15. Notably, Oakland's Draft SEIR also acknowledges that "[t]he 80 dB SEL noise level is correlated primarily to speech disturbance outdoors rather than sleep disturbance." SEIR, at 3.3-22.

SAL00015-27

Comment:

- The Supplement, like the Draft EIS/EIR, completely fails to address the impacts of airport noise on speech interference, which is one of the most noticeable aspects of extremely loud aircraft takeoffs and landings. See Berkeley Keep Jets Over the Bay, 91 Cal.App.4th at 1375-76.

Response:

Comment noted. The effects of noise on speech in the customary residential setting are reflected in the noise compatibility criteria used for land use impact analysis in this report, as established by the FAA and the State of California. Speech interference in a classroom setting was addressed in Section 4.1, Noise, and Section 4.2, Land Use, of the Supplement to the Draft EIS/EIR. Supporting technical data and analyses are provided in Appendix S-C and Technical Report S-1 of the Supplement to the Draft EIS/EIR.

SAL00015-28

Comment:

- The Supplement fails to take into account the noise standards set forth in El Segundo's noise ordinance. Under the CEQA Guidelines, Appendix G, Section XI, a project proponent should consider whether a proposed project would generate noise, or expose persons to noise, in excess of local standards set forth in general plans and ordinances. El Segundo's general noise standards are set forth in its Noise Ordinance, section 7-2-4. For residential property, a noise exceeding five (5) dBA above the ambient noise level is prohibited; for commercial property, noise exceeding eight (8) dBA above ambient noise levels is prohibited. This standard is ignored by the Master Plan analysis. In addition, the single event noise data on which the ordinance is based is, as explained above, not made available in the Supplement. This is a further indication that the data that would be most helpful to residents most affected by airport noise (regarding individual takeoffs and landings) has still not been provided to them.

Response:

Consistent with the standards presented in the City of El Segundo Noise Ordinance (Ordinance 1242) Section 4.2, Land Use (subsection 4.2.6) of the Draft EIS/EIR and Supplement to the Draft EIS/EIR evaluated noise-sensitive uses that would be exposed to an increase of 3 CNEL within the 60-65 CNEL or 5 CNEL below 65 CNEL for informational purposes. Please see Topical Response TR-LU-5 for an additional discussion of aircraft noise thresholds. Although these noise level increases were not considered to be significant, no noise-sensitive uses within the City of El Segundo were exposed to these noise increases. Significant roadway noise levels that resulted in an increase of 5 dBA Leq(h) in peak noise hour levels compared to 1996 baseline conditions or 12 dBA Leq(h) in peak hour noise levels compared to the No Action/No Project Alternative were also analyzed in Section 4.1 of the Draft EIS/EIR and Supplement to the Draft EIS/EIR. As concluded therein, two receptor locations within the City of El Segundo would be exposed to a significant increase in roadway noise levels under Alternatives A, B, and C and none under Alternative D. Consistency with noise policies stated in the City of El Segundo General Plan was addressed in the Section 4.2, Land Use of the Draft EIS/EIR and the Supplement to the Draft EIS/EIR with supporting technical data and analyses provided in Technical Report 1 of the Draft EIS/EIR and Technical Report S-1 of the Supplement to the Draft EIS/EIR. As shown on Table S4.2.2-29 of the Supplement to the Draft EIS/EIR, in the City of El Segundo Alternative

D would result in an overall decrease in the 65 CNEL contour area compared to 1996 baseline, Year 2000 conditions, and the No Action/No Project Alternative. Therefore, this alternative would not conflict with policies contained in the Noise and Housing Elements of the City of El Segundo General Plan, which focus on reducing incompatible uses exposed to noise. In addition no new noise-sensitive uses would be newly exposed to noise levels of 65 CNEL or greater, to an increase of 1.5 CNEL within the 65 CNEL contour, or to significant CNEL levels in the City of El Segundo. Additionally, El Segundo does not show any noise-sensitive uses newly exposed to high single event noise levels as defined by the 94 dBA SEL noise contour, compared to the 1996 baseline or Year 2000 conditions. Typical Noise Footprints of the Operating Fleet are identified in Section 6, of Appendix D, Aircraft Noise Technical Report of the Draft EIS/EIR.

SAL00015-29

Comment:

- The Supplement fails to provide an adequate analysis of the noise impacts on El Segundo of the proposed reconfiguration of the southern runway complex including shifting Runway 25L about 50 feet farther south towards the residences of El Segundo. This is important because El Segundo has urged a serious consideration of the alternative design of an "end-around" taxiway rather than the centerline taxiway that is proposed. Details of the proposed plan must be clarified for adequate analysis. In order to evaluate the comparative noise impacts, a single event noise analysis of individual takeoffs and landings under each design must be done. In addition, the Supplement fails to provide enough information to develop adequate mitigation measures to lessen the significant adverse noise impacts of this aspect of the plan. See Attachment 7.

Response:

Noise impacts on El Segundo are addressed in Section 4.1, Noise, and Section 4.2, Land Use, of the Draft EIS/EIR and Supplement to the Draft EIS/EIR. Supporting technical data and analyses are provided in Appendix D and Technical Report 1 of the Draft EIS/EIR and Appendix S-C and Technical Report S-1 of the Supplement to the Draft EIS/EIR. Mitigation measures for LAX Master Plan alternatives are presented in Sections 4.1, Noise, and 4.2, Land Use, of the Supplement to the Draft EIS/EIR, with supporting information in Appendix SC and Technical Report S-1. The commentor is referred to the tables presented in Appendix S-C which indicate the LAmass noise to which various sites in El Segundo would be exposed by the No Action and Alternative D alternatives. The distance between locations in El Segundo and the aircraft operating under either alternative would differ by 50 feet or less. At the distances from the centerline under either alternative and the nearest residential location in El Segundo, the noise level differences of any single event would be less than 3/10s of a decibel. The average adult cannot distinguish between the noise levels of discrete events if the difference is less than three decibels. Consequently, there would be no audible distinction between single events of the same aircraft using either the south runway of Alternative D or the south runway in its present location. Please see Section 6, Single Event Noise Analysis in Appendix S-C1, Supplemental Aircraft Noise Technical Report, of the Supplement to the Draft EIS/EIR regarding establishment of thresholds. Additionally, single event impacts for a variety aircraft are identified in Section 6, Typical Noise Footprints of the Operating Fleet of Appendix D, Aircraft Noise Technical Report, of the Draft EIS/EIR. Please see Response to Comment SAL00015-327 and SAL00015-328 regarding end around taxiways.

SAL00015-30

Comment:

- There are numerical discrepancies between the different tables used in the Master Plan and Supplement to list the assumed fleet mix. The fleet mix used for noise analysis must be clarified. The discrepancies in assumptions may result in understating noise impacts. See Attachment 7, p.10.

Response:

The noise analysis is based on the SIMMOD runs that were used in the LAX Master Plan and LAX Master Plan Addendum. The basis for the discrepancies between Design Day Operations and Average Annual Day operations are explained in Section 3, Future Aircraft Operating Conditions of Appendix, S-C1, Supplemental Aircraft Noise Technical Report of the Supplement to the Draft EIS/EIR. The simulation modeling results, used to develop input to the INM, reflect the combination of all weather and

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service level conditions present during the forecast year of operation. The ratios between the resulting Design Day operations and the average annual level of operations, for each user group and alternative, were applied to reduce the number of operations to Design Day operations output from the simulation modeling to Average Annual Day operational levels used as input to the INM. Therefore, it does not understate noise impacts. Additionally, Table S7, 2015 Average Annual Day Operations and Fleet Mix Alternative D of Appendix S-C1, Supplemental Aircraft Noise Technical Report acknowledges that totals may not add up to 100 percent due to rounding.

SAL00015-31

Comment:

- Because, as detailed elsewhere in these comments, the Supplement incorrectly analyzes the capacity of Alternative D, it consequently also fails to disclose the full noise impacts of implementation of that plan. The greater number of passengers that could actually be served by the airport under Alternative D translates directly into increased traffic, leading to increased noise.

Response:

Please see Response to Comment SAL00015-11 regarding the passenger activity level defined under Alternative D. Please also see Response to Comment SPC00292-17 regarding how the Draft EIS/EIR and Supplement to the Draft EIS/EIR evaluate a reasonable range of alternatives as required by the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA).

SAL00015-32

Comment:

2. Land Use

The Supplement's analysis of land use impacts repeats many of the same problems we identified in our comments on the Draft EIS/EIR. As such, the comments presented in our September 2001 letter remain salient and apply to the Supplement's analysis of Alternative D. In addition, we note that the Supplement's land use analysis is largely based on the conclusions reached in the noise impacts analysis section. See, e.g., Supplement at 4-85. A complete analysis and critique of the Supplement's noise impacts analysis section is presented in the preceding section of this letter and Attachment 1, and will not be repeated here. We note, however, that the significant issues identified with regard to noise impacts undermine the Supplement's analysis of land use impacts.

Response:

Comment noted. Please see Responses to Comments AL00033-82 through AL00033-98, and SAL00015-23 through SAL00015-31 and SAL00015-109 through SAL00015-155 below.

SAL00015-33

Comment:

Additionally, we have identified the following problems and issues raised by the Supplement's analysis of land use impacts.

- The Supplement properly acknowledges that Alternative C would be inconsistent with the 2001 SCAG RTP, which provides for no expansion at LAX. See Supplement Technical Report S-1 at 68; Supplement at 4-151. The same would be true for Alternative D if it is not modified to reduce its capacity, which, as designed, exceeds 78 MAP. The Supplement fails to acknowledge, however, that this inconsistency translates into a potentially significant environmental impact. Some of the physical manifestations of this impact would include greater noise, traffic, and air quality impacts. The Supplement should acknowledge the fact that Alternative D, as well as C, conflicts with the RTP, and that RTP inconsistency constitutes a significant impact. It should propose mitigation and/or alternatives to address that impact.

Response:

The design constraints associated with Alternative D are intended to provide for a future level of aviation activity that would be similar to what would occur under the No Action/No Project Alternative which is generally consistent with the 2001 RTP. These limitations at LAX would encourage the growth of aviation activity at airports other than LAX as specified in the 2001 RTP. Please see Topical Response TR-MP-2 for a discussion of what LAWA has done to ensure consistency between the LAX Master Plan and SCAG RTP.

SAL00015-34

Comment:

- The Supplement correctly acknowledges that development of the Intermodal Transportation Center ("ITC") on the vacant land previously slated for development as Continental City would preclude development of that land as provided in the Los Angeles General Plan. Supplement at 4-195 to 4-196. Specifically, the Continental City site is designated as a "Regional Center" development site in the Los Angeles General Plan Framework Element (excerpt attached hereto as Attachment 12). Regional centers are intended to contain a diversity of uses (office, retail, health facilities, entertainment, etc.) and to "serve as a focal point of regional commerce, identity and activity." Attachment 12. The Supplement concludes that the proposal to develop the Continental City site as an ITC rather than a regional center is not significantly inconsistent with the General Plan and would not require a general plan amendment. As support for this conclusion, the Supplement points to two aspects of the proposed ITC: (1) its focus on multi-modal transportation and (2) its promotion of day and night activities on the site. While it is certainly true that these are secondary characteristics of a regional center, they are not the sole, most important or defining characteristics. See Attachment 12. As such, they do not, in and of themselves, render the ITC (an aviation serving use) consistent with the "Regional Center" general plan designation. The Supplement should therefore acknowledge that the ITC is inconsistent with the general plan.

Response:

The discussion on page 4-196, in Section 4.2, Land Use, of the Supplement to the Draft EIS/EIR did not conclude that a general plan amendment would not be required. As shown on Figure S4.2-15 of the Supplement to the Draft EIS/EIR, development of the ITC at the Continental City site would require a general plan amendment to adjust the Westchester-Playa del Rey Community Plan boundaries to reflect the development of airport-related uses within the LAX Plan. As stated on page 4-165 of the Supplement to the Draft EIS/EIR, there would also be other amendments required to the City of Los Angeles General Plan Framework Element for consistency. Therefore, the commentor is correct that the ITC is not consistent with the current General Plan designation. However, consistent with the methodology to evaluate plan consistency presented in Section 4.2.2 of the Draft EIS/EIR, the development of a use other than a Regional Center at the Continental City site was not considered significant in the analysis of plan consistency since this plan conflict would not result in a physical impact on the environment and would not be wholly inconsistent with the policy goals of the Framework Element Regional Center designation.

SAL00015-35

Comment:

- The Supplement deletes from consideration those land use/noise mitigation measures now being evaluated as part of the Community Noise Roundtable Program (14 C.F.R. Part 150 and 161 flight procedures). Supplement at 4-198. The deletion is improper. LAWA and the FAA have a legal obligation to include those potentially feasible mitigation measures in the EIS/EIR for the Master Plan.

Response:

The deletion from the Draft EIS/EIR that is referenced by the commentor stated that LAWA would evaluate potential costs and benefits of new noise-mitigation flight procedures and operational rules and regulations, pursuant to FAR Parts 150 and 161, and in cooperation with the FAA, airport users and surrounding communities. As stated on page 4-198 of the Supplement to the Draft EIS/EIR, this portion of mitigation MM-LU-1 was deleted since this study is currently being conducted by LAWA as part of the LAX Community Noise Roundtable Program. However, mitigation measures that incorporate the

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requirements of FAR Parts 150 and 161 were included in Sections 4.1, Noise and 4.2, Land Use of the Draft EIS/EIR and Supplement to the Draft EIS/EIR.

FAR Part 161 is incorporated into mitigation measure MM-N-5 which states that a Part 161 Study shall be initiated to seek Federal approval of locally-imposed restrictions on departure to and approaches from the east when over-ocean procedures are in effect. Further analysis of land use compatibility under Part 150, including the effectiveness of mitigation that would result from mandatory over-ocean procedures under Part 161 is provided in Section 6.1.3, of Appendix S-C1, Supplemental Aircraft Noise Technical Report and Chapter 4 of Technical Report S-1, Supplemental Land Use Technical Report of the Supplement to the Draft EIS/EIR.

SAL00015-36

Comment:

- The Supplement includes mitigation measures that would require LAWA to conduct research regarding the impact of aircraft noise at various levels on learning by schoolchildren. Supplement at 4-210 (MM-LU-3). Another mitigation measure would require LAWA to provide sound insulation to schools found to exceed a threshold of significance developed based on the results of that study. Supplement at 4-210 (MM-LU-4). These mitigation measures lack legally required specificity and enforceability. It is not clear, for example, what kinds of "industry experts" would, under the mitigation measures, be called on to conduct a "peer review" of and "accept" the study results. Would those experts be specialists in learning or aviation noise? How would the experts be selected? What would the time frame be for completion of the study? Would elements of the Master Plan be stayed pending results of the study? It is also unclear what LAWA would be obligated to do regarding noise in schools if the experts conducting the peer review of the study cannot agree regarding what the threshold of significance should be. The mitigation measures should be revised to answer the above questions and include a mechanism for resolving such potential disagreement among experts. That mechanism should be conservative and err on the side of caution and reducing noise impacts in the affected schools.

Response:

Comment noted. The commentor is accurate in paraphrasing the identified mitigation measures. The commentor appears to be referencing page 4-210 of the Supplement to the Draft EIS/EIR, mitigation measure MM-LU-3, Conduct Study of the Relationship Between Aircraft Noise Levels and the Ability of Children to Learn which states:

Current studies of aircraft noise and the ability of children to learn have not resulted in the development of statistically reliable predictive model of the relative changes in aircraft noise levels on learning. Therefore, a comprehensive study shall be initiated by LAWA to determine what, if any, measurable relationship may be present between learning and the disruptions caused by aircraft noise at various levels. An element of the evaluation shall be the setting of an acceptable replacement threshold of significance for classroom disruption by both specific and sustained aircraft noise events. Experts to conduct the study would be selected by LAWA through a competitive solicitation which reviews the qualifications of each proposing expert (team of experts). Among the qualifications would likely be substantial experience in similar efforts, such as that cited in the references related to single event impacts on school situations. The study should be conducted soon after the approval of the Supplement to the Draft EIS/EIR.

As stated in MM-LU-3 and presented in Sections 4.1, Noise and 4.2, Land Use of the Supplement to the Draft EIS/EIR, the study to determine noise levels that affect the ability of children to learn would be based on noise levels that result in disruption of speech in a classroom setting, rather than an evaluation of learning abilities over time. The methodology used to determine the relationship between levels of noise and children's ability to learn will be one of the first elements to be developed by educational and psychoacoustical specialists retained by LAWA to conduct the study. The specific schools selected for inclusion in the study will likely be selected from among those now impacted by aircraft noise and those that are not known to be adversely effected by aircraft noise. It is not anticipated that elements of the Master Plan would be stayed, but rather schools significantly impacted by single event noise impacts will receive sound insulation to reduce interior noise levels to the applicable threshold noise level, unless the school is subject to an existing aviation easement. The Master Plan improvements would continue concurrently with the Study in MM-LU-3. Schools that are

currently eligible for acoustical treatment as part of LAWA's ANMP will continue to be acoustically treated.

SAL00015-37

Comment:

- The Supplement indicates that the 1988 ANMP is "currently" being updated and "is scheduled for completion in the second quarter of 2003." Supplement at 4-87. Given that the second quarter of 2003 has now passed, this information appears to be out of date. The Supplement should have provided more complete information regarding the 2003 ANMP and should have analyzed the extent to which the ANMP comports with the requirements outlined in the mitigation measures described in the Supplement.

Response:

The 1998 ANMP (not 1988 ANMP) is referenced on page 4-87 in Section 4.2, Land Use, of the Supplement to the Draft EIS/EIR. An update to the number of units that have received sound insulation or have been acquired within the composite ANMP as of June 2002, is provided on page 4-88 of the Supplement to the Draft EIS/EIR. According to LAWA's Noise Management Section this is the most recent composite information available. Since preparation of the Supplement to the Draft EIS/EIR, the 2001 ANMP has been released. The 2001 ANMP includes progress in implementing the ANMP through December 2001. However, the information presented in Section 4.2, Land Use of the Supplement to the Draft EIS/EIR still represents the most currently available information about the status of achieving land use compatibility under the ANMP. LAWA's Noise Management Section is currently preparing the 2003 ANMP which is anticipated to be available by June 2004. Components of the 2001 ANMP relating to ANMP implementation are presented in Subtopical Response TR-LU-3.8 and TR-LU-3.10.

The Supplement to the EIS/EIR analyzed the extent to which the current ANMP agrees with the requirements outlined in mitigation measures MM-LU-1, MM-LU-2, MM-LU-3, MM-LU-4, and MM-LU-5. Subtopical Response TR-LU-3.14 addresses how approval of the LAX Master Plan would affect the ANMP. Specifically, MM-LU-1 would revise the current ANMP to include the following: accelerate the current ANMP prior to the inclusion of newly eligible residential and noise sensitive uses, amend the ANMP to include libraries, and expand the ANMP boundaries to include those residential and noise-sensitive uses located outside the current ANMP boundaries (based on the 1992 fourth quarter 65 CNEL noise contour) that would be newly exposed to 65 CNEL noise levels as a result of Alternatives A, B, C, and D. The ANMP boundary and incompatible uses within the ANMP boundary was presented in Technical Report 1, Land Use Technical Report, of the Draft EIS/EIR. Progress to date in achieving land use compatibility under the ANMP and challenges in implementing the ANMP over time are summarized in Subtopical Response TR-LU-3.10. MM-LU-1 was based, in part, in removing current barriers that have slowed the progress of implementing the ANMP. MM-LU-2 would expand the boundaries of the ANMP to include residential uses newly exposed to high single event noise levels that result in nighttime awakening and are outside the ANMP boundaries based on the Master Plan alternative that is ultimately approved. MM-LU-3 and MM-LU-4 would establish a replacement threshold for single event noise levels that result in classroom disruption based on the Master Plan alternative that is ultimately approved and incorporate eligible schools into the ANMP. MM-LU-5 would upgrade and expand the existing noise monitoring system, which is used to validate and update the ANMP boundaries.

SAL00015-38

Comment:

3. Surface Transportation

The Supplement fails to disclose the severity of the impacts of the Master Plan alternatives, and Alternative D in particular, on increased traffic, as well as the noise and air pollution generated by that traffic. The traffic analysis contains numerous analytical errors, omissions and flawed assumptions, which are documented in detail in Attachment 2 to this letter. Among those problems are the following:

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Response:

Comment noted. Surface transportation impacts were addressed in Section 4.3, Surface Transportation, of the Draft EIS/EIR and Supplement to the Draft EIS/EIR, with supporting technical data and analyses provided in Technical Reports 2 and 3 of the Draft EIS/EIR and Technical Reports S-2a and S-2b of the Supplement to the Draft EIS/EIR. In addition, please see Response to Comment AL00043-3 regarding proposed traffic improvements for off-airport roadways and Topical Response TR-ST-2 regarding surface transportation analysis methodology.

SAL00015-39

Comment:

- The Supplement continues the use of 1996 traffic data as the baseline for purposes of evaluating the severity of traffic impacts, and fails to respond to numerous previous comments pointing out flaws in the baseline calculations. The Supplement fails to adequately document why the use of 7-year-old traffic data as the environmental baseline suffices under CEQA and NEPA.

Response:

Appendix S-B discusses the baseline update. For additional information, please see Topical Response TR-ST-2 and, in particular, Subtopical Response TR-ST-2.12.2 regarding a summary of 1995 model validation and 1996 model update.

SAL00015-40

Comment:

- The Supplement substantially understates the traffic impacts of Alternative D due to its reliance on the artificially low figure of 78.9 million annual passengers (MAP), which is based on unrealistic and unsupported assumptions and is, based on our independent analysis, substantially lower than the actual gate capacity of Alternative D. Each additional passenger served translates to an increase in the number of airport-related trips and the resultant environmental impacts.

Response:

Comment noted. It is unrealistic to assume that each gate would be occupied by the largest aircraft feasible carrying a 100 percent load factor all of the time, which seems to be implied by the commentor. The capacity of the Airport under Alternative D is consistent with the No Action/No Project Alternative. Please see Response to Comment SAL00015-11 regarding the passenger activity level defined under Alternative D. Please also see Topical Response TR-ST-6 regarding neighborhood traffic impacts.

SAL00015-41

Comment:

- There are substantial numerical errors and inconsistencies in the Supplement. For example, the traffic analysis uses 5,953 daily construction employee trips (Supplement Table 4.3.2-9), while based on the 5,992 total construction personnel disclosed in Chapter 4.20 of the Supplement, more than twice that number of trips (11, 273) would be generated.

Response:

As described in Section 7.7 of Technical Report S-2b of the Supplement to the Draft EIS/EIR, one of the policies to address construction-related employee traffic impacts is to establish remote parking locations for construction employees park and then ride van pools, carpools, or shuttle buses to the LAX area rather than driving their own vehicles to work. The locations of these remote sites have yet to be determined, but they could be as far as 50 miles from LAX. Because of the establishment of these remote park-and-ride lots, it is expected that more than 5,000 daily employees will arrive in the LAX area in fewer than 3,000 vehicles.

SAL00015-42**Comment:**

- The analysis of construction traffic fails to take into account the impacts of construction trips during many high volume traffic hours during the day, limiting its discussion to a single peak morning and afternoon hour and therefore failing to disclose significant impacts during other times. Many other impacts of construction activity are similarly not disclosed and therefore inadequately mitigated.

Response:

The impacts of construction traffic were analyzed for the times of the day that represented the worst case conditions. To determine if any construction-related impacts would occur outside the three typical peak hours, an analysis was conducted to estimate traffic conditions on select roadways during the two construction peak hours. For further details of this analysis, please see Chapter 4.3.2 of the Supplement to the Draft EIS/EIR and, in particular, Section 4.3.2.2, "General Approach and Methodology."

SAL00015-43**Comment:**

- The analysis of freeway impacts fails to take into account the existing levels of congestion on the I-105 and I-405 freeway mainlines. The Supplement fails to analyze numerous constricted and congested segments on these freeways. The ramp improvements recommended as mitigation will fail to improve the freeway congestion caused by this project unless capacity is increased on the segments of the freeway that are already operating at or above capacity. The Supplement's failure to acknowledge this results in its erroneous conclusion that freeway impacts are less than significant.

Response:

The project is not responsible for resolving existing congestion on the freeway system. Only project-related impacts to these facilities need to be addressed. The Supplement to the Draft EIS/EIR provides details of this traffic study in Section 6, Congestion Management Program Analysis, of Technical Report S-2b.

Project Study Reports (PSRs) for the proposed I-105 and I-405 Interchanges will be completed for approval by Caltrans and the FHWA at a later date. The PSRs will provide a more detailed level of analysis regarding the operation of the freeways with these planned improvements

SAL00015-44**Comment:**

- Errors in the analysis of intersections located in El Segundo (including, for example, incorrect assumptions regarding existing turn lanes, omission of a driveway into LAX, incorrect signal phasing, and arbitrary volume adjustments) result in an inaccurate disclosure of traffic impacts and inadequate discussion of mitigation measures for many of those intersections.

Response:

The surface transportation impacts of the Master Plan alternatives were presented in Section 4.3.1, On-Airport Surface Transportation, and 4.3.2, Off-Airport Surface Transportation, of the Draft EIS/EIR and the Supplement to the Draft EIS/EIR. Please see Topical Response TR-ST-2 regarding surface transportation analysis methodology.

SAL00015-45**Comment:**

- The Supplement does not provide an adequate analysis of the phasing of construction of the improvements contemplated in Alternative D and the mitigation measures proposed, so that in several

3. Comments and Responses

cases it appears that mitigation measures will not be in place until years after the components of Alternative D that make the mitigation necessary. In addition, no traffic analysis was provided for 2005, making it doubly difficult to understand the impacts during interim years and to coordinate mitigation. This results in further failures to disclose the extent of the impacts during buildout of the project.

Response:

The construction schedule in Table S3-15 of the Supplement to the Draft EIS/EIR will be revised to begin the Offsite Roadway Improvements earlier. Certain project component roadway improvements, such as the widening of Aviation Boulevard and 111th Street adjacent to the ITC, are not included in the proposed construction period for the ITC. Traffic mitigations are not included in this table. The specific traffic mitigation measures which are expected to be in place prior to the opening of specific Alternative D projects that affect ground transportation were listed in Table S4.3.2-13 of the Supplement to the Draft EIS/EIR (now shown in Table F4.3.2-30 of the Final EIS/EIR).

SAL00015-46

Comment:

- The Supplement fails to remedy problems previously identified regarding calculations of future cumulative traffic conditions. It also fails to use current lists of pending local projects in its analysis of cumulative traffic impacts, apparently relying on the now outdated list that was utilized in the 2001 Draft EIS/EIR. As a result, the analysis of cumulative traffic impacts is not accurate and may omit significant effects.

Response:

Please see Response to Comment AR00003-21 regarding cumulative impacts.

SAL00015-47

Comment:

4. Social Impacts

a. The Supplement's Analysis of Employment and Socio-Economics Perpetuates the Same Flaws and Misconceptions as the Draft EIS/EIR.

The Supplement, like the Draft EIS/EIR, continues to imply that the economic growth of the Los Angeles region under the No Action/No Project Alternative would fall far short of the growth projected under Alternatives A, B, or C due to the fact that growth would be constrained at LAX itself under the No Action/No Project Alternative. Additionally, the Supplement now draws the same conclusion with regard to Alternative D, based on the assumption that Alternative D would limit growth at LAX to nearly the same extent as the No Action/No Project Alternative. As discussed in our prior comments, (September 2001 Comment Letter at 67-68), this conclusion is not sound because it fails to consider the regional growth that would be generated at other airports due to the growth constraints placed on LAX. The environmental analysis presented considers only the jobs and economic growth directly generated by LAX itself, rather than taking a region-wide approach that would consider jobs and other economic benefits generated at other regional airports under the regional airport approach. See CEQA Guidelines § 15064(d) (requiring that all reasonably foreseeable impacts receive consideration).

Moreover, the analysis of Alternative D, as well as the analysis of the other alternatives, does not take into account the post-September 11, 2001 security requirements at airports, which have added and will continue to add a substantial number of jobs in law enforcement and security at LAX and other airports. Supplement at 4-298, fn. 71. See Attachment 13 (news reports of substantial recent and proposed increases in security personnel at LAX). This, combined with the failure to consider regional growth due to constraints placed on LAX growth, indicates that the Supplement, like the Draft EIS/EIR, underestimates the growth that will occur under both the No Action/No Project Alternative and Alternative D, and renders the inter-alternatives analysis inaccurate.

Response:

Comment noted. The ability of other airports in the region to absorb air transportation demand that is not satisfied by one of the LAX Master Plan alternatives, including Alternative D, and the related economic effects were analyzed in Chapter 1, Regional Context, of the Draft EIS/EIR. See also Topical Response TR-RC-1 regarding the LAX Master Plan role in the regional approach to meeting demand. While LAX is subject to new security requirements post-September 11, 2001, as noted in the comment, these same requirements would apply to all of the LAX Master Plan alternatives considered in the Supplement to the Draft EIS/EIR, thus allowing a fair comparison among alternatives.

SAL00015-48

Comment:

b. The Supplement's Analysis of Relocation of Residences and Businesses Is Inadequate.

Although the Supplement's discussion of impacts due to the relocation of residences and businesses purports to consider demographic and economic changes that have occurred in the LAX region since the 1996 baseline year, its consideration of those changes is dismissive at best. The Supplement states that "in general, the differences between the 1990 and 2000 U.S. Census data do not reflect substantial demographic changes that would alter the analysis presented in the Draft EIS/EIR." Supplement at 4-303.

However, Table S2 of Appendix S-D reveals that not only has the minority population within the study area as a whole increased from 78% to 84% between 1990 and 2000, but the percentage of the population within the study area living below the poverty level has also increased from 18% to 23% in those ten years. Supplement Appendix S-D at 5. Under Alternative D, residential acquisition would generally occur in the Manchester Square area. In that census tract, CT 2774, the minority population was 90.29% of the total population in year 2000, with 27.11% of the total population living below the poverty level. Supplement at Appendix S-D, Table S3. Meanwhile, the Los Angeles Times recently reported that the median price for a home in Los Angeles County rose 23.3% between July 2002 and July 2003 from \$266,000 to \$328,000. "Home Sales Stay on Fire, Especially in Inland Empire" by Bonnie Harris, Los Angeles Times, August 21, 2003, attached as Attachment 14.

Response:

The sentence immediately preceding the above-referenced statement from page 4-303 in Section 4.4.2, Relocation of Residences or Businesses, of the Supplement to the Draft EIS/EIR read: "The potential for changes in census data to affect the environmental conclusions previously provided in the Draft EIS/EIR is discussed below in Section 4.4.2.3, Affected Environment/Environmental Baseline." In the discussion that followed (within subsection 4.4.2.3), the first two bullet points summarized demographic changes that occurred within both the study area as a whole and Census Tract 2780 (in which residential acquisition may occur depending on the alternative selected) between the 1990 and the 2000 Census. Because Master Plan implementation will necessitate residential acquisition in only one census tract, if at all, the residential relocation analysis focused on the demographic characteristics of that tract. The environmental justice analysis, on the other hand, which is provided in Appendix S-D of the Supplement to the Draft EIS/EIR and cited above, addressed issues associated with a broader geography and accordingly focused on the demographic characteristics exhibited throughout the study area as a whole. That analysis presented details of demographic changes and also concluded on page 6 of Appendix S-D that based on the methodology used to identify census tracts as minority and/or low-income, only two of 79 census tracts were newly defined as minority and/or low-income based on changes between the 1990 and 2000 Census.

To clarify, residential acquisition would not occur in the Manchester Square area as part of Alternative D. As was discussed in Section 4.4.2, Relocation of Residences or Businesses, of the Supplement to the Draft EIS/EIR, no residential acquisition is proposed for Alternative D. Acquisition currently underway within the Manchester Square neighborhood is occurring as part of a separate ongoing program, and will continue to occur independent of the Master Plan. Please see Topical Response TR-RBR-1 for further discussion of residential acquisition and relocation.

3. Comments and Responses

SAL00015-49

Comment:

Although the acquisition of residential properties within the Manchester Square neighborhood is an ongoing program, under Alternative D, the City of Los Angeles would accelerate this acquisition once the Master Plan has been approved in order to comply with the Master Plan's Construction Sequencing Plan. Supplement at 4-304. Accordingly, a largely minority population, nearly a third of whom are impoverished, would be forced into one of Los Angeles County's worst housing markets in decades. Although the Master Plan purports to address this potential affordable housing crisis through Master Plan Commitment RBR-1, this "commitment" merely defers mitigation. Id. at 4-305. Commitment RBR-1 states that LAWA will prepare a Residential and Business Relocation Plan and expand its current relocation program at some unspecified point in the future. Id. Given that the City of Los Angeles is supposed to move forward with acquisition and/or condemnation of the Manchester Square neighborhood as soon as the Master Plan is approved (Supplement at 4-304), it is obvious that the "Residential and Business Relocation Plan" should have been prepared as a part of this Draft EIR/EIS and absolutely must be prepared prior to the approval of the Master Plan. Deferral of this important mitigation defeats the purpose of the CEQA planning process which requires that all impacts and options for mitigation be evaluated prior to project approval. See CEQA Guidelines §§ 15002(a)(3), 15004(a), 15003(h).

Response:

The existing voluntary residential acquisition program in place for the Manchester Square and Belford areas commenced in Spring 1998. As discussed in Section 4.4.2, Relocation of Residences or Businesses, of the Draft EIS/EIR and Supplement to the Draft EIS/EIR, in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, a relocation plan is currently in place for the voluntary program (i.e., LAWA's Final Relocation Plan - Voluntary Residential Acquisition/Relocation Program for the Areas Manchester Square and Airport/Belford, dated June 2000 and referred to throughout the Draft EIS/EIR and Supplement to the Draft EIS/EIR as the Existing Relocation Plan). The Existing Relocation Plan requires that an adequate number of referrals to comparable decent, safe, and sanitary housing units be made available within a reasonable time prior to relocation, and that no occupant be required to move until such housing is available. The estimated completion timeframe for voluntary property acquisition is during calendar year 2005.

Alternative D does not propose to accelerate acquisition within Manchester Square and Belford in advance of the expected completion date. Rather, the Master Plan provides specificity as to the measures available to facilitate the ANMP land acquisition under LAWA's existing Voluntary Residential Acquisition/Relocation Program for Manchester Square and Belford, should they be necessary following Master Plan approval. As required by law, all relocation activities would comply with the provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended.

SAL00015-50

Comment:

Finally, although the Supplement attempts to address the acknowledged shortfall in real estate suitable for light industrial uses, the attempt relies upon too many vague and uncertain conditions. The Supplement identifies relocation impacts to light industrial uses as significant. Id. at 4-314. Through Mitigation Measure MM-RBR-2, the Supplement attempts to address these impacts by stating that LAWA will coordinate with the City of Inglewood and the County of Los Angeles to identify residential properties that could be acquired and converted for light industrial uses. Id. at 4-312. Not only has no such program yet been developed - thus continuing the EIS/EIR's trend of deferred mitigation - but such a program would rely on: (1) the existence of suitable residential properties; (2) the financial and practical ability to acquire them; (3) the ability to relocate residents, many of whom are low-income; (4) approval from the local jurisdictions to rezone residential properties for light industrial uses; and (5) the financial ability to construct light industrial facilities. None of these contingencies are provided for in the documents; they are not even discussed in detail. Such vague and uncertain mitigation does not support the Supplement's conclusion that project-level and cumulative relocation impacts would be less than significant with mitigation.

Response:

Please see Response to Comment AL00033-122 regarding relocation of businesses. As discussed therein, the Proposed Relocation Plan to be implemented by LAWA (refer to Appendix P to Chapter V of the Draft LAX Master Plan and Chapters 2.7 and 2.8 of the Draft LAX Master Plan Addendum) provides as many businesses as possible the opportunity to relocate onto the airport or into airport-owned developments. In addition, mitigation has been identified to further address potential impacts related to business relocation. The above-referenced Mitigation Measure MM-RBR-2, Relocation Opportunities through Aircraft Noise Mitigation Program (Alternatives A, B, C, and D), is based in part on existing plans by other jurisdictions. Separate from the LAX Master Plan, the City of Inglewood has a Redevelopment Plan under which residential uses considered incompatible with existing zoning and exposed to high noise levels are proposed to be acquired and redeveloped with a more compatible commercial or industrial use. These sites are considered by the City of Inglewood as "suitable residential properties." The areas referenced along Century Boulevard are located within the boundary of the existing ANMP program and may therefore be eligible for mitigation funding. Rezoning would not be problematic as properties within this area are already proposed for land use recycling by the City or are non-conforming residential uses within areas designated for business park or industrial use. The financial feasibility of the measure is validated and enhanced by the location of the properties within an approved Redevelopment Plan area. As stated within Mitigation Measure MM-RBR-2, areas under the City of Inglewood General Plan and Redevelopment Plan that are proposed for land use recycling along Century Boulevard shall be given high priority. Furthermore, Mitigation Measure MM-LU-1, Implement Revised Aircraft Noise Mitigation Program (Alternatives A, B, C, and D), expands the existing ANMP and, among other things, allows for increased annual funding by LAWA for land use mitigation as well as the provision by LAWA of additional technical assistance to local jurisdictions to support more rapid and efficient implementation of their land use mitigation programs. Such efforts would promote the provision of relocation assistance in compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, in the most timely and efficient manner possible.

SAL00015-51

Comment:

c. The Supplement's Analysis of Environmental Justice Is Inadequate and Continues to Rely On Much of the Same Flawed Reasoning and Meager Factual Support As the Draft EIS/EIR.

Comments we presented in our September 2001 Comment Letter on the Draft EIS/EIR regarding environmental justice remain in force with regard to this Supplement. For example, there continues to be a lack on information regarding certain health risks associated with living so close to a major airport, especially concerning chronic respiratory illnesses such as asthma, which are more prevalent among populations disproportionately affected by LAX, such as minority and low-income communities. Additionally, this section of the Supplement relies too heavily on the purported "benefits" that will be provided by the Master Plan, without offering any commitments or mitigation measures to make those benefits an enforceable reality. Supplement at 4-339 to 4-341.

Response:

Please see Topical Response TR-EJ-1 regarding potential air quality and health risk impacts on low-income and minority communities. Although the Supplement to the Draft EIS/EIR indicates there would be potential for disproportionately high and adverse air quality related health effects among minority and low-income populations under the build alternatives, it also states that any long-term studies that might allow for quantification of such effects would be well outside of the scope of the EIS/EIR. Part of the difficulty in quantifying such effects is the challenge of distinguishing LAX emissions from other sources such as the Chevron Oil Refinery, the I-405 freeway, and the I-105 freeway. Regarding over reliance on benefits, these benefits are provided in addition to, and only after applying and considering all feasible mitigation measures, including the comprehensive mitigation measures for air quality provided in Chapter 5, Environmental Action Plan, of the Final EIS/EIR. These mitigation measures and the environmental justice benefits would be enforceable as conditions of project approval and through implementation of a Mitigation Monitoring and Reporting Program.

3. Comments and Responses

SAL00015-52

Comment:

Moreover, although the Supplement acknowledges that Alternative D will expose three schools that are located within minority and/or low-income communities to greatly increased noise, (Supplement at 4-324), rather than providing mitigation to directly address that identified impact, the Supplement merely proposes to "study" whether such exposure is a bad thing. Id. at 4-338 (MM-LU-3). Studies regarding the impact of noise on learning already exist, and indeed the Supplement states that LAWA has evaluated recent research literature. Supplement at 4-11. See, in addition, "A Prospective Study of Some Effects of Aircraft Noise on Cognitive Performance in Schoolchildren," *Psychological Science*, September 2002 (Vol. 13, No. 5), by Staffan Hygge, Gary W. Evans, and Monika Bullinger, attached as Attachment 15; see also Exhibits 4.1(A) and 4.1(B) to our September 2001 Comment Letter. There is no reason for LAWA to defer mitigation and reinvent the wheel by conducting its own studies when the information on impacts of severe noise on the learning of school children already exists. Instead, LAWA should commit to providing actual mitigation - at a minimum, sound insulation - to the impacted schools without delay. Without adequate mitigation to address this identified significant impact, the EIS/EIR cannot lawfully be approved. CEQA Guidelines § 15091(a)(1).

Response:

Comment noted. The commentor is accurate in that Alternative D of the Supplement to the Draft EIS/EIR will expose three additional public schools to increased single event noise levels. Under Mitigation Measure MM-LU-1, Implement Revised Aircraft Noise Mitigation Program (Alternatives A, B, C and D), LAWA will continue to acoustically treat those schools identified in the ANMP.

SAL00015-53

Comment:

5. Induced Socio-Economic (a.k.a. Growth-Inducing) Impacts.

The Supplement's analysis of induced socio-economic (growth-inducing) impacts continues the inaccurate logic of the Draft EIS/EIR: despite the fact that Alternative D will involve massive construction and provide numerous economic benefits to the LAX region, it will not induce any growth. Instead, according to the Supplement, Alternative D will actually lead to a decrease in jobs and population due to "productivity increases" in the manufacturing sector. For the reasons set forth in our September 2001 Comment Letter, we reject to this conclusion. See September 2001 Comment Letter at 74-5.

Response:

Comment noted. Please see Response to Comment AL00033-137, Response to Comment SPHPD00004-7, and Response to Comment SAL00004-11 regarding the analysis of growth inducement impacts, including impacts specifically associated with Alternative D.

SAL00015-54

Comment:

Additionally, although the Supplement notes that through property acquisition, Alternative D will "deplete the total supply of industrial space in the LAX vicinity by approximately 17 acres..." and that there is currently only 500,000 square feet of vacant industrial space in the vicinity, the Supplement nevertheless concludes that this will not be a significant growth-inducing impact. Supplement at 4-353 to 4-354. The Supplement bases this conclusion on reasoning that is not only faulty, but defies established legal principles of environmental review. To wit: because the shortfall in available industrial space will likely lead other jurisdictions to rezone land for industrial uses and because those rezones will trigger discretionary approval, and thus environmental review, by the local jurisdictions, there is no significant impact here. Supplement at 4-354 ("To the extent that induced demand in other jurisdictions would exceed available supply within industrially designated and zoned land, proposed industrial development in those instances would be subject to discretionary approval by these jurisdictions and,

therefore, would require environmental review. The potential for project-induced demand for industrial development to result in impacts is, therefore, considered to be less than significant.").

This is not how CEQA and NEPA work. If this Project will trigger growth, whether directly or indirectly, then the impacts of that growth must be analyzed now, not at some later date in some later environmental review. See e.g., Pub. Res. Code § 21100(b)(5); *City of Antioch v. City Council of Pittsburg*, 187 Cal.App.3d 1325, 1337 (1986). It does not matter, for the purposes of the environmental review for the Master Plan, whether the specific future projects induced by this Project will be subject to later environmental review; the impacts of such growth inducement must be identified and analyzed here. CEQA mandates that environmental impacts be identified and analyzed in the EIR, not at a later date. See *Sundstrom v. County of Mendocino*, 202 Cal.App.3d 296, 307 (1988) (holding a negative declaration invalid where a county approved a project while postponing the resolution of uncertainties regarding environmental impacts to a later date).

Furthermore, although the Supplement states that "Alternative D could result in greater intensification of existing industrial properties in the area or a greater potential for the conversion or recycling of other land uses," (Supplement at 4-354) this is not identified as a significant impact and no further analysis is provided. This conclusion is simply left hanging. This lack of follow-through is not acceptable for the purposes of environmental review. For all of these reasons, the Supplement's analysis of induced socio-economic impacts is as inadequate and flawed as the Draft EIS/EIR's.

Response:

It was acknowledged in Section 4.5, Induced Socio-Economic Impacts (Growth Inducement), of the Supplement to the Draft EIS/EIR that the anticipated increase in cargo processed through LAX under Alternative D has the potential for growth-inducing effects for warehousing and industrial uses in the surrounding area. As stated, such increased demand could result in the redevelopment and intensification of existing industrial properties or the recycling of other existing uses. However, the mere occurrence of new demand for industrial property would not constitute a significant impact in and of itself. Induced socio-economic impacts were defined in part in Section 4.5, Induced Socio-Economic Impacts (Growth Inducement), as significant impacts on the environment associated with an induced need for development of substantial new land uses and/or public facilities or infrastructure resulting from directly or indirectly fostered population or economic growth. Furthermore, it is expected that much of the potential future demand could be met in nearby areas already targeted for expanded industrial development. For example, the City of Inglewood has plans to expand industrial operations and employment in the area.

Please see Response to Comment AL00033-137, Response to Comment SPHPD00004-7, and Response to Comment SAL00004-11 regarding the analysis of growth inducement impacts, including impacts specifically associated with Alternative D.

SAL00015-55

Comment:

6. Air Quality

The Supplement provides some new analysis of air quality impacts, apparently in response to prior comments. However, it still fails to address many of the inadequacies identified in prior comments, fails to include adequate mitigation measures, and fails to disclose the severity of the air emissions impacts of the construction and operations of the Master Plan alternatives. The air quality analysis contains numerous analytical errors, omissions, inconsistencies, and flawed assumptions. These are documented in detail in the technical comments prepared by Dr. J. Phyllis Fox and Petra Pless, included as Attachment 3 to this letter. As these reports indicate:

Response:

Comment noted.

3. Comments and Responses

SAL00015-56

Comment:

- The Supplement fails altogether to analyze PM 2.5 emissions, the major component of particulate emissions from airport operations, despite currently applicable CARB standards.

Response:

Please see Response to Comment PC02585-9 regarding PM2.5 calculations.

SAL00015-57

Comment:

- The Supplement utilizes an outdated PM 10 standard, rather than the currently applicable and more stringent CARB standard; this results in understatement of significant impacts.

Response:

Section 4.6, Air Quality, of the Supplement to the Draft EIS/EIR notes the establishment of new PM2.5 standards and lower PM10 standards. As noted in Section 4.6.6, concentrations from on-airport and construction related sources were found to be significant. Please see Response to Comment SPC00296-34 regarding PM standards.

SAL00015-58

Comment:

- The Supplement substantially understates background ambient concentrations of air pollutants by deviating from regulatory guidelines and standard practice, resulting in failure to disclose violations of ambient air quality standards.

Response:

The linear rollback method for estimating future air pollutant concentrations is a widely accepted technique. Future background concentrations were tabulated according to this method as outlined in Chapter II.3 of the modeling protocol titled "LAX Master Plan EIS/EIR Air Quality Modeling Protocol for Criteria Pollutants" (see Draft EIS/EIR Technical Report 4 Attachment A). This protocol was reviewed by SCAQMD, and comments and suggestions from SCAQMD were incorporated into the protocol prior to conducting the air quality analyses presented in the Draft EIS/EIR and the Supplement to the Draft EIS/EIR. The linear rollback method was indeed used by SCAQMD in the 1997 AQMP and the 2003 AQMP to estimate future background concentrations in the South Coast Air Basin. Because this Comment was offered as a summary of Comment SAL00015-248, also please see Response to Comment SAL00015-248.

SAL00015-59

Comment:

- Without providing any explanation in the text, the Supplement provides a completely new analysis of the air quality impacts of construction activities for the airport improvements under consideration. The new construction emissions calculations result in substantially lower conclusions regarding emissions. They are not adequately supported in the documents, and appear to utilize invalid methodology and numerous incorrect assumptions which result in understating the construction impacts.

Response:

The air quality analysis contained in the Supplement to the Draft EIS/EIR utilizes conservative assumptions and methodologies. First, Alternative D requires significantly less construction activities than the previously proposed alternatives. Therefore, Alternative D requires fewer pieces of construction equipment, which in turn, reduces emissions. The current construction analysis is based

on CARB off-road emission factors for each actual piece of equipment assumed to be working at the site throughout all phases of project construction.

The same assumptions relative to hours of operation are contained in all Alternatives. All equipment is assumed to be operating five days per week, eight and one half hours per day for the most conservative approach possible.

Please see Appendix S-E of the Supplement to the Draft EIS/EIR for a more detailed explanation of construction-related air quality impacts associated with the proposed project.

SAL00015-60

Comment:

- The Supplement utilizes an updated model (EDMS 4.11) to develop projected air pollutant emissions for the baseline and all Master Plan alternatives. It fails to use a consistent approach however. Instead, it calculates the emissions for Alternative D using the updated model but then, rather than calculating emissions for all alternatives under the new model, uses a ratio to "adjust" the emissions projections for other alternatives. This approach is scientifically flawed and makes comparisons between the emissions of the alternatives meaningless.

Response:

Please see Response to Comment SAL00013-120 regarding the ratioing method.

SAL00015-61

Comment:

- The Supplement fails to provide a meaningful analysis of total air emissions impacts. Instead, it improperly piecemeals the analysis by reporting separately the on-airport, construction, and off-airport impacts.

Response:

Please see Response to Comment AF00001-24 regarding combining emission inventories and concentration results for comparison against significance thresholds.

SAL00015-62

Comment:

- The Supplement uses unrealistic and unsupported projections regarding the effectiveness of mitigation measures, resulting in further understatement of impacts.

Response:

Comment noted. The Supplement to the Draft EIS/EIR contains a voluminous list of construction- and operation-related mitigation measures that will be implemented as part of the proposed project. Many of the mitigation measures being implemented do not have a specific control efficiency assigned to them by the SCAQMD, CARB or USEPA. Therefore, emission reductions through the implementation of all feasible mitigation measures will most likely be much higher than is currently assumed through the air quality analysis. The Supplement to the Draft EIS/EIR has accurately disclosed all project-related air quality impacts.

SAL00015-63

Comment:

- The proposed air quality mitigation measures are inadequate because the proposed measures are of dubious value in reducing air emissions, many are impermissibly vague and not adequately enforceable, numerous feasible mitigation measures are omitted and the measures provided are not enforceable. Please see the lists of proposed mitigation measures (which have been adopted

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elsewhere) provided in Attachment 3. Particularly given the nonattainment status of the South Coast Air Basin with regard to ozone, CO and PM10, LAWA must act more aggressively in utilizing effective and enforceable air quality mitigation measures.

Response:

LAWA has included all feasible mitigation measures in the Supplement to the Draft EIS/EIR for the proposed project. Any significant new mitigation measures proposed by the commentor have been evaluated and included in the Final EIS/EIR, where feasible and appropriate.

Please see Response to Comment SAL00015-277 and SAL00015-278.

SAL00015-64

Comment:

- The Supplement, like the Draft EIS/EIR before it, fails to provide sufficient data for the technical consultants to check the calculations. We have submitted formal records requests for the necessary data (Attachment 16), and have been assured that the information will be provided, but have not received the materials in time to utilize them for these comments. As soon as possible after receiving the requested documents, we will submit supplemental comments on the Supplement analysis, as appropriate.

Response:

LAWA received a Public Information Act request from Shute, Mihaly & Weinberger LLP dated October 16, 2003, but received by LAWA on October 21, 2003. LAWA responded to this request in a letter dated November 5, 2003. The information made available pertaining to both the on-airport and off-airport air quality analyses included the following information:

-On-Airport Criteria and Toxic Air Pollutant Emission and Dispersion Files and Model Results: EDMS 3.2 and 4.11, ISCST3, and ISC-OLM model input (including meteorological data) and results for analysis of emissions and dispersion from Alt D aircraft and other operational sources summarized in the LAX Master Plan Supplement to the Draft EIS/EIR.

-Off-Airport Traffic Air Quality Files: CAL3QHC model input/output and EMFAC2002 criteria pollutant emission factors files as well as regional traffic emission calculation spreadsheets.

-LAX Monitoring and SCAQMD Monitoring Data: used in determining existing background air quality data around LAX.

The data provided included emission inventories for aircraft, ground support equipment, stationary, and on-airport traffic sources as well as dispersion results for aircraft, ground support equipment, stationary, on-airport traffic, and off-airport traffic sources. Off-airport emission and dispersion data files were also made available. The dispersion analysis of 1-hour NO₂ for all operational and construction sources was provided in the OLM model files.

LAWA received a second Public Information Act request from Shute, Mihaly & Weinberger LLP dated and received on October 28, 2003. LAWA responded to this request on three separate dates.

LAWA provided the following information pertaining to Item #1 in a letter dated November 6, 2003:

-Construction Criteria Pollutant Emissions and Dispersion Files

The data provided included emission inventories for construction sources. Construction emission and dispersion data files were also made available.

LAWA provided the following information pertaining to Item #2 in a letter dated November 10, 2003:

-Spreadsheets used to estimate storm water runoff, pollutant loadings and concentrations, impervious areas, and surface water recharge volumes.

Item #3 requested copies of two reports that are voluminous and contained large maps and exhibits. LAWA staff contacted Shute, Mihaly & Weinberger LLP to inform them of a delay in delivery of these documents. Copies of the documents were provided to Shute, Mihaly, & Weinberger LLP on November 26, 2003.

SAL00015-65

Comment:

- The Supplement also gives short shrift to analysis of public health impacts, in substantial disregard of the comments we submitted in 2001. The evaluation of human health risks caused by toxic air pollutant emissions associated with LAX operations under the various alternatives, including Alternative D, uses outdated databases and underestimates emissions from various airport sources. The Supplement continues to use an inappropriate threshold of significance for both chronic noncancer health risks, and cancer risks. And it makes no attempt to formulate effective mitigation measures for human health impacts. These analytical deficiencies and others are detailed in Attachment 5 to this letter, at pp. 34-40.

Response:

The human health risk assessment followed California Environmental Protection Agency and U.S. Environmental Protection Agency guidance, adapted to the airport environment. Methods used in the human health risk assessment were more likely to overestimate than underestimate possible health risks. For example, risks were calculated for individuals that are likely to be exposed at locations where toxic air pollutant emissions were predicted to be highest. Individuals were assumed to be exposed for almost all days of the year and for many years to maximize estimates of possible exposure. Toxicity information used in the human health risk assessment incorporated conservative assumptions designed to protect the more sensitive receptors, such as children, the elderly, and individuals with respiratory conditions. Resulting incremental risk estimates represent upper-bound predictions of exposure and health risk.

Regarding threshold of significance, please refer to Response to Comment AF00001-40. The thresholds of significance were selected based on South Coast Air Quality Management District (SCAQMD) policies. No regulations exist that establish thresholds of significance for an entire facility such as LAX. The thresholds selected are consistent with the SCAQMD CEQA Handbook (1993) for assessing impacts of new developments as well as recent, publicly available correspondence from SCAQMD. Please note that the CARB document, Risk Management Guidelines for New and Modified Sources of Toxic Air Pollutants, July 1993, suggests an action range for the total hazard index ranging from 1 to 10. The SCAQMD Rule 1401 (g)(3) allows for selection of alternate hazard index levels, not to exceed 10. Rule 1402, which is for existing sources and more pertinent to the evaluation at hand, identifies a significant risk level of 5 for total acute and chronic hazard indices. The non-cancer acute hazard index threshold was revised in the Supplement to the Draft EIS/EIR to 1 (Section 4.24.1.4). Please note that the SCAQMD 1997 Air Quality Management Plan Draft EIR, Chapter 4 - Potential Environmental Impacts and Mitigation Measures, Subchapter 4.4 - Hazard/Human Health Impacts, identifies a threshold of significance of 5 for non-cancer effects. Please refer to Topical Response TR-HRA-4 regarding mitigation strategies for human health impacts.

SAL00015-66

Comment:

7. Hydrology and Water Quality

Our comments regarding the Supplement's hydrology and water quality analysis were prepared by Phyllis Fox, Ph.D. and Petra Pless, D. Env. Those comments are attached hereto as Attachment 5. Resumes for these experts are provided as Attachment 4.

The comments prepared by our experts indicate that the EIS/EIR's treatment of water quality impacts remains inadequate and inaccurate. The Supplement raises new issues and does not adequately address the serious problems previously identified in our comments on the Draft EIS/EIR, including reliance on outdated data and understated pollutant loads. The EIS/EIR excludes numerous important pollutants and fails to provide for mitigation measures that are well developed and specific enough to

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allow for an objective evaluation of effectiveness, much less enforcement. Accordingly, the Draft EIS/EIR underestimates impacts to water quality and sets forth insufficient mitigation measures.

Response:

Please see Topical Response TR-HWQ-1 regarding model constituents and the storm water pollutant load estimation method, Topical Response TR-HWQ-2 regarding Master Plan Commitment HWQ-1, and Response to Comment AR00003-63 regarding mitigation measures appropriate for this program-level evaluation. Responses to specific comments included in commentor's Attachment 5 are provided in Responses to Comments SAL00015-290 through SAL00015-305.

SAL00015-67

Comment:

8. Section 4(f) Resources

As discussed in our September 18, 2003 Letter (page 77), section 4(f) of the Department of Transportation Act of 1966 requires federal agencies to identify and avoid impacts to parklands, recreation areas, historic resources, and wildlife and waterfowl refuges. 49 U.S.C. § 303(c). Under section 4(f), codified at 49 U.S.C. § 303, the Secretary of Transportation may approve a transportation project requiring the "use of publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, State, or local significance, or land of an historic site of national, State, or local significance (as determined by the Federal, State, or local officials having jurisdiction over the park, area, refuge, or site)" only if no "prudent and feasible" alternative to using the resource exists, and the project includes "all possible" planning to minimize harm to the resource resulting from the use. Id. Like the Draft EIS/EIR before it, the Supplement has not only failed to fully examine the section 4(f) resources impacted by the Master Plan Alternatives, including Alternative D, but it has also failed to fully develop alternatives to the use of these resources and to provide "all possible" mitigation measures to minimize harm.

Response:

As explained in Section 4.8, Department of Transportation Act, Section 4(f) (subsection 4.8.1), of the Supplement to the Draft EIS/EIR, the DOT Section 4(f) discussion provided therein summarized the evaluation and findings presented in Appendix S-F, Supplemental Department of Transportation Act Section 4(f) Report, of the Supplement to the Draft EIS/EIR. The report comprising Appendix S-F fulfills the requirements of DOT Act Section 4(f) and constitutes a draft Section 4(f) evaluation. The draft Section 4(f) evaluation presented in the Draft EIS/EIR and the Supplement to the Draft EIS/EIR was publicly circulated and followed agency coordination, per the requirements of DOT Act Section 4(f). The final Section 4(f) evaluation is presented in Section 4.8, Department of Transportation Act, Section 4(f), of this Final EIS/EIR.

As it pertains to the identification of avoidance alternatives, Section 4.0, Avoidance Alternatives, in Appendix S-F of the Supplement to the Draft EIS/EIR identifies three options for north airfield configurations that would minimize the impact to the Habitat Restoration Area (HRA). Section 4.0 goes on to state that "additional avoidance alternatives are being investigated by the FAA and LAWA and will be explored during circulation of this Draft DOT Act Section 4(f) evaluation and the Supplement to the Draft EIS/EIR." Please see the final Section 4(f) evaluation, presented in Section 4.8, Department of Transportation Act, Section 4(f), of this Final EIS/EIR.

Relative to the identification of all possible mitigation to minimize harm, Section 5.0, Measures to Minimize Harm/Mitigation, in Appendix S-F of the Supplement to the Draft EIS/EIR identifies and describes several mitigation measures that address the potential effects on the HRA. As stated therein, the referenced mitigation measures were provided in their entirety in Section 4.10, Biotic Communities; Section 4.11, Endangered and Threatened Species of Flora and Fauna; and Section 4.9.1, Historic/Architectural and Archaeological/Cultural Resources, of the Supplement to the Draft EIS/EIR. Identification of all feasible mitigation measures to minimize harm within the HRA was also based on coordination with affected federal jurisdictions. Additionally, as stated within Appendix S-F of the Supplement to the Draft EIS/EIR, if the use within the HRA cannot be avoided, the FAA will need to determine that no feasible and prudent alternatives exist and that all possible mitigation has been incorporated into the project prior to the approval of Alternative D.

SAL00015-68

Comment:

First, the Supplement fails to identify all the section 4(f) resources that may be impacted by the Master Plan Alternatives, including Alternative D. See also September 2001 Comment Letter at 77. Specifically, although resources subject to section 4(f)'s protection specifically include historic resources of national, State, or local significance, (see 49 U.S.C. § 303(c); Supplement, Appendix S-F at 1), both the main text of the Supplement and Appendix S-F to the Supplement fail to consider impacts to historic resources of State and local significance. For example, the Intermediate Terminal Complex, the International Airport Industrial District and the Morningside Park Neighborhood are not included in the documents' list of section 4(f) resources, despite the FAA's own determination that these resources are eligible for listing as State and/or local historic resources. See Supplement at 4-436, Table S4.9.1-1.

Regardless of whether these resources are ultimately determined to be eligible for listing on the federal National Register of Historic Places - a process which is still ongoing - the mere fact that these resources are eligible for State and/or local listing triggers section 4(f). The omission of any discussion of these resources under section 4(f) must be corrected for this document to comply with federal law. Under Alternative D, at least one of these section 4(f) resources - the International Airport Industrial District - will be partially demolished, destroying the entire district's integrity. Supplement at 4-437. Without full consideration of these identified section 4(f) resources, including exploration of all "prudent and feasible" alternatives to their use and "all possible" planning to minimize harm to these resources, this project simply can not comply with section 4(f).

Response:

Please refer to Response to Comment AL00033-146 regarding the results of the consultation with FHWA and the California State Historic Preservation Officer (SHPO) and the identification of historic resources that could be affected by implementation of the Master Plan.

The Section 4(f) evaluation provided in the Supplement to the Draft EIS/EIR is in compliance with 49 U.S.C. 303(c), which leaves the determination of what constitutes a significant resource to the Federal, State, or local officials having jurisdiction over the site. FAA guidance related to this federal mandate provides in FAA Order 5050.4A, Airport Environmental Handbook, Chapter 5, page 41, that Section 4(f) of the DOT Act applies to historic sites of national, state or local significance which are included in or eligible for inclusion in the National Register of Historic Places. Furthermore, Federal Highway Administration (FHWA) regulations (23 C.F.R. Section 771.135, state that "For purposes of Section 4(f), a historic site is significant only if it is on or eligible for the National Register of Historic Places, unless the FHWA determines that the application of Section 4(f) is otherwise appropriate. Accordingly, the focus of the 4(f) analysis is appropriately placed on sites of national, state, or local significance which are included in or eligible for inclusion in the National Register of Historic Places. As discussed in Response to Comment AL00033-146, the Intermediate Terminal Complex, International Airport Industrial District, 1961 Air Traffic Control Tower, and Morningside Park Neighborhood are not eligible for the National Register of Historic Places, as assessed in Appendix I, Section 106 Report, of the Draft EIS/EIR and Appendix S-G, Supplemental Section 106 Report, of the Supplement to the Draft EIS/EIR. Further clarification as to why Section 4(f) was determined inapplicable for these resources is provided below.

The Intermediate Terminal Complex appears to be historically significant under local City of Los Angeles Historic-Cultural Monument criteria (and accordingly under criteria for the California Register) as a representative milepost in the evolution of the Los Angeles airport. However, past demolition of five of the original buildings that were used as passenger terminals and hangars, and alterations to the remaining buildings that have taken place over time, prevents the complex from meeting National Register requirements for integrity. As a result, the Intermediate Terminal Complex is not addressed for purposes of Section 4(f).

The International Airport Industrial District appears to satisfy the criteria for designation as a City of Los Angeles Historic Preservation Overlay Zone, and the criteria for the California Register, due to its association with a prominent architect who created an innovative approach to early industrial development. However, it has been determined ineligible for the National Register due to a lack of integrity. Approximately 32 of industrial buildings that were located within the District have been

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demolished over time, and most of the remaining 28 properties have undergone modification. As a result, the International Airport Industrial District is not addressed for purposes of Section 4(f).

The 1961 Airport Traffic Control Tower, which is less than 50 years of age, is ineligible for listing in the National Register, the California Register, and locally in the City of Los Angeles. This is due to its lack of integrity due to modifications over time, and because it does not reflect the exceptional importance necessary to satisfy Criterion Consideration G (properties less than 50 years of age) of the National Register criteria. As a result, the 1961 Airport Traffic Control Tower is not addressed for purposes of Section 4(f).

For the Morningside Park Neighborhood, the City of Inglewood does not have criteria for evaluating historic resources, however, its association with early housing development in the City and southern California, led to a determination that it appears eligible for the California Register and local designation. It is ineligible for the National Register because of a lack of integrity, as many of the homes that were built in the mid-1930s, have been modified or in some instances demolished. As a result, the Morningside Park Neighborhood is not addressed for purposes of Section 4(f).

Impacts on resources of local and state significance that are not in or eligible for inclusion in the National Register of Historic Places and were not evaluated pursuant to Section 4(f), were fully evaluated in Section 4.9.1, Historic/Architectural and Archaeological/Cultural Resources, of the Draft EIS/EIR and Supplement to the Draft EIS/EIR.

Please also refer to Response to Comment SAL00015-67 regarding the identification of avoidance alternatives and all possible mitigation to minimize harm.

SAL00015-69

Comment:

Second, as discussed in the Supplement and Appendix S-F, the FAA's determinations of eligibility for both the National Register of Historic Places and the California Register, are subject to consultation and concurrence by the California State Historic Preservation Officer ("SHPO"). See 36 CFR § 800.2(c)(1); Supplement, Appendix S-G at 1. This consultation is currently ongoing and thus, not only has the SHPO not yet concurred with the FAA's determinations regarding the above discussed resources, the SHPO has also not concurred with the FAA's determinations regarding the ineligibility of the 1961 Air Traffic Control Tower for federal, State, or local listing. Even if this resource is ultimately determined to be ineligible for listing in the National Register of Historic Places, it may still be eligible for State or local listing, either of which would trigger the protections of section 4(f). Without consideration of impacts to this potentially significant historic resource, the Draft EIS/EIR is incomplete.

Response:

Please refer to Response to Comment AL00033-146 regarding the results of the consultation with FHWA and the California State Historic Preservation Officer (SHPO) and the identification of historic resources that could be affected by implementation of the Master Plan. Also see Response to Comment SAL00015-68 regarding the evaluation of historic resources recognized at the State and local levels. As discussed in Response to Comment SAL00015-68, the Intermediate Terminal Complex, International Airport Industrial District, 1961 Air Traffic Control Tower, and Morningside Park Neighborhood are not eligible for the National Register of Historic Places, and therefore, pursuant to FAA and FHWA regulations and guidance, they were not evaluated pursuant to Section 4(f).

SAL00015-70

Comment:

Third, even where the Supplement correctly identifies certain section 4(f) resources, it fails to fully consider and mitigate impacts to those resources. For example, although the document identifies Vista del Mar Park as a section 4(f) resource, it finds that a 3.3 dB CNEL increase from Year 2000 conditions under Alternative D will not constitute a constructive use of the park. Supplement at 4-427. Through flawed reasoning, the Supplement determines that because the noise level at the park was at one time almost as bad as it will be under Alternative D, normal use of the park will not be disrupted by bringing the noise level back up again. Id. The document ignores the relevant fact that noise levels at the park

have been much lower recently than they would be under Alternative D. Specifically, the Supplement concludes that, although the park had a noise level of 75.7 dB CNEL in Year 2000, no constructive use will occur under Alternative D's 79.1 dB CNEL, because once upon a time in 1996, the park had a 79 dB CNEL. Id. Simply put, the Supplement concludes that the increase in noise will not impact normal use of the park because the park is already noisy and was historically even noisier. Id. No support for this conclusion is cited in the Supplement and similarly unsupported conclusions are made with regard to Dockweiler Beach State Park. Id. Without further support for these findings, the Supplement is inadequate under section 4(f).

Response:

As was stated briefly in Section 4.8, Department of Transportation Act, Section 4(f), and explained in Section 4.2, Land Use, and Technical Report S-1, Supplemental Land Use Technical Report, of the Supplement to the Draft EIS/EIR, Vista del Mar Park is considered an incompatible land use in terms of noise exposure. Per 14 CFR Part 150, certain outdoor land uses, such as parks, that are exposed to noise levels above 75 CNEL may be considered incompatible. Under both 1996 and Year 2000 conditions, Vista del Mar Park was exposed to high noise levels (i.e., greater than 75 CNEL) from both aircraft and vehicular traffic due to its location immediately west of the North Runway Complex and adjacent to Vista del Mar, a major thoroughfare. Given its location, the park is a prime location for viewing aircraft departing LAX, and normal use of the park has been ongoing despite past or current noise levels. As was acknowledged in Section 4.8, Department of Transportation Act, Section 4(f), and Appendix S-F, Supplemental Department of Transportation Act Section 4(f) Report, of the Supplement to the Draft EIS/EIR, although the projected noise level increase compared to Year 2000 conditions represents a substantial increase in noise, the increase in noise would not substantially interfere with the normal use of the park. Therefore, if Alternative D were adopted, the increase in noise at the park would not constitute a constructive use.

Similarly, areas within Dockweiler Beach State Park have been exposed to noise levels in excess of 75 CNEL under both 1996 and Year 2000 conditions. Despite high noise levels, the beach has been and is frequently used. As discussed in Section 4.8, Department of Transportation Act, Section 4(f), and Appendix S F, Supplemental Department of Transportation Act Section 4(f) Report, of the Supplement to the Draft EIS/EIR, Dockweiler Beach State Park would experience an overall decrease in the geographic area exposed to high noise levels, although some areas would be newly exposed to noise levels of 75 CNEL or greater. However, given its current noise conditions, similar to Vista del Mar Park, the projected noise level increase would not substantially interfere with the normal use of the beach, and a constructive use would not occur.

SAL00015-71

Comment:

9. Historic Resources, Including Architectural, Archeological, Cultural, and Paleontological Resources

Like the Draft EIS/EIR, the Supplement's identification of Historic/Architectural and Archeological/Cultural Resources and analysis of impacts to those resources is legally inadequate. As discussed in our September 2001 Comment Letter, the Draft EIS/EIR downplayed LAWA's responsibility for the alteration and destruction of certain resources, including CA-LAN-1118 and the 1961 Air Traffic Control Tower; the Supplement suffers from the same flaw.

Response:

Regarding CA-LAN-1118, please see Response to Comment AL00033-148. Regarding previous alterations to the 1961 Air Traffic Control Tower, the commentor appears to be referring to the mechanical vertical aluminum louvers that were once installed on the outside of the Control Tower windows to provide additional shading. These louvers were removed in 1998, since they no longer operated as designed and they interfered with health and safety codes, including fire code requirements. After the removal of the louvers, the glass was recoated to provide additional fire-retardant protection and shading. It should be noted that the modifications made to the Control Tower were undertaken independent of the LAX Master Plan and any effects associated with such modifications were outside the scope of the LAX Master Plan EIS/EIR. Furthermore, at the time the alterations were made the building was much less than 50 years of age and had understandably not been evaluated or identified as a significant historic resource.

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SAL00015-72

Comment:

Additionally, a number of other flaws are revealed in the Supplement, including the failure to: identify resources; determine their eligibility for listing on federal, State, or local registers; adequately describe and document those resources within the EIS/EIR; and identify alternatives and/or mitigation measures that would avoid or lessen impacts to these resources.

For example, despite the passage of almost two years since the circulation of the Draft EIS/EIR, no final determination has been made regarding many resources' eligibility for the National Register of Historic Places, the California Register of Historical Resources, or local registers. See Supplement, Appendix S-F at 4. Under Section 106 of the National Historic Preservation Act of 1966, 16 U.S.C. § 470 et seq., the federal government must make determinations of eligibility for the National Register of Historic Places in consultation with the State Historic Preservation Officer ("SHPO"). See 36 CFR § 800.2(c)(1). According to the Supplement, the SHPO has yet to concur with the FAA's determinations that the Intermediate Terminal Complex, the International Airport Industrial District and the Morningside Park Neighborhood are not eligible for the National Register of Historic Places. Likewise, as noted above, the SHPO has not yet concurred with the FAA's determination that the 1961 Air Traffic Control Tower is not eligible for federal, State, or local listing due to recent modifications made to the exterior of this historic structure by LAWA.

Without a final determination regarding whether the impacted resources are eligible for listing on the National Register of Historic Places, there can be no compliance with Section 106 of the National Historic Preservation Act of 1966, 16 U.S.C. § 470 et seq. Moreover, with regard to the 1961 Air Traffic Control Tower: even if this resource is not eligible for listing on the National Register of Historic Places, eligibility for listing on State or local registers would implicate not only section 4(f), discussed above, but also CEQA. Without such a determination, impacts to this potentially historic structure cannot be fully understood, let alone avoided or mitigated.

Response:

The comment above pertains to the analysis of historic resources provided in Section 4.9.1, Historic/Architectural and Archaeological/Cultural Resources; Appendix I, Section 106 Report; and Appendix S-G, Supplemental Section 106 Report, of the Supplement to the Draft EIS/EIR. While Section 4.9.1.3, Affected Environment/Environmental Baseline, in Section 4.9.1, Historic/Architectural and Archaeological/Cultural Resources, of the Supplement to the Draft EIS/EIR states that consultation between FAA and SHPO on the determination of National Register eligibility for those historic/architectural and archaeological/cultural resources identified within the APE is currently ongoing, and that the results of the consultation will be incorporated into the Final EIS/EIR, the statutory limits on when SHPO can concur or provide comment have since passed. As stated within 36 CFR Part 800.3(c)(4), "if the SHPO/THPO fails to respond within 30 days of receipt of a request for review of a finding or determination, the agency official may either proceed to the next step in the 106 process based on the finding or determination or consult with the Council in lieu of the SHPO/THPO." As no comments have been received from SHPO and the 30 day review period has long since passed, concurrence by SHPO is therefore assumed and consistent with the assessment contained in the Section 106 Report, that the Intermediate Terminal Complex, the International Airport Industrial District, the 1961 Air Traffic Control Tower, and the Morningside Park Neighborhood are not eligible for the National Register of Historic Places. Nonetheless, impacts on resources not determined eligible for the National Register that have been identified as significant at the local and state level have been identified and mitigation measures were provided to address these effects in Section 4.9.1, Historic/Architectural and Archaeological/Cultural Resources (subsection 4.9.1.8), of the Supplement to the Draft EIS/EIR.

SAL00015-73

Comment:

Additionally, despite the Supplement's recognition that Alternative D would adversely impact the International Airport Industrial District - determined by the FAA to be eligible for both State and local listing - little information is provided regarding this important resource. Not only would Alternative D demolish eleven buildings contributing to this historic district, it would also "compromise the overall

integrity and configuration of the district resulting in a significant impact at the state and local levels." Supplement at 4-436. Despite the acknowledged direct and cumulative significant impacts resulting from demolition of these historic resources, almost no information is provided in the Supplement or Appendices regarding the International Airport Industrial District and what buildings in particular will be demolished.

As the Supplement recognizes, Alternative D's partial demolition of the International Airport Industrial District is a significant direct and cumulative impact under CEQA. Supplement at 4-436. The District is a "significant exception[]" to the utilitarian appearance of the majority of the industrial architecture within the Area of Potential Effects ("APE"). Supplement, Appendix S-G at 39. Designed by "national[ly] acclaim[ed]" architect S. Charles Lee, many of the buildings of the District have "distinctive entries with canopies, supports and fenestration derived from both the Streamline and the Modern architectural vocabularies." Id. Despite this, only one photograph of the District is provided in the Supplement. Id. at Figure S14; see also id. at Attachment 2, DPR 523 Form (same photograph). This photograph is taken at a distance from almost a bird's eye view and reveals a view of rooftops and blacktop; the facade of one building can be seen. Id. This single photograph of an acknowledged historic district is totally inadequate for the purposes of environmental review. At the very least, individual photographs of the facades of buildings contributing to the District, with particular care given to buildings proposed for demolition, should be included in the EIS/EIR. Without more visual representations of the resources to be impacted and without the identification of the specific buildings to be demolished, this document fails to meet the minimum standards of for environmental review that we have identified under federal and State law.

Like the Draft EIS/EIR, the Supplement fails to provide adequate - or rather any - analysis of the feasibility of rehabilitating, remodeling, and reusing historic structures, including the buildings within the International Airport Industrial District. The EIS/EIR must address the option of adaptively reusing the buildings the FAA and LAWA propose for demolition according to the standards established by the Secretary of the Interior and the California Office of Historic Preservation.

Response:

Substantial information is provided regarding the International Airport Industrial District in Section 4.9.1 (subsection 4.9.1.3), of the Draft EIS/EIR; Appendix I, Section 106 Report, of the Draft EIS/EIR; and as noted by the commentor, Appendix S-G of the Supplement to the Draft EIS/EIR. Although the absence of further photographs did not compromise the findings in the Supplement to the Draft EIS/EIR, which indicated that effects on the District due to partial demolition would be significant and unavoidable under CEQA, additional photographs of the district and its contributors have been included in Attachment 3, LAX Expressway Photographs, of this Final EIS/EIR. Additionally, the identification of those contributing properties within the International Airport Industrial District that would be demolished under Alternative D have been included in Section 4.9.1 of the Final EIS/EIR. Adaptive reuse of the buildings is not considered feasible as they would require relocation, and their primary features of note are their distinctive entries, with the buildings otherwise utilitarian in nature. Mitigation measure MM-HA-1, in Section 4.9.1, Historic/Architectural and Archaeological/Cultural Resources (subsection 4.9.1.8), of the Supplement to the Draft EIS/EIR, provides for recordation of the resources in accordance with the Secretary of the Interior's Guidelines for Architectural and Engineering Documentation Standards. Mitigation measure MM-HA-2, provides for the development of educational materials to communicate the significance of demolished resources to the general public and local community history programs and related interest groups.

SAL00015-74

Comment:

Finally, although the Supplement recognizes that a significant impact will occur to the region's paleontological resources due to the grading and excavations involved in Alternative D, as well as the other build alternatives, the document continues to defer important mitigation - in violation of federal and state law - that could potentially mitigate some of the significant impacts to these resources. Specifically, Mitigation Measure MM-PA-1, a mitigation for Alternatives A, B, C, and D, defers development of a monitoring and fossil remains treatment plan for construction-related activities until after Project approval. Supplement at 4-446. Such a plan should have been developed and made available for comment as part of the Draft EIS/EIR. There is no reasonable justification for postponing the development of this plan until after the Project is approved, and the document does not attempt to

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offer any. An acceptable monitoring and fossil remains treatment plan for construction-related activities should be developed and circulated for public comment and should be included in any final version of the EIS/EIR for this Project. Failure to do so constitutes impermissible deferral of mitigation designed to address identified significant direct and cumulative impacts.

Response:

There has been no improper deferral of mitigation. Mitigation Measures MM-PA-1 through MM-PA-7 are sufficiently detailed to ensure that resources are preserved and treated in accordance with industry standards. Note that MM-PA-1, requires that the monitoring and treatment plan be approved independently by the Vertebrate Paleontology Section of the Natural History Museum of Los Angeles County to comply with paleontological requirements. It would be impractical and premature for LAWA to hire a paleontologist to develop such a plan prior to approval of the project and without a more specific understanding of construction-related activities that will only be possible after further development of components of an approved LAX Master Plan alternative.

SAL00015-75

Comment:

10. Biotic Communities

The Supplement's analysis of impacts to biological resources employs the same faulty methodology as the Draft EIS/EIR's analysis of biological impacts, and, thus, its conclusions regarding impacts and mitigation are likewise fundamentally flawed and misleading. Like the Draft EIS/EIR, the Supplement relies on the quantification of "habitat units" to analyze the impacts the Project will have on biological resources. Although the technique has been renamed the "Mitigation Land Evaluation Procedure" ("MLEP") and is no longer called the "Habitat Evaluation Procedure" ("HEP"), the methodology remains the same. As discussed in our September 2001 Comment Letter, the MLEP contradicts accepted methodology for assessing impacts to biological resources, including habitat. By examining factors that are not relevant to the needs of sensitive species and relying on the fiction of the "habitat unit" that is at odds with the reality of sensitive species' habitat needs, the MLEP greatly underestimates the impacts the Project will have due to the destruction of hundreds of acres of existing habitat. See September 2001 Comment Letter at 84.

Response:

Please see Topical Response TR-BC-1 regarding the Habitat Evaluation Procedure (HEP) analysis and use of modified HEP methodology.

SAL00015-76

Comment:

Because the Supplement relies on the same flawed methodology as the Draft EIS/EIR, our comments provided in our prior comments remain entirely applicable to this Supplement and to the analysis of Alternative D. Additionally, despite the inclusion of new information and new mitigation measures, the Supplement not only subjects itself to the same failures as the Draft EIS/EIR, it compounds these failures by providing new information and mitigation that is misleading and inadequate.

For example, several times in its analysis of impacts to biological resources, the Supplement appears to compare the impacts of Alternative D to the impacts that would result from the other build alternatives, instead of conducting a comparison to baseline conditions or even to the No Action/No Project Alternative. See e.g., Supplement at 4-466 ("Potential impacts to flora and fauna resulting from increased concentrations of air pollutants [under Alternative D] would be the same as other build alternatives."). This kind of comparison is misleading and serves to minimize the apparent impacts of each build alternative.

Response:

Please see Topical Response TR-BC-1 regarding the Habitat Evaluation Procedure (HEP) analysis and use of modified HEP methodology.

With regard to the latter part of the comment, impacts (both direct and indirect) associated with each alternative, including Alternative D, were determined through comparison to baseline conditions (Section 4.10, Biotic Communities, of the Draft EIS/EIR and Supplement to the Draft EIS/EIR).

SAL00015-77

Comment:

Additionally, although the Supplement identifies numerous significant impacts to biological resources - including loss of state-designated habitat and impacts to Lewis's evening primrose, sensitive arthropods, the silvery legless lizard, the San Diego horned lizard, the burrowing owl, the western spadefoot toad, the San Diego black-tailed jackrabbit, the loggerhead shrike, and 300 mature trees (id. at 4-465 to 466) - the Supplement nevertheless concludes that there will be no significant impacts with mitigation (id. at 4-479). The Supplement reaches this result by purporting to require habitat replacement. However, much of this habitat replacement is proposed for land that is already designated and protected habitat - i.e. land within the El Segundo Blue Butterfly Habitat Preserve. See e.g., MM-BC-13, Supplement at 4-478 ("Opportunities for restoration include... 36.11 acres from removal and restoration of 50 percent of the existing roadways to Southern Fore-dune..."). By relying on the flawed methodology of "habitat units," the Supplement announces that it is creating new habitat to replace habitat that will be destroyed by the Project by merely improving the "habitat value" of already existing designated habitat. In reality, no new habitat is created; at best, existing protected habitat is merely improved. The result is that impacts to biological resources are grossly underestimated and not truly mitigated.

Response:

Pursuant to CEQA, mitigation measures proposed by the Draft EIS/EIR and the Supplement to the Draft EIS/EIR were designed to mitigate for potentially significant impacts from the proposed project. Article 9, Section 15126.4 of the CEQA Guidelines states "[a]n EIR shall describe feasible measures which could minimize significant adverse impacts." Mitigation measures are intended to reduce project impacts to levels below the CEQA thresholds of significance. Habitat restoration and enhancement are largely accepted methods for mitigating impacts to biological resources.

The Los Angeles/El Segundo Dunes, including the El Segundo Blue Butterfly Habitat Restoration Area, contain many paved former city streets that currently do not provide any habitat value to biological resources. These roads provide an ideal opportunity for restoration because even though they currently do not support habitat, they are in an area already afforded protections under the California Coastal Act and City of Los Angeles Ordinance 167940 and are on the project site. With regard to the use of habitat units, please see Topical Response TR-BC-1.

SAL00015-78

Comment:

Another example of the Supplement's inadequate mitigation of biological impacts is the mitigation it proposes for the removal of over 300 mature trees. Although the Supplement acknowledges that this significant impact will occur as a result of the proposed LAX Northside/Westchester Southside project and that the destruction of these mature trees will have a significant impact on the nesting activities of certain sensitive species, including raptors, the proposed mitigation is thoroughly inadequate. First, the mitigation fails to minimize the significance of the impact involved. The replacement trees will not be mature, and, thus, at a minimum, there will be significant short term impacts until the replacement trees reach maturity (which could take decades). Moreover, the Supplement leaves the determination of the species of replacement trees to the discretion of LAWA. Id. at 4-471. As discussed in our previous comment, LAWA has a documented history of using inappropriate, non-native, and invasive landscaping both within and near sensitive habitats. September 2001 Comment Letter at 84-85. Any mitigation for the destruction of these 300 mature trees should require LAWA to plant native species, or, where the use of native species is infeasible, native-compatible species.

Response:

As described in mitigation measure MM-BC-3 of the Supplement to the Draft EIS/EIR, the mitigation ratio for impacts to 300 mature trees (diameter breast height of at least 8 inches) is 2:1. This mitigation ratio was determined through coordination with the City of Los Angeles. Each mitigation tree

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shall be at least a 15-gallon, or larger, specimen in size. Surveys at LAX indicate that there are currently no sensitive species and/or raptor nesting activities in the 300 trees that would be impacted by the proposed project. In addition, tree removal activities, as a precaution, shall take place outside of the raptor and migratory bird breeding season. There would therefore be no short-term displacement due to activities.

With regard to the latter part of the comment, LAWA will avoid utilizing weedy non-native tree species during the planting of replacement trees described in MM-BC-3 of the Draft EIS/EIR and Supplement to the Draft EIS/EIR. Locally native plants will be used to the greatest extent feasible, or where the use of native species is infeasible, native-compatible species will be considered. Please see Response to Comment AL00033-179 and Response to Comment AS00005-15 for further discussion of native landscaping. With regard to the above-referenced section of your September 2001 Comment Letter, please see Response to Comment AL00033-171.

SAL00015-79

Comment:

A final example of the Supplement's inadequate attempts to mitigate impacts to biological resources is its deferral of the development of relocation and monitoring plans to an entirely undefined later date. Supplement at 4-475 to 4-477 (MM-BC-9). Rather than develop relocation and monitoring programs for inclusion in the Supplement, the Supplement has instead impermissibly deferred development of these important mitigation measures. The formulation of mitigation measures can not be deferred until after project approval; rather, "[m]itigation measures must be fully enforceable through permit conditions, agreements, or legally binding instruments." 14 CCR § 15126.4 (a)(2).

Response:

Some of the components of the relocation and monitoring plan for the San Diego black-tailed jackrabbit, as well as the monitoring program for loggerhead shrike, as described in mitigation measure MM-BC-9, require actions to take place prior to construction of the proposed project therefore development of these plans shall be completed prior to construction. The plans, described in mitigation measure MM-BC-9 are subject to approval by CDFG prior to implementation and enforcement by CDFG thereafter. Mitigation measure MM-BC-9 contains performance criteria by which its success can be measured and documented. The completion and success of actions proposed in the mitigation measure will be subject to confirmation from CDFG.

Under CEQA, mitigation measures must be enforceable, but the enforceability mechanisms need not appear in the EIR; they can be presented later in the CEQA process in the form of a mitigation monitoring program. As required by CEQA guidelines, mitigation measures such as MM-BC-9 have been proposed by the Draft EIS/EIR and the Supplement to the Draft EIS/EIR to mitigate for potentially significant impacts from the proposed project. In addition, each mitigation measure for impacts to biological resources will be included in a mitigation monitoring program that will identify the means of enforcing such a measure. As required by CEQA, the mitigation monitoring program will be included in the package with the Final EIS/EIR that will go to City and Federal decision makers before they consider approving any LAX Master Plan project.

SAL00015-80

Comment:

11. Endangered and Threatened Species of Flora and Fauna

As discussed above, the flaws inherent to the methodology employed by the Supplement (and the Draft EIS/EIR before it) to quantify loss of habitat poisons the entire analysis of impacts to biological resources and mitigation measures. These flaws overlap with and carry over to the Supplement's analysis of impacts to endangered and threatened species and result in a great underestimation of impacts. Additionally, as discussed in our earlier comments, the methods employed by the Draft EIS/EIR, and now the Supplement, to determine the current population of certain endangered species results in overestimation of current populations, and thus, again, an underestimation of impact. September 2001 Comment Letter at 85.

Response:

Please see Topical Response TR-BC-1 regarding the Habitat Evaluation Procedure (HEP) analysis and use of modified HEP methodology, Topical Response TR-ET-1 regarding potential impacts to the El Segundo blue Butterfly, and Topical Response TR-ET-2 regarding the definition and evaluation of wetlands/vernal pools.

SAL00015-81

Comment:

Although the Supplement recognizes that existing wetland habitat for the Riverside Fairy Shrimp will be entirely destroyed by the Project, (Supplement at 4-485 and 4-486 to 4-487), it nevertheless both downplays the significance of this impact and also concludes that this impact will be fully mitigated by the creation of new habitat for the transplanted shrimp cysts off-site. Id. at 4-489 to 4-493 and 4-494. First, the Supplement fails to recognize that the current "degraded" nature of the Riverside Fairy Shrimp's habitat is due to its own ongoing actions - grading and mowing the vernal pools the shrimp occupy. LAWA asserts that this destruction of habitat is necessary for maintenance purposes. Rather than recognize that this constitutes a "take" under the Endangered Species Act, the Supplement uses LAWA's own improper actions to downplay the value of the habitat. Second, the Supplement and Appendix S-H offer little support for their assumptions that: (1) appropriate off-site habitat or land suitable for habitat construction will be found; (2) this land will be available for purchase; (3) money will be available for the purchase; and (4) the removal of the shrimp cysts from the Project site to this off-site location will be successful. Third, there is no discussion in the Supplement or the Draft EIS/EIR of the impacts that building this habitat off-site might have to whatever environment is chosen for this new habitat. Given these problems and the lack of support for the document's underlying assumptions, the Supplement's conclusion that impacts to the Riverside Fairy Shrimp will be reduced to a level of insignificance is likewise unsupported.

Response:

Airfield mowing is not improper; it is required by law and performed pursuant to FAA Wildlife Hazards Management Guidelines. Title 14, CFR Part 39 mandates that the airport operations area be maintained in such a condition as to minimize or eliminate wildlife usage, which includes mowing or discing the vegetation to reduce its attractiveness to wildlife, and eliminating standing water. As required under Section 7 of the Endangered Species Act, upon discovery of the Riverside fairy shrimp cysts at LAX the FAA initiated consultation with the U.S. Fish and Wildlife Service (USFWS) in June 1999 for operations and maintenance issues regarding the 1.3 acres of atypical wetlands containing the embedded cysts. The involvement of the FAA provides the federal nexus which precludes the requirement of a 10(a) permit for "take" and triggers Section 7 consultation requirements. The FAA and LAWA have been in the process of fulfilling these consultation requirements since 1999.

With regard to mitigation for impacts to Riverside fairy shrimp, please see Topical Response TR-ET-2. All aspects of mitigation for impacts to Riverside fairy shrimp have been subject to Section 7 consultation between the FAA, LAWA, and the USFWS. It is believed that as a result of the Section 7 consultation, impacts to the Riverside fairy shrimp will be reduced to a level below significance. As a result of Section 7 consultation among LAWA, the FAA, and the USFWS, a Draft Biological Opinion has been issued by the USFWS and is included as Appendix F-E of this Final EIS/EIR.

SAL00015-82

Comment:

Moreover, the Supplement fails to justify the decision to build an employee parking garage directly over the habitat for the Riverside Fairy Shrimp in the first instance. No explanation is given for why this structure could not be constructed on land that has already been disturbed for building. For example, the employee parking garage could be constructed nearby in the LAX west end where LAWA proposes to remove the existing remote aircraft gates. This option has not been explored, but should be, as a means of mitigation impacts to wetlands and endangered species.

Response:

The employee parking garage will not be built directly over Riverside fairy shrimp habitat. As a result of consultation among LAWA, FAA, and USFWS and incorporation of the Draft Biological Opinion issued

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by the U.S. Fish and Wildlife Service pursuant to Section 7 of the Federal Endangered Species Act, a buffer area of 7.1 acres of undeveloped land surrounding and including EW009, EW012, and EW013 and their watersheds shall be designated as an off-limits area in the construction drawings for each phase of construction described in Section 2 of the Final EIS/EIR. In addition, LAX operations personnel with vehicular access to the airport operations area shall be apprised of these off-limits areas annually, until the Federal Aviation Administration (FAA) or LAWA secures permission to remove soils embedded with cysts of the Riverside fairy shrimp. Prior to the initiation of construction, LAWA shall review the plans and specifications for construction of the employee parking facility to ensure that adequate best management practices (BMPs), such as a berm, swale, or comparable measures, have been incorporated into the plans and specification to prevent construction runoff from affecting the designated buffer area for EW009, EW012, and EW013. The construction avoidance measures shall be periodically inspected by LAWA throughout construction to ensure the efficacy of the BMPs, and corrective action shall be undertaken as necessary to ensure that construction and operation of the employee parking facilities do not result in adverse impacts to surface water quality in EW009, EW012, and EW013. The Draft Biological Opinion issued by the USFWS is included as Appendix F-E of this Final EIS/EIR.

SAL00015-83

Comment:

Finally, as discussed in Section (10) above, because the Supplement employs a flawed methodology to quantify impacts to habitat, impacts to the El Segundo Blue Butterfly are greatly underestimated. Despite the construction of a number of new navigational aids and the loss of significant habitat for the butterfly, the Supplement concludes that the Project will not result in any significant impacts. Id. at 4-494. This conclusion is unsupported and premature.

Response:

The Mitigation Land Evaluation Procedure, referred to in Section 10 of the commentor's letter, was used to evaluate the biotic communities at LAX. Analysis of impacts to Endangered and Threatened species was not subject to the same procedure. Impacts to the El Segundo blue butterfly were calculated directly on a square feet basis. Mitigation measures MM-ET-2, MM-ET-3, and MM-ET-4 of the Supplement to the Draft EIS/EIR are designed to reduce impacts to the El Segundo blue butterfly to a level that is less than significant, pursuant to CEQA thresholds of significance. Section 4.11, Endangered and Threatened Species of Flora and Fauna, of the Supplement to the Draft EIS/EIR discussed CEQA thresholds of significance and restoration of habitat for the El Segundo blue butterfly. Mitigation for impacts to the host plants for the El Segundo blue butterfly shall be at a ratio of 1:1, resulting in no net loss of the plant species. The feasibility of restoration of habitat for the El Segundo blue butterfly is supported by LAWA's previous restoration experience in the Habitat Restoration Area.

SAL00015-84

Comment:

12. Wetlands

The Supplement's analysis of impacts to wetlands and the mitigation proposed to deal with those impacts are inadequate for all alternatives. For further discussion of this issue, please see Section 11, above, (discussing impacts to vernal pools due to LAWA's ongoing "maintenance" procedures, impacts to the protected Riverside Fairy Shrimp, and the infeasibility of mitigating these impacts through off-site creation of replacement habitat), and our September 2001 Comment Letter (at 86).

Response:

Please see Response to Comment SAL00015-81 regarding maintenance activities within the Airport Operations Area. Please see Topical Response TR-ET-2 regarding mitigation for impacts to the Riverside fairy shrimp, and mitigation measure MM-ET-1 of the Supplement to the Draft EIS/EIR. Mitigation measure MM-ET-1 includes a 3:1 mitigation ratio for impacts to the Riverside fairy shrimp and its habitat. This mitigation ratio was recommended by the USFWS in their comment letter to the Draft EIS/EIR during the public review period. The USFWS has issued a Draft Biological Opinion pursuant to Section 7 of the Federal Endangered Species Act. Mitigation for impacts to Riverside fairy shrimp are in conformance with conservation measures described in the Draft Biological Opinion. The soils

containing cysts of the Riverside fairy shrimp will be relocated to property owned by the FAA and designated a habitat preserve at the former Marine Corps Air Station at El Toro, or a comparable site approved by the USFWS. The Draft Biological Opinion issued by the USFWS is included as Appendix F-E of this Final EIS/EIR.

SAL00015-85

Comment:

13. Coastal Resources

Like the Draft EIS/EIR, the Supplement relies on the analysis and conclusions of earlier chapters, specifically, Sections 4.10 Biotic Communities and 4.11 Endangered and Threatened Species of Flora and Fauna, for its discussion regarding coastal resources. For the reasons set forth above in Sections 10 and 11, above, these analyses and conclusions are ill-supported and inadequate. The analysis of impacts to biological resources, including coastal resources, underplays and ignores significant impacts to the coastal dunes ecosystem, including the habitat for the endangered El Segundo Blue Butterfly.

Response:

Comment noted. Please see Responses to Comments AL00033-165 through AL00033-180 and AL00033-374 through AL00033-415.

SAL00015-86

Comment:

Additionally, like the Draft EIS/EIR, the Supplement contains no discussion of impacts to marine life.

Response:

Please see Response to Comment AL00033-414 regarding impacts to coastal zones.

SAL00015-87

Comment:

Moreover, the build alternatives of the EIS/EIR, including Alternative D, remain inconsistent with the California Coastal Act, which requires that development projects protect, and where feasible, enhance the quality of the coastal zone environment. Pub. Res. Code § 30000 et seq.

Response:

Please see Responses to Comments AL00033-165 through AL00033-180 and AL00033-374 through AL00033-415. As indicated in Section 4.14, Coastal Zone Management and Coastal Barriers, of the Draft EIS/EIR and Supplement to the Draft EIS/EIR, each of the Master Plan build alternatives, including Alternative D, would be consistent with the goals of the California Coastal Act, and no significant impact on the coastal zone/coastal resources would occur.

SAL00015-88

Comment:

14. Energy Supply and Natural Resources

As with other sections, the Supplement's analysis of energy supply and natural resources perpetuates the same problems seen in the analysis earlier presented in the 2001 Draft EIS/EIR. As such, the comments presented in our September 2001 Comment Letter remain salient and apply to the Supplement's analysis of Alternative D. In addition to those comments, we have identified the following problems with and notable issues raised by the Supplement's analysis of energy supply and natural resources:

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Response:

Comment noted. Please see Responses to Comments AL00033-188 through AL00033-192, and SAL00015-89 through SAL00015-93 below.

SAL00015-89

Comment:

- A significant portion of the numbers contained in Supplement Table S4.17.1-3 are marked with indicators explaining that those numbers have been modified from the numbers included in the 2001 Draft EIS/EIR in order to correct "errors" and "mathematical errors." The Supplement does not, however, provide any information regarding the nature or extent of those errors, does not explain why some changes are attributed to "mathematical errors" while others are simply called "errors," and does not provide any indication of why the errors occurred.

Response:

Of the 150 individual values (not including subtotals or totals) included in Table S4.17.1 3 of the Supplement to the Draft EIS/EIR, 12 values were modified following publication of the Draft EIS/EIR. In addition, several values were revised to correct mathematical errors, many of which were related to rounding. In some instances, the difference in the revised value is less than one tenth of one percent of the original value. In the two instances where the difference in the value exceeds 10 percent (the greatest difference is 14 percent), the value in the Supplement to the Draft EIS/EIR is lower than that in the Draft EIS/EIR.

Many of the values in the Table S4.17.1-3 are based on square footage information for each alternative. The square footage values for some of the alternatives used to calculate electricity and natural gas consumption in the Draft EIS/EIR varied slightly from the square footage reported elsewhere in the document. For the Supplement to the Draft EIS/EIR, square footage values that were consistent with those reported elsewhere in the document were used. For example, for the 1996 baseline electricity consumption, specific square footage for cargo was used (1,910,752 square feet). Elsewhere in the Draft EIS/EIR, this square footage was rounded to the nearest hundred-thousand (1,900,000). For the Supplement to the Draft EIS/EIR, the rounded value was used to ensure consistency throughout the document. It should be noted that the resulting electricity and natural gas consumption values reported in Table S4.17.1-3 of the Supplement to the Draft EIS/EIR are within 1 percent of the values presented in the Draft EIS/EIR (variations range from .001 percent to .85 percent).

The other values that were revised in Table S4.17.1-3 pertain to gasoline and diesel consumption associated with off-airport vehicles for the No Action/No Project Alternative and Alternatives A, B, and C. These calculations were updated in the Supplement to the Draft EIS/EIR to reflect corrections to vehicle miles traveled data. The number of vehicles, and the mix of vehicles, did not change. The resulting values are all lower than those presented in the Draft EIS/EIR.

SAL00015-90

Comment:

- The Supplement concludes that the impact of the Master Plan build alternatives (Alternatives A, B, C & D) on electricity and natural gas supplies would be less than significant because "a sufficient supply of electricity and natural gas is expected to be available." Supplement at 4-516 (emphasis added). In other words, the Supplement's analysis is based on an assumption that sufficient gas and electricity will be available to support the increased demand protected under Alternative D and the other Master Plan build alternatives. The Supplement cites no support for this assumption. As such, the conclusion that the Master Plan build alternatives' impacts on electricity and natural gas supplies would be less than significant is not based on substantial evidence. Project approval is therefore precluded under CEQA. Pub. Res. Code § 15091(a)-(b).

Response:

The availability of electricity and natural gas to accommodate projected demand associated with the Master Plan is addressed in Section 4.17.1, Energy Supply (subsection 4.17.1.3), of the Draft EIS/EIR. As indicated in that section, LADWP has an obligation to serve its customers as stated in the City Charter. LADWP's 2000 Integrated Resource Plan outlines adequate electricity supply and

transmission capability to meet the needs of its customers within the Los Angeles area including LAX. LADWP's extensive transmission system and its present capacity allows the city to access surplus electricity generated in the Pacific Northwest and Southwest to meet all of the city's needs through the year 2015. Also as indicated in that section, according to a report prepared by the California Energy Commission, future supplies of natural gas are anticipated to be adequate to meet projected demand through 2015. The Draft EIS/EIR is incorporated by reference into the Supplement to the Draft EIS/EIR (Supplement to the Draft EIS/EIR, p. 1-11).

SAL00015-91

Comment:

- The Supplement acknowledges that the increased demand for electricity projected under Alternative D may result in the need to upgrade the electrical power transmission system. Supplement at 4-516. The document does not, however, identify any of those reasonably foreseeable transmission upgrade projects, much less evaluate the environmental impacts associated with their construction and operation.

Response:

At this stage of the Master Planning effort, the nature, extent, and location of necessary upgrades to the electrical power transmission system is not known. Upgrades to the electrical power transmission system can be accomplished in a number of ways and at a number of facilities and locations. In some instances, these upgrades may not require any new facilities, but merely would require that existing equipment be replaced. If new electrical facilities are required, they are expected to take up very little space, and to consist of equipment and technologies commonly and safely used in urban areas. Specific upgrades will be identified during the detailed design of the Master Plan facilities. Master Plan Commitment E-2 will ensure that adequate electrical distribution facilities are available to support the electricity needs associated with the Master Plan. Because the specific type and location of upgrades is not known at this time, an analysis of the potential environmental impacts associated with their implementation and operation would be speculative and, therefore, is not required by CEQA (State CEQA Guidelines, Section 15145). However, specific upgrades identified during detailed project design will be evaluated pursuant to CEQA, if warranted. Please also see Response to Comment AR00003-63.

SAL00015-92

Comment:

- The Supplement notes that under Alternative D, "some" GSE and on-airport vehicles would be converted from gas/diesel to LNG, CNG or propane power. The Supplement must provide greater specificity with regard to this conversion. Such specificity is necessary in order to: (1) ensure the conversion program is actually carried out and enforceable; (2) accurately calculate the project's energy supply impacts; and (3) accurately calculate the project's air quality impacts (see Attachment 3).

Response:

The basis of the assumptions pertaining to LNG, CNG, and propane consumption are identified in Section 2.3 of Technical Report 8, Energy Supply Technical Report, of the Draft EIS/EIR. It should be noted that the assumptions underlying the energy analysis of the Draft EIS/EIR and the Supplement to the Draft EIS/EIR do not account for mitigation measures proposed to reduce non-energy-related impacts of the project. Several proposed air quality mitigation measures would affect energy consumption associated with on-airport vehicles.

As part of the proposed air quality mitigation package, GSE would be converted to electric power (or extremely low emission technology, such as fuel cells). This would decrease LNG and CNG consumption, and would increase electricity consumption, as compared to the analysis of energy impacts provided in the Draft EIS/EIR and the Supplement to the Draft EIS/EIR. The environmental impacts of this mitigation measure--including the increase in electricity consumption due to the conversion of GSE to electric power--were addressed in Section 4.6 (subsection 4.6.8.6), Air Quality, of the Draft EIS/EIR. As indicated in Section 4.17.1 (subsection 4.17.1.3), Energy Supply, of the Draft EIS/EIR, the City of Los Angeles Department of Water and Power (LADWP) has an obligation to serve its customers, including LAX. Also as indicated in that section, LADWP has adequate electricity

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generation, transmission, and distribution capacity to meet the needs of its customers within the Los Angeles area, including LAX. It should be noted, as stated in Appendix S-E, Section 2.3.1, of the Supplement to the Draft EIS/EIR, that LAWA executed a long-term agreement with LADWP in 1999 to provide "green power" to LAX, a decision that will greatly reduce the need for locally generated electricity at LAX. By 2010, LAWA intends to increase the use of green power at LAX to 50 percent and by 2015 to 100 percent. The measure pertaining to GSE conversion is very specific. Please see Response to Comment AR00003-63 regarding the enforceability of proposed mitigation measures. As indicated in that response, adopted mitigation measures will be fully enforceable pursuant to a mitigation monitoring and reporting program.

The air quality analysis does not assume the conversion of on-airport vehicles to alternative fuels beyond that required by State laws, regional regulations, and local ordinances pertaining to public fleet vehicles. As indicated in Table S4.6-18, Recommended Mitigation Measure Components, of the Supplement to the Draft EIS/EIR, although LAWA has committed to promoting the conversion of on-airport private-fleet vehicles to alternative fuels, no credit is taken for the air quality benefits from such conversion even though a positive air quality benefit will develop from the implementation of this measure; that is, the potential emission reductions were not quantified. To the extent that such conversion does occur, the potential environmental impacts are addressed in Chapter 4.6 (subsection 4.6.8.6) of the Draft EIS/EIR. If the conversion does not occur at the levels assumed in the energy analysis, the consumption of LNG, CNG and propane would decrease, and the consumption of gasoline and diesel would increase. LNG, CNG, propane, gasoline, and diesel are all petroleum products. As indicated in Section 4.17.1 (subsection 4.17.1.3), of the Draft EIS/EIR, petroleum products are market-driven commodities for which adequate supplies are anticipated through 2015 by the California Energy Commission.

Responses to comments contained within the commentor's Attachment 3 are provided in Responses to Comments SAL00015-235 through SAL00015-289. Regarding the GSE assumptions used in the Supplement to the Draft EIS/EIR analysis, please see Response to Comment SAL00015-264.

SAL00015-93

Comment:

- The Supplement concludes that Alternative D would entail a 412 percent increase in the consumption of LNG, CNG and propane over existing conditions. Supplement at 4-517. This is a major increase which, as even the Supplement acknowledges, would require construction of significant new distribution infrastructure. Id. The Supplement concludes, however, that the dramatic increase in the consumption of LNG, CNG and propane will not result in any significant environmental impacts. Id. This conclusion is not supported by substantial evidence because neither LAWA nor the FAA has adequately considered the environmental impacts of constructing and operating the new infrastructure necessitated by that increased consumption.

Response:

The Supplement to the Draft EIS/EIR does not indicate that new distribution infrastructure would be required to accommodate the projected increase in LNG, CNG, and propane consumption under Alternative D. Rather, the Supplement indicates that Alternative D would require new electrical and natural gas distribution infrastructure.

Under Alternative D, the existing LNG/CNG Facility located south of World Way West would remain in its current location. In order to accommodate the projected increase in LNG and CNG usage, the facility would be further expanded to include a total of 6 LNG tanks and 10 CNG tanks. These tanks could be accommodated at the current site; no new construction would be required. The maximum tank size at the LNG/CNG Facility would not be any larger than under baseline conditions. Therefore, the hazard footprint would be the same. In the Final EIS/EIR, Section 4.24.3, Safety (subsection 4.24.3.3), has been modified to clarify the number of tanks at the site under Alternative D. Under Alternative D, the CNG Station would be relocated to the southeast corner of Arbor Vitae Street and Aviation Boulevard. The relocated CNG Station would be the same size with the same overall capacity as under baseline conditions.

As indicated in Response to Comment SAL00015-92 above, with implementation of proposed air quality mitigation measures, the consumption of LNG and CNG would decrease from the levels identified in the

Draft EIS/EIR and the Supplement to the Draft EIS/EIR. As a result, the projected need to expand the LNG/CNG Facility is conservative.

SAL00015-94

Comment:

15. Solid Waste

The Supplement's analysis of solid waste perpetuates the same problems seen in the analysis earlier presented in the Draft EIS/EIR. As such, the comments presented in our September 2001 Comment Letter remain salient and apply to the Supplement's analysis of Alternative D. See September 2001 Comment Letter at 94.

Response:

Comment noted. Please see Responses to Comments AL00033-198 through AL00033-209.

SAL00015-95

Comment:

In addition, one of the most obvious problems with the solid waste analysis in the Supplement is its reliance on an inaccurate solid waste generation factor. Specifically, the Supplement assumes a solid waste generation rate of 387 tons per million annual passengers ("tons/MAP") despite the fact that this rate has previously proved to be overly optimistic (i.e., too low). See Supplement Technical Report S-7 at 2; Supplement at 4-531. Year 2000 data shows, for example, that the actual generation rate was 431 tons/MAP rather than the 387 tons/MAP projected by LAWA for 2000 and future years. Id.

The only justification provided for the Supplement's reliance on this generation factor is the hopeful statement that "solid waste generation rates are expected to continually decrease and diversion is expected to increase at LAX." Supplement Technical Report S-7 at 2. This optimism is unfounded, however, in light of actual year 2000 data showing a higher generation rate and in light of the fact that LAWA, which is ultimately responsible for the amount of solid waste generated at LAX, has made inadequate "commitments" to reducing solid waste generation. As we noted in our 2001 comment letter, LAWA's various solid waste "commitments" lack the specificity and detail necessary to be enforceable, real and adequate. See September 2001 Comment Letter at 94. Commitment SW-1 described in the Supplement, for example, indicates that LAWA would implement a "more aggressive recycling program" but provides few details regarding the program and does not assess the likelihood of the program resulting in the significant solid waste generation factor reductions assumed by the Supplement. Supplement at 4-534.

Response:

As indicated in the Draft EIS/EIR (page 4-841), for the purposes of projecting future solid waste generation at LAX, solid waste generation factors current at the time of the preparation of the Draft EIS/EIR had to be adjusted to account for future solid waste diversion as mandated by AB 939. As indicated in the Draft EIS/EIR, these factors were used to project 2005 and 2015 solid waste generation. The Supplement to the Draft EIS/EIR acknowledged that the solid waste generation factor anticipated to be met in future years was not met by 2000. However, these factors are still valid for the purpose of projecting future (2015) solid waste generation.

It is reasonable to assume that solid waste generation rates at LAX will continually decrease and that diversion will continually increase. As indicated in Section 4.19, Solid Waste (subsection 4.19.3), of the Draft EIS/EIR, as of the 1999 reporting year, LAX achieved a diversion rate of 54 percent. As indicated in the Supplement to the Draft EIS/EIR, by 2000, the diversion rate had increased to 67 percent. LAWA has developed a comprehensive integrated materials recovery and source reduction plan. Implementation of this plan is responsible for the achievement of the 67 percent diversion rate. This plan provides a phased approach for the reduction of solid waste generation at LAX. Numerous programs have been identified that will provide for continued success in decreasing solid waste generation and increasing diversion rates. It is anticipated that, regardless of the Master Plan alternative selected, the City, and LAWA as a City agency, will continue to implement and improve

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existing diversion programs to meet or exceed future diversion goals, including the City's goal of 70 percent diversion by 2020.

Regarding Master Plan Commitments SW-2 and SW-3, please see Responses to Comments AL00033-199 and AL00033-200. Regarding Master Plan Commitment SW-1, as with Master Plan Commitments SW-2 and SW-3, Master Plan Commitment SW-1 is not a mitigation measure for a potentially significant, project-related environmental impact, because solid waste generation within the Master Plan boundaries would decrease under all of the Master Plan alternatives compared to baseline conditions. Instead, this commitment is a good practice to further enhance the current on-site waste reduction and recycling program, and to ensure continued commitment to the requirements of AB 939 with implementation of the Master Plan. As indicated in the Introduction to Chapter 4 of the Draft EIS/EIR and Supplement to the Draft EIS/EIR, provisions will be made to ensure that Master Plan commitments are enforceable via zoning conditions, conditions of approval, or similar mechanisms. In addition, an MMRP will be adopted that will include performance standards, where feasible and applicable, for project-related Master Plan commitments and mitigation measures. At the Master Plan level, it is not possible to provide a greater level of specificity regarding the programs that will be implemented. Solid waste reuse, reduction, and recycling opportunities have changed dramatically over the past decade; to specify the precise programs to be implemented over the next decade would be unnecessarily limiting. However, future environmental reviews conducted for individual Master Plan components would afford the opportunity, where appropriate, to provide greater level of detail regarding provisions included in the Master Plan commitments, including consideration of performance standards that are consistent with the solid waste policies and objectives of AB 939. As noted in Master Plan Commitment SW-1, the enhanced recycling program will be based on successful programs at other airports and facilities. The components of the enhanced recycling program -- including implementing recycling programs in terminals, developing a recycling program at LAX Northside/Westchester Southside, requiring tenants to meet specified diversion goals, and including a preference for recycled materials during procurement -- have been proven in other locations and developments.

SAL00015-96

Comment:

16. Construction Impacts

The Supplement contains some new analysis of construction impacts, although the new information is not always easily identified. It continues to posit an overly optimistic construction schedule, rely on badly designed and unenforceable mitigation measures, and omit certain impacts of anticipated construction activity. As laid out above in our discussion of traffic impacts and in Attachment 2, the Supplement includes serious discrepancies regarding size of the workforce and the number of trips those workers would generate. As explained in our discussion of air quality impacts and in Attachment 3, the construction emissions analysis is significantly flawed and fails to disclose impacts on air quality from construction equipment and activity. In addition, the Supplement lacks an adequate analysis of construction noise. See Attachment 1.

Response:

Comment noted. Please see Responses to Comments AL00033-210, SAL00015-42, SAL00015-45, SAL00015-181 through SAL00015-189, SAL00015-250 through SAL00015-262, SAL00016-29, and SAL00015-140, respectively.

SAL00015-97

Comment:

Though the Supplement emphasizes that construction impacts are temporary, the proposed project would impose construction impacts on El Segundo and other neighboring jurisdictions for 10 years or more. These impacts will be severe, and LAWA and FAA must do a great deal more than they have in the documents to date to assure adequate mitigation of the noise, air pollution, traffic congestion, and other impacts of the construction contemplated by this plan.

Response:

Comment noted. Please see Response to Comment AL00033-210.

SAL00015-98

Comment:

17. Art and Architecture

The analysis of impacts to design, art, and architecture found in the Supplement suffers from many of the same inadequacies as the previous discussion in the Draft EIS/EIR and is, thus, likewise inadequate. For our comments on the Draft EIS/EIR, which remain relevant here, please see our September 2001 Comment Letter at 100-102.

Response:

Comment noted. Please see Responses to Comments AL00033-214 through AL00033-218.

SAL00015-99

Comment:

Additionally, the Supplement fails to describe any concrete or defined aesthetic and architectural standards to which the Project will be held. No discussion is provided regarding how architects and designers for the numerous individual building and landscaping projects will be chosen. Given the fact that this Project is one of the primary entrance points to California and the region for international and domestic travelers, and considering the significance and creativity of contemporary architecture in Los Angeles, standards should be established to ensure that talented and competent architects and designers will be chosen to design attractive, efficient, and highly functional buildings and environments.

Response:

Comment noted. The Draft EIS/EIR and Supplement to the Draft EIS/EIR were program level documents intended to guide future Master Plan development at LAX, as discussed further in Response to Comment AR00003-63. It is infeasible to provide specific design characteristics at this point in the planning process. Individual improvement projects will be reviewed on a project by project basis to maintain high design standards at LAX pursuant to design plans and guidelines. With implementation of Master Plan Commitment DA-2, Update and Integrate Design Plans and Guidelines (Alternatives A, B, C, and D), provided in Section 4.21, Design, Art and Architecture Application/Aesthetics, of the Supplement to the Draft EIS/EIR, existing plans and guidelines will be updated or integrated into a comprehensive set of design-related guidelines and plans. As specified, the update will incorporate key provisions in current plans with an equivalent or greater level of design, compatibility, and visual quality. This commitment and a continuation of current plan review processes will ensure that a high level of design is maintained as individual projects move forward.

SAL00015-100

Comment:

Likewise, no building standards are described for the individual building and landscaping projects that will comprise the Project as a whole. For example, in order to mitigate some of the resource impacts this Project will likely entail, the Supplement and the Master Plan itself should require the incorporation of green building methods, practices, and materials. Such a commitment to green building, and a commitment to follow one of the recognized certification programs for green building, would show a commitment to the environment and improving the aesthetic and architectural character of LAX and its vicinity.

Response:

Comment noted. Please see Response to Comment SAL00015-99 regarding the design of future improvements at LAX. Relative to "green" building methods, the City of Los Angeles has not yet approved Citywide standards for such practices, nor has it adopted the Leadership in Energy and Environmental Design (LEED) Green Building Rating System established by the U.S. Green Building Council (USGBC) on a Citywide level. As a general practice LAWA recommends the incorporation of many "green" components for new construction, such as energy saving light fixtures and increased

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insulation. The City Council has approved a Sustainable Building Initiative (Council File #02-0182) adopting the LEED Rating System for new design and construction by the Department of Public Works for buildings of 7,500 square feet or larger, effective July 1, 2003; LAWA intends to monitor implementation of the LEED system within the Department of Public Works for consideration in the future.

SAL00015-101

Comment:

18. Earth/Geology

Because the Supplement relies on much of the same information and analysis found in the Draft EIS/EIR, our comments on the prior document remain relevant here, and apply to the analysis of Alternative D. September 2001 Comment Letter at 102-103.

Response:

Comment noted. Please see Responses to Comments AL00033-219 through AL00033-221.

SAL00015-102

Comment:

Additionally, although the Supplement notes that the potential impacts due to earthquake fault surface rupture are higher for Alternative D as compared to the other build alternatives, (Supplement at 4-584), little analysis of this condition is provided and no additional mitigation measures are offered. Instead, the Supplement concludes that, despite this increased risk, there remains no significant impact. This conclusion is not supported by fact or analysis. At the very least, additional analysis should be provided and further mitigation proposed to address the increased risk of fault surface rupture under Alternative D.

Response:

Details regarding the methods and assumptions used in the analysis of fault surface rupture are included in Section 4.22, Earth/Geology, of the Draft EIS/EIR and the Supplement to the Draft EIS/EIR, with supporting technical analysis provided in Technical Report 12, Earth/Geology Technical Report, of the Draft EIS/EIR. As described therein, this analysis included review of historic aerial photographs and topographic maps, evaluation of surface fault rupture potential, and identification of faults in the vicinity of LAX.

As a result of this analysis, it was determined that the nature, location and even the existence of the Charnock Fault is uncertain in the LAX area. Moreover, there is a low potential that the Charnock fault trace, if it exists, could be found with additional investigation. Were the Charnock fault trace to occur in the LAX area, the likelihood of surface rupture occurring on the fault is low, and the likelihood of any specific structures associated with any of the Master Plan alternatives, including Alternative D, being damaged is considered even lower. The Charnock fault has been analyzed by the State of California, is not considered active by the State, and is not subject to the zoning restrictions of the Alquist-Priolo Earthquake Fault Zoning Act.

The Supplement to the Draft EIS/EIR concluded that the potential impacts of earthquake fault surface rupture and co-seismic ground deformation in the eastern portion of LAX under Alternative D would be higher than the impacts associated with Alternatives A, B, and C. However, it was not concluded that there would be an "increased risk of fault surface rupture under Alternative D" as stated by the commenter. The potential impacts under Alternative D are higher simply because more of the improvements associated with Alternative D are located in the eastern portion of LAX where the Charnock fault may (or may not) exist. As described in the Supplement to the Draft EIS/EIR, and as supported by the facts described above, the likelihood of a fault surface rupture event occurring on the Charnock Fault is low, and this likelihood is not increased or decreased by the presence or absence of any improvement associated with any of the alternatives.

Additional analysis would not alter the conclusions of the Supplement to the Draft EIS/EIR. As stated in that document, because the potential for damage at LAX is considered low, and the potential for

damage to structures associated with Alternative D (and for injury to persons using the new facilities) is considered even lower, the impact of fault surface rupture is considered less than significant. For this reason, no mitigation measures for fault surface rupture under Alternative D are warranted.

SAL00015-103

Comment:

19. Hazardous Materials

The Supplement's analysis of hazardous materials perpetuates the problems pointed out in our September 2001 comments. Those comments remain salient and apply to the Supplement's hazardous materials discussion with regard to Alternative D as well.

Response:

Please see Responses to Comments AL00033-223 and AL00033-416 through AL00033-437.

SAL00015-104

Comment:

See Attachment 6 for our expert consultants' report on hazardous materials. As set forth in that report, the impacts of toxic contamination of soils and groundwaters on the LAX site on the health and safety of construction workers is a matter of grave concern. These impacts have still not been adequately analyzed; instead LAWA assumes, without analysis, that any such impacts will be mitigated. As explained in Attachment 6 and in Attachment F to our September 2001 Comment Letter, this approach is improper and the mitigation measures as proposed are legally deficient.

Response:

Please see Responses to Comments SAL00015-306 through SAL00015-311 and AL00033-416 through AL00033-437.

SAL00015-105

Comment:

20. Public Utilities

Our comments on the Draft EIS/EIR pointed out numerous problems with the analysis of the impacts of the Master Plan alternatives on public services, particularly water and wastewater. See 2001 Comment Letter at 105-109. Although the Supplement claims to have corrected certain errors, many of the numerical discrepancies we noted previously (e.g., a water usage figure for Continental City that is at odds with the Draft EIR for that project) are repeated in the Supplement.

Response:

Responses to the referenced comments on the Draft EIS/EIR are provided in Responses to Comments AL00033-234 through AL00033-243. Specifically, please see Response to Comment AL00033-235 regarding water usage figures for Continental City.

SAL00015-106

Comment:

Also evident in the Supplement is that by assuming that Alternative D would use water conservation methods and reclaimed water (without providing enforceable conditions to ensure this) the Supplement concludes that Alternative D would result in lower water usage than No Action/No Project Alternative. Supplement Table S4.25.1-1. This is not adequately documented, and there is no reason to assume that water conservation measures cannot be incorporated into the current airport without a new Master Plan. The analytical approach of the Draft EIS/EIR and the Supplement is flawed from a CEQA/NEPA perspective because it causes Alternative D to appear to have less severe water supply impacts than

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No Action/No Project Alternative by assuming that No Action/No Project Alternative will not comply with conservation measures that are generally utilized in major public facilities; the result is a misleading comparison.

Response:

The methodology for calculating water consumption is described in Section 4.25.1, Water Use (subsection 4.25.1.2), of the Draft EIS/EIR. As explained in that section, a single set of water factors was used for projecting water use for the No Action/No Project Alternative and the build alternatives (see Tables 7 through 10 of Technical Report 15a, Water Use Technical Report, of the Draft EIS/EIR, and Table S4 of Technical Report S-10a, Supplemental Water Use Technical Report, of the Supplement to the Draft EIS/EIR, as summarized in Table S4.25.1-1 of the Supplement to the Draft EIS/EIR). The commentor is correct in stating that Master Plan commitments would be implemented addressing water conservation and use of reclaimed water under the build alternatives that would not be implemented for the No Action/No Project Alternative. In the absence of a discretionary action by FAA or the City of Los Angeles, such as would occur under the No Action/No Project Alternative, there is no mechanism that would trigger the need to adopt or implement mitigation measures or Master Plan commitments. It should be noted, however, while LAWA has committed to the implementation of water conservation measures at LAX under the Master Plan, neither the Draft EIS/EIR or the Supplement to the Draft EIS/EIR took credit for any reduction in water consumption. Rather, as stated above, the analysis was based on one common set of water factors, thereby overstating the amount of water use under the build alternatives following implementation of the proposed Master Plan commitments. The No Action/No Project Alternative is projected to consume a greater amount of water than the build alternatives due to the build-out of Continental City and LAX Northside, and the retention of existing land uses within the Master Plan boundaries, a portion of which would be acquired under each of the build alternatives. Regarding the enforceability of the Master Plan commitments, as indicated in the Introduction to Chapter 4 of the Draft EIS/EIR and Supplement to the Draft EIS/EIR, provisions will be made to ensure that Master Plan commitments are enforceable via zoning conditions, conditions of approval, or similar mechanisms.

SAL00015-107

Comment:

In this impact area as in others, LAWA's and the FAA's analytical assumption that Alternative D would serve a maximum of 78 MAP, when its gate capacity actually exceeds that and its terminal facilities and airfield capacity will be greatly expanded, leads to an erroneously low projection of water usage, and a resulting understatement of the impacts on water supply. Although the Supplement asserts that there will be adequate water supply for this project, the Los Angeles basin faces a chronic and severe water shortage, and the Master Plan alternatives' water supply impacts must be fully analyzed in the context of the cumulative water supply problems in the area. See e.g., Stanislaus Natural Heritage Project v. County of Stanislaus, 48 Cal.App.4th 182 (1996) (rejecting EIR for failure to analyze water supply aspects of development project).

Response:

Please see Response to Comment SAL00015-312 regarding the capacity of Alternative D. As indicated in that response, the Supplement to the Draft EIS/EIR accurately identified the projected capacity of Alternative D. As a result, the projection of water usage associated with Alternative D is correct.

In accordance with the California Water Code § 10910, et seq., LADWP conducted an updated Water Availability Assessment for Master Plan Alternative D (LADWP Water Supply Availability Assessment for the Los Angeles World Airports Master Plan Alternative "D" Project, June 10, 2003). This assessment is included in Appendix S-A, Agency Consultation Letters, of the Supplement to the Draft EIS/EIR. The assessment concluded that "adequate water supplies will be available to meet the water demands of the Project" (Water Supply Availability Assessment, p. 3) and that "LADWP finds that it will be able to meet the demand of the Project as well as existing and planned future uses of the LADWP's system" (Water Supply Availability Assessment, p. 19).

SAL00015-108

Comment:

Conclusion

The environmental impacts of LAX and the proposed airport improvement plans are massive. The plans for the airport's future should undergo detailed and accurate review, including full disclosure to the public and decisionmakers and an opportunity for the public to comment and be heard. For the reasons detailed in this letter and the attachments, and in our September 2001 Comment Letter and the associated attachments, the Draft EIS/EIR and Supplement still fail to provide adequate disclosure and mitigation of significant environmental impacts. Many of the problems identified in previous comments have still not been remedied. Additional analysis must be prepared to meet legal standards and adequate documents must be circulated to the public for review and comment.

LAWA and FAA may understandably be impatient to conclude this Master Plan process after many years of planning and review. The fact that this process has been a slow one, however, is not a justification for skimping on the necessary analysis and public disclosure. The Draft EIS/EIR should be corrected and recirculated to assure compliance with the legal requirements of CEQA and NEPA.

Response:

Comment noted. Written responses are provided for all comments previously submitted by the commentor in September 2001 regarding the Draft EIS/EIR. Those responses are provided in Responses to Comments AL00033-1 through AL00033-442. Written responses are also provided for all comments submitted in November 2003 regarding the Supplement to the Draft EIS/EIR. Those responses are provided in Responses to Comments SAL00015-1 through SAL00015-333. All of the issues raised by the commentor have been addressed, and the information comprising the Final EIS/EIR for the LAX Master Plan, including the Draft EIS/EIR, the Supplement to the Draft EIS/EIR, and the related public review comments and written responses to those, meets the legal requirements for disclosure of potential environmental impacts pursuant to NEPA and CEQA.

SAL00015-109

Comment:

Acoustical Review of the Supplement to the Draft EIS/EIR for the LAX Master Plan

Introduction

We have reviewed portions of the Supplement to the Draft Environmental Impact Statement/Environmental Impact Report (EIS/EIR) for the LAX Master Plan to identify acoustical issues that may be of concern to adjacent communities to the east and south of LAX. These portions of the Supplement include Chapter 4.1, Noise, and Appendix S-C1, Supplemental Aircraft Noise Technical Report.

General Comments

The Supplement does address some of the deficiencies in the Draft EIS/EIR; in particular, it adds information about the Year 2000 in addition to the Year 1996. That year (2000) is generally thought to be more appropriate for the environmental baseline than 1996 because using 1996 gives the Airport Master Plan the perception of more noise reduction than it should be credited with. The Federally mandated phase-out of Stage 2 aircraft, which is unrelated to the Master Plan, is actually the cause of a significant noise reduction between 1996 and 2000. However, the Supplement, while revealing that noise levels in 2000 were lower than 1996, still uses 1996 as the baseline for evaluating impacts.

Response:

The 1996 environmental baseline for the Draft EIS/EIR included many of the noisier Stage 2 aircraft that were phased out in the Year 2000. Please see Topical Response TR-N-1 regarding the noise modeling approach, in particular Subtopical Response TR-N-1.3 regarding use of 1996 baseline noise levels from which to measure increases associated with proposed alternatives. Please see Topical Response TR-

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GEN-1 regarding baseline issues. The Supplement to the Draft EIS/EIR, in Section 4.1, Noise, and Section 4.2, Land Use, analyzed and compared Year 2000 conditions with baseline conditions for the No Action/No Project, and Alternatives A, B, C, and D. Please also see Response to Comment SAL00015-24.

SAL00015-110

Comment:

The Supplement also adds information that purports to comply with the California Court of Appeals decision in Berkeley Keep Jets over the Bay Committee v. Board of Port Commissioners, to document single event noise effects on the surrounding communities. The problem is that the single event noise information in the Supplement is presented in ways that obfuscate rather than clarify the impact. Rather than provide SEL contours for each of the aircraft types operating at LAX and their frequencies of occurrence, which would provide meaningful information to the lay reader, the Supplement provides an artificial contrivance (the so-called 94 dB SEL contour) which is based on an arbitrary assumption of what a significant percentage of nighttime awakenings is. While this method of correlating SELs and awakenings is interesting it doesn't really answer the questions residents continually want to have answered, i.e., how noisy will the overflights be and how many times am I going to hear them? Outside the airport and the mathematical world of noise analysis, the communities and their residents have a perceived severe annoyance with overly intrusive aircraft noise. And, the annoyance is not just awakenings but also interference with speech and other activities, both indoor and outdoor.

Response:

Comment noted. Please Response to Comment SAL00015-25 and SAL00015-26 regarding the selection of the single event noise level threshold of significance. Numerous studies have demonstrated that annoyance with aircraft noise is most closely correlated with the cumulative noise level (DNL or CNEL), and also that the only useful land use compatibility guidelines for planning in an airport environment are based on cumulative metrics. Therefore, the FAA has developed its land use guidance and compatibility criteria around the cumulative metrics. The term "annoyance" is related to land use compatibility and is addressed by the use of CNEL throughout the study findings, while the term "awakenings" is specifically related to the issue addressed by the single event awakenings threshold adopted by LAWA in response to court directives to Oakland.

SAL00015-111

Comment:

Speech Interference

The Supplement does not address speech interference associated with aircraft noise although, like sleep disturbance, it is a primary cause of annoyance to individuals on the ground. It disrupts routine activities such as radio or television listening, telephone use, and family conversation giving rise to frustration and aggravation. According to both the U. S. Environmental Protection Agency in its seminal "Levels Document" Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety EPA 1974 (Figure D-3, pg D-7) and the Federal Interagency Committee on Noise (FICON) document Federal Agency Review of Selected Airport Noise Analysis Issues FICON Federal Inter Agency Committee on Noise Aug 1992 (pg 3-7) "wherever intrusive noise exceeds approximately 60 dB indoors, there will be interference with speech communication." It can be reasonably concluded that outdoor noise exceeding (roughly 75 dB) will also cause this intrusive interference. The Supplement like its predecessor Draft EIS/EIR is silent on this issue despite the fact that residents of El Segundo and other communities surrounding LAX are affected daily by this annoyance factor. To provide meaningful information on all aspects of annoyance, the Supplement should utilize and disclose a 75 dB SEL contour like the one developed for the awakenings aspect of annoyance. Likewise, assuming 60 dB events will also affect outdoor communication, a 60 dB SEL contour should be provided to the communities around LAX.

Response:

Comment noted. The effects of noise on speech in the customary residential setting are reflected in the noise compatibility criteria used for land use impact analysis in this report, as established by the FAA and the State of California. The EPA position has never been accepted by the joint federal committees

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concerned with noise and its impacts, and the EPA, through its participation on the Federal Interagency Committee On Noise supports the land use compatibility criteria used in preparation of the Draft EIS/EIR and Supplement to the Draft EIS/EIR. For additional information on the meaning of impacts below 65 CNEL, please see Subtopical Response TR-N-2.3, regarding evaluation of impacts should extend beyond the 65 CNEL contour to all sensitive areas under flight tracks. Sound Exposure levels for a variety of aircraft are identified in Section 6, Typical Noise Footprints of the Operating Fleet of Appendix D, Aircraft Noise Technical Report of the Draft EIS/EIR. An 80 dB SEL would typically equate to 70-74 dB Lmax noise level.

SAL00015-112

Comment:

Flights Above 3000 Feet

On another but related vein, the Supplement continues to ignore flight operations above an altitude of 3,000 feet Above Ground Level (AGL), relying on FAA Rules that categorically exclude such flight operations from environmental review under NEPA. However, FAA Order 1050.1D prescribes that "extraordinary circumstances" such as actions which are likely to have a significant impact on noise levels over noise sensitive areas, or a significant impact on coastal zones, "shall be the subject of an environmental assessment." The Supplement, as did the Draft EIS/EIR, appears to be based on the faulty premise that noise in the South Bay communities which lies outside the parameters established for the noise analysis, does not exist. The noise analysis is, obviously, deficient with respect to its treatment of these areas. There are, in fact, several points that will be discussed later that will have a material impact on residential areas and coastal zones and the "extraordinary circumstances" exception should be applied. As stated above, FAA Order 1050.1D calls for at least an assessment of changes in operations above 3,000 feet AGL. Nevertheless, the Supplement and its predecessor Draft EIS/EIR simply dismiss this requirement categorically stating that "no further noise review" above 3,000 feet is necessary since the noise associated with jet aircraft weighing more than 75,000 pounds will not change more than five decibels CNEL. The rationale for this five dB CNEL standard is apparently derived from FAA Notice 7210.360 which states that below 60 dB DNL an increase of 5 dB is only a "marginal" impact. Other than that there appears to be no basis for it.

Response:

The noise analysis was done in complete compliance with appropriate FAA and scientific principles including FAA Order 1050.10 and Order 5050.4A. The commentator assumes that there will be new air traffic routes developed over the South Bay communities as a result of the Master Plan projects. This is not the case. Regardless of the Master Plan alternative, the air traffic routes now used throughout the region and in areas beyond the initial departure and final approach courses will continue to be used by aircraft operating at LAX. As described by Subtopical Response TR-N-3.1, regarding South Bay overflowed by new routes, the new procedures recently implemented to reroute traffic south of LAX during departure are independent of the Master Plan and have nothing to do with the implementation of any of the proposed development actions. These changes were reported in Appendix D, Aircraft Noise Technical Report Section 7 of the Draft EIS/EIR for informational purposes and included in the modeling of future noise conditions, but not within the environmental baseline condition of 1996 because they had not been implemented at that time. The analysis for Noise Screening of Track Changes above 3,000 feet altitude was done in accordance to FAA guidelines. The commentator is correct in identifying that under NEPA requirements the 5 dB Threshold of Significance is not included; however, the Draft EIS/EIR was also prepared under CEQA requirements where increases of 5 CNEL in areas exposed to less than 60 CNEL are also to be considered for CEQA analyses.

SAL00015-113

Comment:

Furthermore, the Supplement and the Draft EIS/EIR misconstrue the FAA's benchmark for the measure of overflight as "Above the Airport" when actually it is "Above Ground Level" (AGL). Obviously, the Supplement's use of "3,000 feet above an airport's elevation," as the criterion places communities in the South Bay and elsewhere which are located well above the airport's elevation at a severe disadvantage. For instance, Palos Verdes is at approximately 1,480 feet elevation, while the Airport is located at 126 feet. Due to the difference in elevation between Palos Verdes and the Airport, an aircraft may be 3,001

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feet "above the airport", and its noise not subject to environmental review under LAWA's theory, while it is only 1,521 feet above Palos Verdes. Thus, while the noise impact may not meet the "above airport" criterion, the noise over Palos Verdes would be significantly greater than assumed, but remain unaccounted for in the model. There is no doubt about this since the Supplemental Aircraft Noise Technical Report on page 33 states that for purposes of consistency with the Draft EIS/EIR the Supplement relied upon the FAA's Air Traffic Noise Screening Model (ATNS) described in FAA Notice 7210.360 to "assess the effects noise level changes associated with air traffic procedure changes at altitudes greater than 3,000 feet above an airport's elevation [clearly misconstruing the FAA's intent]. This methodology requires that changes in aircraft noise be evaluated if the noise associated with jet aircraft weighing more than 75,000 pounds changes by more than five decibels of DNL (CNEL in California) over residential areas and the aircraft is in flight at an altitude between 3,000 and 18,000 feet above the airport." Whether or not the preparers of the Draft EIS/EIR actually used the current computerized version of FAA Notice 7210.360 was called into question during the comment period for the Draft and the Supplement does not provide any evidence of an update. In fact, it appears that use of the outdated and obsolete checklist from the former FAA Notice 7210.360 was continued, leading to the Supplement's reaffirmation on page 33 of the Draft EIS/EIR assertion that "since the flight tracks of the new and relocated runways will be located within close proximity to the present flight tracks of the existing runways, and the aircraft activity on these tracks will not result in an increase of 5 decibels of DNL (CNEL) over any residential area when the aircraft are above 3,000 feet, [the checklist] indicates that no further noise review under this guideline is required." Without doubt the Supplement perpetuates the Draft EIS/EIR's misleading the public into believing that an actual, scientific analysis was conducted to determine whether noise would increase above 3,000 feet when it was not.

Response:

The noise analysis was done in complete compliance with scientific principles and FAA Order 1050.1D and Order 5050.4A. The analysis for Noise Screening of Track Changes above 3,000 feet altitude was done in accordance to FAA guidelines. The commentor is correct in identifying that under NEPA requirements the 5 dB Threshold of Significance is not included; however, the Draft EIS/EIR and Supplement to the Draft EIS/EIR was also prepared under CEQA requirements where increases of 5 CNEL in areas exposed to less than 60 CNEL are also to be considered for CEQA analyses. Please see Section 4 of Appendix D, Aircraft Noise Technical Report, of the Draft EIS/EIR and Section 4 of Appendix S-C1, Supplemental Aircraft Noise Technical Report, of the Supplement to the Draft EIS/EIR for additional information. The Air Traffic Noise Screening Model the commentor refers to a computerized version of the checklist that was formerly used. There are no new requirements or decision criteria included in the newer version of the ATNS. Therefore, there is no material difference in the analysis performed using the checklist versus the computerized model. Additionally, forecasted future conditions do not show that LAX flight tracks will change substantially and cross the South Bay below 3000 feet above the airport. Thus further study is not necessary. Please see Figure S-4, Alternative D Flight Tracks, of the Supplement to the Draft EIS/EIR. The commentor accurately describes a portion of the forecasts provided in the Supplement to the Draft EIS/EIR. Please see Topical Response TR-N-1 regarding noise modeling approach, particularly Subtopical Response TR-N-1.3, regarding simplified line drawing flight tracks vs. track dispersion and Topical Response TR-N-3, regarding aircraft flight procedures particularly Subtopical Response TR-N-3.1 regarding flight routes relative to areas of the South Bay.

SAL00015-114

Comment:

Single Event Noise Analysis

The remedy for many of the Supplement's shortcomings is a complete, accurate and understandable SEL analysis. However, the Supplement, as earlier the Draft EIS/EIR, emphasizes the cumulative time-averaged aircraft noise impacts created by aircraft approaching LAX from the east and from start-of-takeoff roll for west departures. Despite the contrived 94 dB SEL that appears in the Supplement, the Supplement simply doesn't provide any meaningful information either. It still fails to depict and analyze the SELs from potential routes over areas not previously over-flown, from missed approaches and it still does not address a potential increase in lateral separation of aircraft which could lead to an increase in overflight noise. It cavalierly dismisses this concern alleging the flight tracks will not significantly change (Aircraft Noise Technical Report, page 20). However, the Airport Master Plan on pages 11-2.36 and 2.37 indicates that when LAX is operating on a west flow, turbo-prop aircraft turn at the VOR (or Visual

Omni Range) navigational aid despite the policy statement and noise abatement procedures which require aircraft to proceed past the shoreline before starting a turn. If the turbo-prop aircraft do turn early, as the Master Plan indicates and as South Bay communities continue to insist, they will obviously fly over noise sensitive areas such as parts of El Segundo, thus falling under the "extraordinary circumstances" exception mentioned above and requiring further analysis. The Supplement weakly addresses this issue with some well-hidden Lmax data that falls well short of providing any meaningful information (id, Table S15, pages 78-88). The Supplement should provide SEL contours for each aircraft type on each flight track and their frequency of occurrence.

Response:

Comment noted. The noise analysis was done in complete compliance with appropriate FAA and scientific principles including FAA Order 1050.1D and Order 5050.4A. The commentor assumes that there will be new air traffic routes developed over the South Bay communities as a result of the Master Plan projects. This is not the case. Regardless of the Master Plan alternative, the air traffic routes now used throughout the region and in areas beyond the initial departure and final approach courses will continue to be used by aircraft operating at LAX. As described by Subtopical Response TR-N-3.1, regarding South Bay overflown by new routes, the new procedures recently implemented to reroute traffic south of LAX during departure are independent of the Master Plan and have nothing to do with the implementation of any of the proposed development actions. These changes were reported in Section 7, of Appendix D, Aircraft Noise Technical Report of the Draft EIS/EIR for informational purposes and included in the modeling of future noise conditions, but not within the environmental baseline condition of 1996 because they had not been implemented at that time. Please see Subtopical Response TR-N-1.4, regarding simplified line drawing flight tracks vs. track dispersion and Topical Response TR-N-3 regarding aircraft flight procedures. Sound Exposure Levels for a variety of aircraft are identified in Section 6, Typical Noise Footprints of the Operating Fleet of Appendix D, Aircraft Noise Technical Report of the Draft EIS/EIR.

SAL00015-115

Comment:

Other General Comments

Although Alternative D, which is the Preferred Alternative in the Supplement, does not postulate an increase in air traffic operations above the baseline or the No Action/No Project Alternatives, the other study Alternatives still forecast an increase in operations. As the Draft EIS/EIR before it, the Supplement does not clarify how these increased operations will be integrated into the existing Airport air traffic flows nor that they have a real-world potential for increased overflights of South Bay communities.

To accommodate this increase in air traffic, more airspace will probably be required to maintain adequate separation between aircraft during climb out. Air traffic controllers separate aircraft in two ways, laterally and vertically. Generally speaking, heavy departing aircraft are dispersed laterally. As lateral separation between departing aircraft must be maintained, a greater number of offshore aircraft may come closer and over the shoreline, which may also lead to premature easterly turns from the initial southerly headings of departing flights. These premature turns will potentially lead to an increase in overflight noise over South Bay Communities and should be addressed in the Supplement's coverage of the other Alternatives.

The South Bay Coastal Zones are a resource of not only local significance but also state and national significance. Relying on the Extraordinary Circumstances exception the Supplement should provide a meaningful analysis of impacts on South Bay coastal zones.

Response:

New air traffic routes will not be developed over the South Bay communities as a result of the Master Plan projects. Regardless of the Master Plan alternative, the air traffic routes now used throughout the region and in areas beyond the initial departure and final approach courses will continue to be used by aircraft operating at LAX. As described by Subtopical Response TR-N-3.1, regarding flight routes relative to areas of the South Bay, the new procedures recently implemented to reroute traffic south of LAX during departure are independent of the Master Plan and have nothing to do with the implementation of any of the proposed development actions. These changes were reported in Section

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7, of Appendix D, Aircraft Noise Technical Report, of the Draft EIS/EIR for informational purposes and included in the modeling of future noise conditions, but not within the environmental baseline condition of 1996 because they had not been implemented at that time.

The dispersion of individual aircraft departure tracks around the flight paths will become less variable in the future as the industry-wide movement toward the development of GPS/FMS flight procedures becomes more refined. Use of GPS procedures will result in the maintenance of more consistent flight paths than has been the case historically, because pilots (or FMS) will use specific geographic coordinates to navigate their way to and from the Airport. Further, the dispersion of flight tracks in the dominant departure direction lends no refinement to the definition of impacts, because there are no incompatible properties directly west of the runways. Dispersion lateral to the defined departure courses will be corrected by greater navigational controls on aircraft locations. Please see Topical Response TR-N-2, regarding single event noise and CNEL Differences and particularly Subtopical Response TR-N-2.2, regarding use of the 65 CNEL to determine significant impacts. Additionally, please see Appendix S-C Supplemental Aircraft Noise Technical Report and Appendix S-1, Supplemental Land Use Technical Report, of the Supplement to the Draft EIS/EIR regarding analysis of single-event noise impacts.

Aircraft operate in a complex environment and are regulated by a series of rules and regulations and weather conditions of which LAWA has no control over. The pilot is in command of the aircraft and that aircraft is under the control of the FAA. Failure to comply with LAWA's noise abatement procedures is not a violation of the Federal Aviation Regulations. However, it may result in correspondence from LAWA's Environmental Management Bureau staff advising the aircraft operator of the early turn. As stated in LAWA's Aircraft Noise Abatement Operating Procedures and Restrictions; It is not intended that any of the traffic or flight procedures contained herein shall, in any manner, abrogate the authority and responsibility of the pilot in command to assure the safe operation of the aircraft. For further information regarding early turns over areas north and south of the airport, please see Subtopical Response TR-N-3.2. Please see Topical Response TR-N-7 regarding noise abatement measures/enforcement and particularly Subtopical Response TR-N-7.1, regarding enforcement of noise rules (over-ocean, early turns, Stage 2 cockpit procedure), Subtopical Response TR-N-7.2, regarding responsibility for enforcement of noise abatement rules, Subtopical Response TR-N-7.3, regarding compliance with instrument departure procedures, Subtopical Response TR-N-7.4, regarding exceptions to the noise rules and Subtopical Response TR-N-7.5, regarding fines for violations of noise abatement procedures. Additionally, noise abatement measures associated with early turn are addressed in Section 4.1.5, Master Plan Commitments and Section 4.1.8, Mitigation Measures, of Section 4.1, Noise, of the Supplement to the Draft EIS/EIR.

SAL00015-116

Comment:

The noise standards for El Segundo and other surrounding communities were not considered when establishing significance criteria for the impact analysis which seems an extraordinary omission since these communities are undisputedly affected by whichever action is ultimately taken by LAWA.

Response:

Consistent with the standards presented in the City of El Segundo Noise Ordinance (Ordinance 1242) Section 4.2, Land Use (subsection 4.2.6) of the Draft EIS/EIR and Supplement to the Draft EIS/EIR evaluated noise-sensitive uses that would be exposed to an increase of 3 CNEL within the 60-65 CNEL or 5 CNEL below 65 CNEL for informational purposes. Please see Topical Response TR-LU-5 for an additional discussion of aircraft noise thresholds. Although these noise level increases were not considered to be significant, no noise-sensitive uses within the City of El Segundo were exposed to these noise increases. Significant roadway noise levels that resulted in an increase of 5 dBA Leq(h) in peak noise hour levels compared to 1996 baseline conditions or 12 dBA Leq(h) in peak hour noise levels compared to the No Action/No Project Alternative were also analyzed in Section 4.1 of the Draft EIS/EIR and Supplement to the Draft EIS/EIR. As concluded therein, two receptor locations within the City of El Segundo would be exposed to a significant increase in roadway noise levels under Alternatives A, B, and C and none under Alternative D. Consistency with noise policies stated in the City of El Segundo General Plan was addressed in the Section 4.2, Land Use of the Draft EIS/EIR and the Supplement to the Draft EIS/EIR with supporting technical data and analyses provided in Technical Report 1 of the Draft EIS/EIR and Technical Report S-1 of the Supplement to the Draft EIS/EIR. As

shown on Table S4.2-29 of the Supplement to the Draft EIS/EIR, in the City of El Segundo Alternative D would result in an overall decrease in the 65 CNEL contour area compared to 1996 baseline, and Year 2000 conditions, and the No Action/No Project Alternative. Therefore, this alternative would not conflict with policies contained in the Noise and Housing Elements of the City of El Segundo General Plan, which focus on reducing incompatible uses exposed to noise. In addition no new noise-sensitive uses would be newly exposed to noise levels of 65 CNEL or greater, to an increase of 1.5 CNEL within the 65 CNEL contour, or to significant CNEL levels in the City of El Segundo. Additionally, El Segundo does not show any newly exposed residential noise-sensitive uses newly exposed to high single event noise levels as defined by the 94 dBA SEL noise contour, compared to the 1996 baseline or Year 2000 conditions for the no action/no project or all four build alternatives under the 2015 94 dBA SEL. Typical Noise Footprints of the Operating Fleet are identified in Section 6, of Appendix D, Aircraft Noise Technical Report of the Draft EIS/EIR.

SAL00015-117

Comment:

No attempt appears to have been made to check the accuracy of the input data to the INM noise model or to correlate it to actual operational conditions at LAX and not even to calibrate it to noise measurements in the area. As a result, the aircraft noise levels cited in the Supplement may be in error as much as 3 dB. This may not seem like much but it actually represents up to twice the noise energy and should not be trivialized.

Response:

Please see Topical Response TR-N-1 regarding noise modeling approach. Noise monitoring was not correlated with the alternatives. The measured noise data collected at the various sites around the Airport is not adequate to allow the modification of the INM databases to better reflect measured noise levels. The absence of thrust level information for each distance (from ARTS) and noise level combination produced by the monitoring system prevents the modification of the databases in accord with the guidance of the FAA, as provided in Appendix C of the INM User's Guide. The noise analysis was done in complete compliance with appropriate FAA and scientific principles including FAA Order 1050.1D and Order 5050.4A. The INM is intended to be a planning tool for the relative comparison of noise exposure patterns and intensities among baseline and build alternative development conditions. It was not designed for, nor intended to provide, highly defined noise levels reflecting measured local conditions. Consequently, the modeled noise levels associated with environmental baseline conditions will have consistent relative relationships to future noise patterns prepared with the INM.

SAL00015-118

Comment:

The significance criteria developed by LAWA for nighttime awakenings are not only arbitrary but also may not have been properly analyzed or assessed.

Response:

Comment noted. Based on the anticipated expansion of cargo facilities and the forecast growth in nighttime operations under the various development alternatives, as well as public comments received during the review of the Draft EIS/EIR, the potential for the public to be awakened at night was selected for single event evaluation. The Supplement to the Draft EIS/EIR addresses single event noise impacts on nighttime awakenings in Section 4.1, Noise, and Section 4.2, Land Use. Supporting technical data and analyses are provided in Appendix S-C and Technical Report S-1 of the Supplement to the Draft EIS/EIR. As stated on page 139, Section 6, Single Event Noise Analysis in Appendix S-C1, Supplemental Aircraft Noise Technical Report, of the Supplement to the Draft EIS/EIR while the Court of Appeal ruled that the effects of single events should be addressed for CEQA purposes, it did not mandate specific standards for the determination of the significance of those impacts, leaving the determination of precisely what types of impacts and the establishment of thresholds of significance to the project sponsor, based on the sponsor's own assessment of what is locally meaningful. Therefore, LAWA has conducted its own evaluation of the anticipated effects of its proposed development actions on the single event noise levels in the environs of LAX to meet requirements set forth for CEQA evaluations by the California Court of Appeal. There is no federal threshold for single event levels.

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Please see Section 6.1.1, Threshold of Significance of Appendix S-C1 of the Supplement to the Draft EIS/EIR for significance criteria used to develop nighttime awakenings analysis.

SAL00015-119

Comment:

The impact of single event aircraft noise levels at schools in the airport environs may not have been properly defined, analyzed or assessed.

Response:

Comment noted. The Supplement to the Draft EIS/EIR addresses single event noise impacts on schools associated with Alternative D in Section 4.1, Noise, and Section 4.2, Land Use. Supporting technical data and analyses are provided in Appendix S-C and Technical Report S-1 of the Supplement to the Draft EIS/EIR. While the court ruled that the effects of single events should be addressed for CEQA purposes, it did not mandate specific standards for the determination of the significance of those impacts, leaving the determination of precisely what types of impacts and the establishment of thresholds of significance to the project sponsor, based on the sponsor's own assessment of what is locally meaningful. Therefore, LAWA has conducted its own evaluation of the anticipated effects of its proposed development actions on the single event noise levels in the environs of LAX to meet requirements set forth for CEQA evaluations by the California Court of Appeal. Please see Section 4.1.4.1.1, CEQA Thresholds of Significance of Section 4.1, Noise, and Section 6.2.1, Threshold of Significance, of Appendix S-C1 of the Supplement to the Draft EIS/EIR for significance criteria used to develop single event school analysis.

SAL00015-120

Comment:

The impact of roadway noise levels may not have been properly analyzed or assessed.

Response:

The roadway noise analysis followed the procedures in Title 23 of the United States Code of Federal Regulations Part 772, Procedures for Abatement of Highway Traffic Noise and Construction Noise, and FHWA Highway Traffic Noise Analysis and Abatement Policy and Guidance.

SAL00015-121

Comment:

Specific Comments on Chapter 4.1 of the Supplement, Noise

The discussion of aircraft noise and its impacts in Chapter 4.1 of the Supplement are presumably based on the analysis provided in Technical Appendix S-C1, Supplemental Aircraft Noise Technical Report. Any concerns with the analysis and assessment of aircraft noise are, therefore, discussed in our review of the technical appendix in the next section of this report. The following comments on Chapter 4.1 are limited to issues other than aircraft noise, except in those cases where the text of Chapter 4.1 differs from the analysis provided in the technical appendix.

1. The community standards for noise, as established in the noise ordinances and noise elements of El Segundo and other cities surrounding LAX, were not considered when establishing significance criteria for the project. One would think that if you are proposing an action that will affect surrounding communities that you would consider what they perceive as an impact.

Response:

Comment noted. Please see Response to Comment SAL00015-28 regarding El Segundo noise standards.

SAL00015-122

Comment:

2. There is no discussion regarding mechanical equipment or activity noise levels that may occur at the new buildings on the south side of LAX, and their potential impact on noise-sensitive communities in El Segundo.

Response:

At the time of publishing (July 2003) of the Supplement to the Draft EIS/EIR the Imperial Cargo Complex and the South Cargo Complex East would remain unchanged under Alternative D. One existing building in the South Cargo Complex West would be demolished to build a proposed general aviation facility that is being developed independent of the Master Plan. Two new cargo handling facilities would be constructed in the South Cargo Complex West. In the Century Cargo Complex, one existing facility would be demolished, and in its place a new, larger cargo facility would be developed. Ground noise at levels considered to be significant (65 CNEL and above) that is associated with those ground facilities would be masked by the noise created by arriving and departing aircraft. Please see Topical Response TR-N-4, regarding noise mitigation and in particular Subtopic Response TR-N-4.2, regarding berms, barriers, urban forest, walls proposed to interrupt ground noise and Subtopic Response TR-N-4.3, regarding additional mitigation measures.

SAL00015-123

Comment:

3. In Section 4.1.2.1.2, the text states that the peak hour of airport operations during school hours was used to assess the impact of aircraft noise on schools. While this is the proper approach (based on the thresholds of significance established for the project), it is clear in Technical Appendix S-C1 that an average of eight school hours was used in the analysis, not the peak hour (id, page 150 and Table S31).

Response:

As stated in Section 4.1.2.1.2, Classroom Disruption, of Section 4.1, Noise, of the Supplement to the Draft EIS/EIR: Research literature detailing the effects of aircraft noise on the ability of children to learn was evaluated. It is notable that none of the studies reviewed cited a reliable statistical relationship between the amount of aircraft noise exposure present and the degree of learning difficulty experienced by children at affected schools. Therefore, it was determined two thresholds of significance should be based on the 1992 Federal Interagency Committee on Noise (FICON) study detailing the degree of speech understanding at various noise levels (in dB) and the amount of time during the school day that these threshold levels were exceeded. The American National Standards Institute published standards for classroom noise in 2002 that provided additional information, but again did not provide a relationship between aircraft noise and classroom disruption. That standard is based on the hourly equivalent noise level within the classroom for steady state noise, and is set at 35 decibels of Leq(h). While the standard is set for the management of noise generated by mechanical equipment, and is not fully intended for application to interruptive noise events, there is some justification in using the standard in aircraft overflight applications where the traffic flow during the school hours is repetitive and nearly continuous. At LAX, the current and forecast number of arrival operations during the school hours is more than 660. Consequently, an arrival would fly over the area east of the airport once every 45 seconds - nearly a continuous noise event. Therefore, a third threshold was established for interior noise levels for the peak hour of operation during the school day. Please see Table S33, Hourly Equivalent Noise Level at LAX Area Schools With Exceedance of ANSI 35 Leq(h) Thresholds During the Average School Day (8:00 a.m. - 4:00 p.m.) in Appendix S-C1, of the Supplement to the Draft EIS/EIR.

SAL00015-124

Comment:

4. In Section 4.1.2.1.2, the text states that a "Time Above" threshold was used to evaluate noise impacts at schools. This was not identified as a significance criterion in the technical appendix.

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Response:

Please see Response to Comment SAL00016-21 regarding time above thresholds on school impacts.

SAL00015-125

Comment:

5. In Section 4.1.2.1.3, the text states that peak noise hour data (i.e., data for the noisiest one-hour period of the day) were used in the analysis of traffic noise. However, based on our review of Technical Appendix S-C2, Roadway Noise Data, it appears that either peak AM or PM traffic data were used. These traffic peak hours are not typically the noisiest hours of the day since traffic slows due to congestion, and slower traffic is not as loud. So the analysis understates traffic noise. It appears that the data in Technical Appendix S-C2 also reduces traffic speeds for future years, which could also result in understating noise impacts.

Response:

As stated in the title blocks of the tables in Appendix S-C2a. 2008 Roadway Noise Data and Appendix S-C2b. 2015 Roadway Noise Data, the data represents the Airport Peak Hour traffic. The Airport Peak Hour was analyzed because it most closely represent LOS C conditions, which is considered to produce the noisiest traffic activity. Contrary to the commentor's assertion, nothing in the tables indicates AM or PM peak hours.

SAL00015-126

Comment:

6. In Section 4.1.2.1.3, it isn't clear why traffic and aircraft noise were converted to a 24- hour Leq metric for combining, rather than simply converting the traffic noise to a CNEL metric for combining with the already computed aircraft CNEL. This convoluted manipulation is an unnecessary step and further adds to the confusing nature of the impact data presentation.

Response:

Please see Response to Comment SAL00016-29 regarding the combination of traffic and aircraft noise.

SAL00015-127

Comment:

7. In Section 4.1.3.1.2.1, the analysis of nighttime awakenings may be incorrect. Refer to the review of Technical Appendix S-C1 in the following section of this report.

Response:

Comment noted. Please see Responses to Comments SAL00015-133, and Responses to Comments SAL00015-146 through SAL00015-152 below.

SAL00015-128

Comment:

8. In Section 4.1.3.1.2.2, the text states that the peak hour of airport operations during school hours was used to assess the impact of aircraft noise on schools. While this is the proper approach (based on the thresholds of significance established for the project), it is clear in Technical Appendix S-C1 that an average of eight school hours was used in the analysis, not the peak hour.

Response:

Comment noted. Please see Response to Comment SAL00015-123 regarding assessment of peak hour operations.

SAL00015-129**Comment:**

9. In Section 4.1.3.2, again, it isn't clear why traffic and aircraft noise were converted to a 24-hour Leq metric for combining, rather than simply converting the traffic noise to a CNEL metric for combining with the already computed aircraft CNEL.

Response:

Please see Response to Comment SAL00016-29 regarding the combination of traffic and aircraft noise.

SAL00015-130**Comment:**

10. In Section 4.1.3.2, no methodology or calculations are provided to indicate how a one-hour Leq for traffic noise was converted to a 24-hour Leq.

Response:

The Supplement to the Draft EIS/EIR provides methodology for converting one hour Leq to 24-hour Leq on page 4-12 of Section 4.1, Noise.

SAL00015-131**Comment:**

11. In Section 4.1.4.1, the Lmax thresholds for assessing aircraft noise impacts in schools can be related to existing studies, but the 3-second "Time Above" criterion appears to be arbitrary and isn't even mentioned in the Aircraft Noise Technical Report. It isn't clear whether the criterion is cumulative for a school day or for the peak hour, or whether it applies to each individual aircraft event.

Response:

Comment noted. It is unclear where the commentor identifies a three second Time Above criterion. Table S31, Average Daily Minutes Above Threshold, Average Number of Daily Events and Average Event Duration (in Seconds) Above 55 Interior dBA Speech Interference Levels During the Average School Day (8:00 a.m. to 4:00 p.m.) shows numerous average event with durations less than three seconds. The abbreviation and definition of unit measures are included in the table.

SAL00015-132**Comment:**

12. In the significance criteria for roadway noise used in the Supplement (i.e., a peak hour 5 dBA Leq(h) increase over existing conditions and 67 dBA Leq(h) for new facilities resulting from this project as compared to existing conditions) are inconsistent with the CNEL standard used in the Supplement and Draft EIS/EIR to assess aircraft noise, and are inconsistent with the local community standards for addressing traffic noise impacts.

Response:

Please see Response to Comment SAL00016-29.

SAL00015-133**Comment:**

13. In Section 4.1.6.1.5.4.1 regarding nighttime awakenings, the analysis is flawed. Refer to the our comments on the Technical Appendix S-C1 in the following section of this report.

3. Comments and Responses

Response:

Comment noted. The commentor does not indicate specifically where flaws are identified in Section 4.1.6.1.5.4.1, Nighttime Awakenings of Section 4.1, Noise of the Supplement to the Draft EIS/EIR. Comments on the Technical Appendix S-C1 provided by the commentor are provided in Responses to Comments SAL00015-146 through SAL00015-155 regarding single-event noise analysis.

SAL00015-134

Comment:

Specific Comments on the Technical Appendix S-C1, Supplemental Aircraft Noise Technical Reports

1. In Section 1.3, the text states that the Draft EIS/EIR was prepared with INM 6.0 model and that the Supplement to the Draft EIS/EIR was prepared with the INM 6.0c model. However, the Draft EIS/EIR, Appendix D, page 6, discusses Version 5.1a...so, which is it? In any case, since the versions use slightly different databases for aircraft noise, it is important to either use the same version of the model, or to ensure that both versions produce the same results for LAX.

Response:

INM 5.1a was not used for the noise modeling in the Draft EIS/EIR or Supplement to the Draft EIS/EIR. It is used as a reference to describe that it allows for an unlimited amount of flight tracks during modeling. Appendix D, Aircraft Noise Technical Report Section 1.3 Noise Contours of the Draft EIS/EIR indicates that Aircraft contours presented in this appendix were generated using the Integrated Noise Model (INM), Version 6.0. As stated on page 5, in appendix S-C1, Supplemental Aircraft Noise Technical Report, of the Supplement to the Draft EIS/EIR aircraft noise contours presented in this appendix were generated using the Integrated Noise Model (INM), Version 6.0C. The INM is a state-of-the-art FAA approved computer model that is used to predict the noise impacts from aircraft operations. INM Version 6.0 was the most recent version of the aircraft noise calculation model available at the time of preparation of the noise contours for the Draft EIS/EIR. While the model has been updated since the release of the Draft EIS/EIR, the modifications of noise contour patterns between Version 6.0 and Version 6.0C are relatively insignificant, particularly for a large airport such as LAX with a great variety of aircraft types and large volumes of traffic. Version 6.0 was released in late 1999 and includes all enhancements to previous versions to allow consideration of many local conditions that may have an effect on the location of the noise contours, including both flight and ground run-up activities. Although the database of the model has been subsequently updated several times, the fundamental model is the same as was used to compute the noise contours prepared for the Draft EIS/EIR.

SAL00015-135

Comment:

Furthermore, in neither case, the Draft using INM 5.1a or 6.0 nor the Supplement using INM 6.0c was the INM's topographic module used in conjunction with the basic noise computation function. In other words, the topography of the area overflowed by LAX flights was not considered at all in determining CNEL or SEL values. In the flatter areas under the approaches and along the South Bay beach communities, that omission is of minor consequence but it significantly underestimates the noise predicted for higher terrain in the South Bay such as the Palos Verdes Peninsula. That is why the residents of the Peninsula consistently dispute the noise impacting their communities. The Supplement and the earlier Draft dismiss this as an irrelevant concern because the aircraft are higher than 3,000 feet above the airport reference point as they overfly those areas. However, FAA Order 1050.1D mandates that "extra ordinary circumstances" such as actions likely to have a significant impact on noise sensitive areas or coastal zones "shall be the subject of an environmental assessment." The Palos Verdes Peninsula seems to fit easily within that requirement. Overflights of Palos Verdes, for example, which is approximately 1,480 feet elevation may well be within 3,000 feet above ground level (which is the proper basis for analysis rather than the airport reference point) and should be considered in the impact analysis. Using the topographic module and enlarging the study area to include the Peninsula should remedy this glaring analytical problem. At the very least, the FAA's Air Traffic Noise Screening Model should be applied to the Palos Verdes Peninsula rather than cavalierly dismissing the residents' concerns although this model only addresses one specific part of the problem, i.e., aircraft over 75,000 pounds.

Response:

Please see Response to Comment SAL00015-113 regarding flights above 3000 feet. Forecasted future conditions do not show that LAX flight tracks will change substantially and cross the South Bay below 3000 feet above the airport. Thus further study is not necessary. Please see Figure S-4, Alternative D Flight Tracks, of the Supplement to the Draft EIS/EIR. Under NEPA and CEQA thresholds of significance, the South Bay communities and the Palos Verdes Peninsula communities are not significantly impacted by aircraft noise. Additionally, with the distance of the Palos Verdes Peninsula from LAX and the height of the aircraft over the community, it was concluded that adjustments for terrain would not reveal such differences from modeled levels as to create a significant impact. Please see Topical Response TR-N-3 regarding aircraft flight procedures and Topical Response TR-N-1 regarding noise modeling approach.

SAL00015-136

Comment:

2. In Section 2.1, the text states that the LAWA software automatically assigns an aircraft to a flight track and to an INM aircraft type. It isn't clear that there is any radar tracking to verify the flight tracks, nor is it clear that the aircraft types are being assigned properly (e.g., "light" vs. "heavy" aircraft). Residents of the communities south of LAX have been consistently claiming that many aircraft turn south before crossing the shoreline as is required by the Airport's FAR Part 150 Noise Control Plan.

Response:

As stated on page 6, in Section 2.1, Data Sources and Assumptions, of Appendix S-C1, Supplemental Aircraft Noise Technical Report, of the Supplement to the Draft EIS/EIR, at LAX an automated noise and operations monitoring system is in use that provides daily records of flight operations by virtually all aircraft using the facility. The FAA's Automated Radar Terminal System (ARTS) records are accessed by software owned and operated by LAWA's Environmental Management Division-Noise Bureau to obtain location and other descriptive information related to each arrival and departure. This information is processed to assign each aircraft to one of several predefined flight track corridors and the resultant information is loaded into a relational database. The database includes aircraft type as designated by radar, runway and flight track assignments, user identification and flight number, type of operation (approach or take off), and its time of occurrence records of flights are extracted from this database with proprietary software developed for and owned by LAWA to produce a compiled report of operations for any period desired. This processing automatically assigns an INM aircraft type (based on the aircraft fleet records of each carrier) to each operation and summarizes the number of arrivals and departure by each type during day, evening and night hours. Early turns over El Segundo have been a focus of public complaint for years. The airport has attempted to deal with the issue for years through the posting of signs at the end of each runway calling for flight to the coastline prior to turns, but occasional deviations from the procedure continue to occur. A part of the reason is the alignment of the runways relative to the community. Under the No Action/No Project Alternative and build alternatives the west end of the runways nearest El Segundo are closer to the community than the east ends (the runways are aimed more toward the community's west end), while the north runways are both farther away (except in Alternative A) and aimed away from the community. Aircraft operate in a complex environment and are regulated by a series of rules and regulations and weather conditions of which LAWA has no control over. The pilot is in command of the aircraft and that aircraft is under the control of the FAA. Safety is a priority for the FAA. Noise abatement is secondary. Failure to comply with LAWA's noise abatement procedures is not a violation of the Federal Aviation Regulations. However, it may result in correspondence from LAWA's Environmental Management Bureau staff advising the aircraft operator of the early turn. As stated in LAWA's Aircraft Noise Abatement Operating Procedures and Restrictions; It is not intended that any of the traffic or flight procedures contained herein shall, in any manner, abrogate the authority and responsibility of the pilot in command to assure the safe operation of the aircraft. For further information regarding early turns over areas north and south of LAX, please see Subtopical Response TR-N-3.2. Please see Topical Response TR-N-7 regarding noise abatement measures/enforcement and particularly Subtopical Response TR-N-7.1, regarding enforcement of noise rules (over-ocean, early turns, Stage 2 cockpit procedure), Subtopical Response TR-N-7.2, regarding responsibility for enforcement of noise abatement rules, Subtopical Response TR-N-7.3, regarding compliance with instrument departure procedures, Subtopical Response TR-N-7.4, regarding exceptions to the noise rules and Subtopical Response TR-N-7.5, regarding fines for violations of noise abatement procedures. Additionally, noise abatement measures associated with

3. Comments and Responses

early turn are addressed in Section 4.1.5, Master Plan Commitments and Section 4.1.8, Mitigation Measures, of Section 4.1, Noise, of the Supplement to the Draft EIS/EIR.

Please see Topical Response TR-N-3 regarding aircraft flight procedures and early turns over north and south of airport.

SAL00015-137

Comment:

3. In Section 2.1.4, the text states that a 3 [degree] glide path has been assumed for all approaches. While that may be what appears in the Jeppesen charts, it isn't clear in this section that this is consistent with actual operations at LAX.

Response:

Comment noted. Under ILS conditions the 3-degree glide slope will be used for all approaches. However, under VFR conditions with no vertical descent guidance the approach is at the FAA ATC and pilots discretion.

SAL00015-138

Comment:

4. In Section 2.1.5, the average number of aircraft operations by aircraft type and time of day were estimated on a proportional basis using the 85% of operations that were actually monitored by the LAWA software. No attempt appears to have been made to determine if this approach yields data that is consistent with actual operations at the airport.

Response:

Comment noted. The ARTS data that is acquired through LAWA's noise monitoring system is taken from FAA radar data. However, this data is processed and filtered by the FAA, therefore, there may be an inconsistency between ATC operations and ARTS data. Average day numbers of operations by each aircraft type are proportionately increased to assure that the noise exposure evaluations represented the actual number of operations recorded by the Tower. The average day data is defined as the total data for all available days divided by the number of days available. This process eliminates the extremes of operation that occur infrequently. Please see Section 2.1.5, Year 2000 Conditions Fleet and Aircraft Operations, of Appendix S-C1, Supplemental Aircraft Noise Technical Report, of the Supplement to the Draft EIS/EIR, for information regarding underlying assumptions used in modifying the fleet mix and operations data. The noise analysis was done in complete compliance with appropriate FAA and scientific principles including FAA Order 1050.1D and Order 5050.4A.

SAL00015-139

Comment:

5. In Section 2.1.7, the text admits that the INM under-predicts the CNEL by 0-3 dB based on noise monitoring around LAX. Therefore, it may be reasonably concluded that the CNEL, SEL and Leq analyses for Alternative D are also under-predicted by the same 0-3 dB. (The INM model uses SEL values to calculate CNEL, so an under-prediction of one reflects an under-prediction of the other. Leq is likewise related to SEL and CNEL). A deviation of 3 dB is significant, as alluded to in the significance criteria used for assessing airport noise impacts. In fact, it represents an enormous difference in the noise energy impacting on the airport's environs. While the Supplement to the Draft EIS/EIR cannot ethically alter the contours to account for the measurements, apparently no attempt was made in the Supplement to ensure the accuracy of the myriad input data (e.g., flight track definitions, flight profiles, operations distributions on the various flight tracks, etc.) for the INM model to help calibrate the model to the actual conditions and obtain more consistency with the measurements. Moreover, the INM's basic noise curves are based on noise certification measurements taken under specific atmospheric conditions (temperature and humidity) that are not consistent with those existing at the near-sea level LAX and its environs. The model supposedly adjusts for local conditions but uses an annual average for

temperature and, according to this section, uses default humidity. It is no wonder that the model contours and the measurements are not consistent.

Response:

Comment noted. Please see Response to Comment SAL00015-117 regarding calibration of noise data.

SAL00015-140

Comment:

6. In Section 3.1.5, the text states that during the construction of Runway 7R/25L, the noise contours near the south set of runways will be shifted about 1/8 mile to the North for a period of one year. As a result, noise-sensitive locations that were outside the 65 dB contour line will be exposed to a CNEL that is up to 5 dB higher. No mitigation measures are identified for the construction phase aircraft noise impacts.

Response:

Even with Master Plan commitments that are identified in Section 4.1.5, of Section 4.1, Noise and Section 4.2.5, of Section 4.2, Land Use, and mitigation measures that are identified in Section 4.1.8, of Section 4.1, Noise and Section 4.2.8, of Section 4.2, Land Use, of the Supplement to the Draft EIS/EIR, construction operations would create noise levels over extended periods of time that are more than 5 dBA Leq higher than ambient levels near residential areas and schools. There would be significant and unavoidable impacts that are temporary and unavoidable.

SAL00015-141

Comment:

7. In Section 3.1.6, the text states that the extension of Runway 24L to the East will create a bulge in the contours, exposing noise-sensitive locations in east-lying communities that would not otherwise be exposed to a CNEL of 65 dB. No mitigation is identified for this impact.

Response:

The comment is incorrect. Mitigation measures for Alternative D, which would include noise-sensitive uses newly exposed to noise levels of 65 CNEL or greater, were addressed in Section 4.1.8, Mitigation Measures of Section 4.1, Noise and Section 4.2.8, Mitigation Measures of Section 4.2, Land Use of the Supplement to the Draft EIS/EIR.

SAL00015-142

Comment:

8. In Section 3.1.6, the text states that Alternative D will shift the northern portion of the noise contours by 100 feet to 500 feet to the South and will shift the southern portion of the contours 50 feet closer to El Segundo. No mitigation is identified for this impact. Section 3.1.3 alleges that there would be no appreciable difference in the CNEL in El Segundo in comparison to the No Action/No Project Alternative. Of course, the report does not indicate the effect on SELs which would logically be slightly higher.

Response:

Table S50, Alternative D 2015 Newly Exposed Residential and Noise-Sensitive Uses (Compared to 1996 Baseline Conditions) and Table S55, Alternative D 2015 Residential and Noise-Sensitive Uses Newly Exposed (Compared to No Action/No Project Alternative) do not show any new residential impacts, therefore, there is no mitigation proposed. Additionally, Table S83, Alternative D 2015 94 dBA SEL Noise Contour Part 161 Mitigation Residential Uses Newly Exposed (Compared to 1996 94 dBA SEL), Table S84, Alternative D 2015 94 dBA SEL Noise Contour Part 161 Mitigation Residential Uses Newly Exposed (Compared to 2000 94 dBA SEL) and Table S85, Alternative D 2015 94 dBA SEL Noise Contour Part 161 Mitigation Residential Uses Newly Exposed (Compared to 1992 65 CNEL Noise Contour) of Technical Report S-1, Supplemental Land Use Technical Report of the Supplement to the Draft EIS/EIR do not show any newly exposed residential uses.

3. Comments and Responses

SAL00015-143

Comment:

9. Table S14 provides the aircraft noise analysis results in terms of DNL, not CNEL. Therefore, the CNEL impacts identified in Table S20 cannot be corroborated.

Response:

The CNEL impacts can be corroborated using Table S13, LAX Master Plan Supplement to the Draft EIS/EIR Regular and Special Grid Point Assessment - Aircraft CNEL Comparison of Build Alternatives to 1996 Baseline, Year 200 Conditions, and 2015 No Action/No Project Alternative in Appendix S-C1, Supplemental Aircraft Technical Noise Report of the Supplement to the Draft EIS/EIR.

SAL00015-144

Comment:

10. Table S15 identifies the anticipated Lmax noise levels generated by aircraft operations. No comparison with the results from noise monitoring stations surrounding LAX appears to have been made to determine the accuracy of the INM model in predicting Lmax levels.

Response:

Please see Topical Response TR-N-1 regarding the noise modeling approach, in particular Subtopical Response TR-N-1.2 regarding measured versus modeled baseline year noise levels.

SAL00015-145

Comment:

11. In Section 5.0, there is no identification of impacts on residential properties.

Response:

The commentor is correct. Section 5, Location Impact Analysis of Appendix D, Aircraft Noise Technical Report of the Draft EIS/EIR and Appendix S-C1, Supplemental Aircraft Noise Technical Report of the Supplement to the Draft EIS/EIR does not identify residences. It computes noise characteristics of individual locations in the airport environs. Residential impacts were addressed in Technical Report 1 of the Draft EIS/EIR and Technical Report S-1 of the Supplement to the Draft EIS/EIR.

SAL00015-146

Comment:

12. In Section 6.1.1, the significance threshold established by LAWA for nighttime awakenings is 10% of the population being awakened no more than once every ten days. The report claims that this is statistically equivalent to 1% of the population being awakened every night. However, this is not only completely arbitrary but also incorrect. A threshold of 1% of the population being awakened every night is far more stringent than 10% of the population being awakened no more than once every ten days.

Response:

The intent of the analysis was to state that 10 percent of the population being awakened no more than once every 10 days is statistically equivalent to not more than 1 percent of the population being awakened on an average night.

SAL00015-147

Comment:

13. In Section 6.1.2, the description of the methodology used to calculate the location of the 94 dB SEL noise contour is unclear. Using the 94 dB SEL criterion, itself, is completely arbitrary since it is merely correlates to a point on a noise data trend line where the 1997 FICAN report states that 10% of the population exposed to this level will be awakened. Why 10% is selected as the benchmark is unknown. To establish a noise contour for operations that would occur once every ten days, it appears that the methodology only considered aircraft operations that occur at least 0.1 times per day (or once every ten days). If this is a correct understanding of the methodology, then the methodology is in error. The fact that the methodology includes only aircraft that have at least 0.1 operations per day means that some operations have been excluded from the analysis. This could mean that infrequent takeoffs to the east under Santa Ana conditions were not considered in the analysis. This would have a significant effect on the residents in eastern communities including Inglewood. In effect, what is plotted in the Supplement is the 94 dB SEL contour (i.e., the contour for 10% awakenings) for a subset of the total operations occurring at the airport. Thus, the analysis is incorrect for two reasons: (1) it plots the contour for 10% awakenings, not 1%; and (2) it under-predicts the contour because it does not include all of the flight operations at the airport. It should also be noted that, as indicated in Comment #5, above, the model under-predicts SEL values by 0-3 dB. This was not considered in the analysis or assessment of impact. Furthermore, the technical report concludes that 10% of the people living on the 94 dB SEL contour line will be awakened once every 10 days ignoring the fact that the people living "inside" that 94 dB SEL contour line will be exposed to even higher SELs and the actual total percentage of awakenings will be substantially higher.

Response:

The 94 dBA SEL was selected because it represented the level at which 10 percent of the population would be expected to be awakened. Its application to a frequency of once in ten days results in an expectation that 10 percent of the sleepers living on the line would be awakened, on average, once in ten days. The decision to define these levels as the local threshold of significance is the responsibility of LAX as the airport sponsor and was left to LAWA for application to the project per CEQA. There is no federal single event threshold. Please see Section 6.1.1, Threshold of Significance of Appendix S-C1 of the Supplement to the Draft EIS/EIR for significance criteria used to develop nighttime awakenings analysis.

The 94 dBA of SEL contour does not under predict nighttime single event noise levels. The commentor misunderstands the methodology used to compute the contour. All flight operations were considered in calculation of the 94 dBA of SEL contour. The frequency of at least once in ten days represents a sum of all operations that carry a level of 94 dBA of SEL. For example, if an operation occurred once in the year, it would have an average daily frequency of 0.003 events. If 33 events at the same level occurred during the course of the year, the frequency would sum to 0.1 operations. Therefore, the contour line is indicative of those locations where at least 33 separate events during the year (perhaps all occurring on the same night) with noise levels of 94 dBA of SEL. Even if an event occurred once per year, it would have been incorporated into the computation defining the contour line. Please see Response to Comment SAL00015-117 regarding differences decibel differences between measuring and modeling.

Finally, the commentor is correct in understanding that persons residing within the contour line potentially will be awakened more frequently than once in ten days or to noise levels louder than 94 dBA of SEL.

SAL00015-148

Comment:

14. In Section 6.1.2, it isn't clear that the analysis of nighttime awakenings only included nighttime aircraft operations. It also isn't clear that ground run-up operations were included in the analysis.

3. Comments and Responses

Response:

Although LAWA prohibits most ground run-ups between the hours of 11:00 p.m. and 6:00 a.m., the modeling analysis was of all nighttime operations in the INM program input files (that includes run-ups) and did not include any daytime activity.

SAL00015-149

Comment:

15. The analyses and findings discussed in Sections 6.1.2.1 and 6.1.2.2 may be incorrect based on Comments #12 and #13, above.

Response:

Comment noted. Please see Response to Comment SAL00015-146 regarding nighttime awakenings significance threshold and Response to Comment SAL00015-147 regarding calculation of 94 dB SEL contour.

SAL00015-150

Comment:

16. In Section 6.1.3, the mitigation for nighttime awakenings is filing a 14 CFR Part 161 application. However, as the text states in Section 3.1.6, this application will only eliminate a pilot's discretion for nighttime takeoffs to the east. For safety reasons, takeoffs to the east will still occur during Santa Ana conditions or when coastal fog limits visibility. Since these safety reasons account for the great majority of takeoffs to the east (as stated in Section 3.1.6), the 14 CFR Part 161 application will provide little mitigation to the residents of communities east of the airport.

Response:

For safety reasons all easterly operations will not be eliminated during over-ocean procedures (12:00 a.m. to 6:30 a.m.). Only those flights with the pilot's discretion will be eliminated. During a recent 18-month period, LAWA found that only 82 takeoffs were made to the east at night during periods when the over-ocean procedures were in effect. LAWA is committed to undertake a Part 161 analysis to achieve FAA approval of this measure, but the FAA has not committed to its approval. Additionally, the boundaries of the ANMP will be expanded to include residential uses newly exposed to single event exterior nighttime noise levels of 94 dBA SEL, based on the Master Plan Alternative that is ultimately approved as addressed in MM-LU-2, Incorporate Residential Dwelling Units Exposed to Single Event Awakenings Threshold into Aircraft Noise Mitigation Program (Alternatives A, B, C, and D) of Section 4.2.8, Mitigation Measures of Section 4.2, Land Use, of the Supplement to the Draft EIS/EIR.

SAL00015-151

Comment:

17. In Section 6.1.3, the text states that the 14 CFR Part 161 application will only apply to eastbound takeoffs between midnight and 6:30 a.m. However, Section 6.1 states that the analysis of nighttime awakenings applies to the hours between 10:00 p.m. and 7:00 a.m. Therefore, the proposed mitigation measure will not be effective for a period of 2-1/2 hours each night.

Response:

Comment noted. Please see Response to Comment SAL00016-26 regarding Part 161 and analysis of nighttime awakenings between 10:00 p.m. and 7:00 a.m.

SAL00015-152

Comment:

18. Because of Comments #12, #13, and #15 through #17, the sound insulation program identified in Section 6.1.3 may be inadequate in terms of the area covered by the program.

Response:

Comment noted. The ANMP will be expanded to include residential uses newly exposed to single event exterior nighttime noise levels of 94 dBA SEL, based on the Master Plan Alternative that is ultimately approved. Please see SAL00015-146 regarding awakenings significance threshold; Response to Comment SAL00016-26 regarding Part 161 and analysis of nighttime awakenings between 10:00 p.m. and 7:00 a.m., SAL00016-24 regarding the 94 dBA nighttime criterion and SAL00015-150 regarding Part 161 and analysis of nighttime awakenings between 12:00 a.m. and 6:30 a.m.

SAL00015-153

Comment:

19. In Table S33, the average Leq for the 8-hour school day is obtained by adding $10\log(3)$ to the 24-hour Leq calculated by the INM model. The basis for this calculation appears to be that the 8-hour school day is 1/3 of a 24-hour day. However, this methodology is incorrect since flights are not evenly distributed throughout the day. The result of the analysis is an average Leq that is too low because most flights at LAX occur during the daytime. It should be noted that, as indicated in Comment #5, above, the model under-predicts Leq values by 0-3 dB. This was not considered in the analysis or assessment of impact. It should be further noted that, as indicated in Chapter 4.1 of the Supplement, the analysis should have been based on the peak, not average, hour.

Response:

The commentor misinterprets the data identified in Table S33, Hourly Equivalent Noise Level at LAX Schools with Exceedance of ANSI Leq(h) Thresholds During the Average School Day (8:00 a.m.-4:00 p.m.) of Appendix S-C1, Supplemental Aircraft Noise Technical Report of the Supplement to the Draft EIS/EIR is correct. The commentor would be correct if the 8-hour school day was only part of a total 24-hour Leq day. This is not the case. The noise level was consistently high due to the number of operations for the entire 8-hour period so the Leq was adjusted by 4.8 Leq during the remaining 16 hours in order to make the Leq consistent for a 24-hour day. The Supplement to the Draft EIS/EIR does not disaffirm significant impact from noise exposure noise effects. Noise impacts were addressed in Section 4.1, Noise, and Section 4.2, Land Use, of the Supplement to the Draft EIS/EIR. Supporting technical data and analyses are provided in Appendix S-C and Technical Report S-1 of the Supplement to the Draft EIS/EIR. Additionally, please see Subtopical Response TR-N-1.4 for differences in modeling vs. measured baseline year. Additionally, maximum noise levels (Lmax) were computed during school single event analysis. Please see Section 6.2, School Single Event Analysis of Section S-C1, of the Supplement to the Draft EIS/EIR.

SAL00015-154

Comment:

20. In Section 6.2.3, the text states that the current eligibility for school mitigation is based on CNEL. But this is unrelated to Section 6.2 which is an analysis and assessment of single event noise levels, not CNEL, at schools. An appropriate mitigation measure would be to revise the eligibility requirements to include the new single event criteria.

Response:

The commentor correctly notes that current eligibility for school mitigation is based on CNEL. However, under Mitigation Measure MM-LU-4, any schools found to exceed a newly established threshold of significance for classroom disruption identified in MM-LU-3 shall be incorporated into the ANMP administered by LAWA. Mitigation measures were addressed in Section 4.2, Land Use, of the Final EIS/EIR.

SAL00015-155

Comment:

21. In Section 6.2.3, the only mitigation proposed for the single event criteria at schools is an additional study to determine whether the criteria used are appropriate. This is not reasonable. LAWA has identified what it considers to be appropriate significance criteria based on several existing studies on

3. Comments and Responses

the issue of classroom disruption. Therefore, concrete mitigation measures should be identified to mitigate the significant impacts identified in the report.

Response:

Section 6.2.3 Mitigation of Single Event Effects on Schools of Appendix S-C1, Supplemental Aircraft Noise Technical Report does indicate that a new study of the relationship between specific aircraft noise levels and childhood learning abilities will be undertaken by LAWA as part of the continuing environmental monitoring process obligated under CEQA. This study will seek a predictive statistical relationship between the level of aircraft noise present at a school and the ability of children to learn, as expressed by standardized test results. When that study is complete and acceptable results are achieved, the potential for additions to the sound insulation program for schools will be revisited as part of LAWA's continuing environmental management responsibilities. The Supplement to the Draft EIS/EIR addressed mitigation measures in Section 4.1.8 of Section 4.1, Noise, and Section 4.2.8, of Section 4.2, Land Use. Supporting technical data and analyses are provided in Appendix S-C and Technical Report S-1 of the Supplement to the Draft EIS/EIR. Additionally, please see Section 6.2.1, Threshold of Significance of Appendix S-C1, Supplemental Aircraft Noise Technical Report of the Supplement to the Draft EIS/EIR for significance criteria used to develop single event school analysis.

SAL00015-156

Comment:

Tom Brohard, PE, has reviewed various reports and documents associated with the Los Angeles International Airport (LAX) Master Plan prepared for Los Angeles World Airports (LAWA) and the Federal Aviation Administration (FAA.) These include, but are not limited to, the June 2003 LAX Master Plan Addendum and the July 2003 Supplement to the Draft Environmental Impact Statement/Environmental Impact Report (Supplement.) Our review focused on the traffic impacts of Alternative D upon the City of El Segundo as identified in various documents and reports, particularly in S-2b, the Supplemental Off-Airport Surface Transportation Technical Report prepared by Parsons Transportation Group in June 2003. The comments in this letter are in addition to our July 16, 2001 report prepared for the City of El Segundo regarding the traffic impacts of LAX Master Plan Alternatives A, B, and C. LAWA and FAA have not yet responded to those earlier comments, and many of the problems with the analysis previously identified have not been addressed.

In summary, LAWA has not conducted an adequate traffic and circulation analysis of Alternative D. Without further study to address the inadequate analysis and substantial evidence of significant traffic impacts, as discussed below, it is not legally permissible to conclude, as the Supplement does, that most of the proposed project's traffic impacts have a less than significant effect on the environment with mitigation. A corrected traffic analysis for Alternative D must be prepared, and the Supplement for the Los Angeles International Airport Master Plan must be revised and recirculated, to address these critical issues.

Response:

Comment noted. Surface transportation impacts were addressed in Section 4.3, Surface Transportation, of the Draft EIS/EIR and Supplement to the Draft EIS/EIR, with supporting technical data and analyses provided in Technical Reports 2 and 3 of the Draft EIS/EIR and Technical Reports S-2a and S-2b of the Supplement to the Draft EIS/EIR. In addition, please see Response to Comment AL00043-3 regarding proposed traffic improvements for off-airport roadways and Topical Response TR-ST-2 regarding surface transportation analysis methodology.

SAL00015-157

Comment:

Brief Summary of the Project

According to the Project Description on Page 3-2 of the Supplement, Alternative D is proposed to include facilities designed to serve 78.9 million annual passengers (MAP) and 3.1 million annual tons (MAT) of air cargo activity. The Supplement indicates "this level of aviation activity is also equivalent to the No Action/No Project activity level, which is projected to accommodate approximately 78.7 MAP and

3.1 MAT of air cargo." Page 3-57 of the Supplement indicates Alternative D is now the preferred alternative.

Page 3-43 of the Supplement describes the facilities in Alternative D as follows:

"Alternative D retains the existing four runway configuration at LAX. Major project elements include airfield modifications, the development of new terminals with the removal of public parking structures in the existing CTA and elimination of private vehicle access to the CTA. It also includes a Ground Transportation Center (GTC), Consolidated Rental Car Facility (RAC), Intermodal Transportation Center (ITC), and an Automated People Mover (APM) system."

LAX Master Plan Addendum Traffic Related Issues

The following concerns, omissions, and deficiencies relate to the traffic impacts associated with Alternative D upon the City of El Segundo. These comments were developed during our detailed review of the traffic related portions of the LAX Master Plan Addendum.

Response:

Comment noted. Surface transportation impacts were addressed in Section 4.3, Surface Transportation, of the Draft EIS/EIR and Supplement to the Draft EIS/EIR, with supporting technical data and analyses provided in Technical Reports 2 and 3 of the Draft EIS/EIR and Technical Reports S-2a and S-2b of the Supplement to the Draft EIS/EIR. In addition, please see Response to Comment AL00043-3 regarding proposed traffic improvements for off-airport roadways and Topical Response TR-ST-2 regarding surface transportation analysis methodology.

SAL00015-158

Comment:

1. LAX Will Continue to Experience Pressure to Grow - Page 2-1 indicates "Alternative D would be designed to serve approximately 78 MAP" and "The Alternative D design would encourage other airports in the region to develop facilities to accommodate regional demand beyond the level served at LAX." Table 1.3-2 indicates LAX could be expected to attract about 98 million annual passengers with the other regional airports serving about 48 million annual passengers. With the removal of El Toro as a potential secondary airport for the region and with various constraints associated with each of the other existing secondary airports, LAX will continue to experience significant pressure to expand beyond the 78 million annual passengers. Serving more than 78 million annual passengers will result in additional traffic impacts to the freeways and street intersections above those identified in the Supplement.

Response:

Comment noted. The number of passengers that would be accommodated by Alternative D is constrained to 78.9 MAP based on the design of the Alternative D gate facilities and the projected airline response to the constrained facilities. The ability to increase aircraft size, thereby increasing passenger levels, was limited by the number and type of gates available under the Alternative D terminal design.

SAL00015-159

Comment:

2. Larger Aircraft in 2015 Results in Significant Passenger Increases - Table 2.2-2 compares the type of gate positions for various aircraft in 2002 with those proposed in 2015. The trend in this table clearly indicates larger planes with more passengers per plane will serve LAX in 2015. Page 2-9 indicates the design aircraft include the Boeing 747-400 for Group V and the Airbus A380 as a representative aircraft for Group VI, also known as New Large Aircraft. Larger aircraft with 500 to 600 or more passengers per plane result in more vehicle trips and additional traffic impacts to freeways and streets above those identified in the Supplement.

3. Comments and Responses

Response:

As stated on page 3-2, Chapter 3, Alternatives, of the Supplement to the Draft EIS/EIR, the facilities that compromise Alternative D are designed to serve approximately 78.9 million annual passengers. Larger aircraft serving the airport does not necessarily equate to increased total passenger capacity or increased airport traffic. Design of Alternative D to accommodate a future (2015) airport activity level of 78.7 MAP took into account the future use of New Large Aircraft (NLA), including the number and types of gates proposed under Alternative D, as well as the ability of NLA to use taxiways/taxilanes to and from those gates. Chapter 3, Alternative D Constrained Activity, of the Draft Master Plan Addendum, described in greater detail the role of NLA in the future operation of LAX under Alternative D, with supporting documentation and analysis, including the Alternative D Airside Analysis and the Aircraft Operation and Passenger Activity Profiles, provided in Appendices F and G, respectively, of the Draft Master Plan Addendum.

SAL00015-160

Comment:

3. Number of Gates Is Not Legally Constrained - Table 2.2-3 compares the number of gates by aircraft group type between Alternative D and the No Action/No Project. While the text on Page 2-32 indicates Alternative D would discontinue the use of remote gate positions, there is nothing presented in the Master Plan which would guarantee the elimination of these gates or that would prevent the establishment of other remote gates at LAX. An increase in the number of gates beyond the 153 that have been assumed in Alternative D would result in more passengers, more vehicle trips and additional traffic impacts to freeways and streets above those identified in the Supplement.

Response:

As described on page 3-25, in Section 3.3, Alternative D - Enhanced Safety and Security Plan (subsection 3.3.2), of the Supplement to the Draft EIS/EIR, Alternative D emphasizes encouraging a long-term regional approach to serving air traffic demand in the Los Angeles basin by designing facilities at LAX to accommodate passenger and cargo activity levels as projected in regional plans, such as the SCAG RTP. LAWA determined that constraining the aircraft gate frontage at the terminal is a component of the airport system that is fully within its control. However, as explained in detail in Section 3.3 in the Draft EIS/EIR, it is important to understand that the levels of passengers that each alternative is designed to accommodate are not finite limits where the airport would somehow be closed or where aircraft would be redirected to some other facility when this number is reached. These levels are an indication of the number of passengers that can be accommodated at a reasonable level of service.

The north airfield modifications would eliminate the remote gates at the existing west pad facility and this area would be prohibited from use as a remote passenger boarding location. The new west satellite concourse would be constructed at one of the two existing remote commuter gate areas. A ground run-up enclosure (GRE) is proposed to be constructed at the other existing remote commuter aircraft boarding area.

SAL00015-161

Comment:

4. Unsupported Passenger Assumptions Significantly Understate the Impacts - Page 3-5 indicates "The ability to increase aircraft size, thereby increasing passenger levels, was limited by the number and types of gates available under the Alternative D terminal design." As indicated in comments above, more gates serving larger aircraft will be available under Alternative D. In sharp contrast to this, comparing the No Action/No Project to Alternative D in Table 3.3-1 indicates there will be a decrease in the number of annual passengers served in 2015 by domestic air carriers from 42 million annual passengers to 40 million annual passengers, with an increase in passengers served by smaller commuter planes. These assumptions do not appear to be supported, and a detailed explanation and justification of the reduction in trips provided by air carriers must be provided to ensure that the impacts of Alternative D are not understated.

Response:

Please see Response to Comment SAL00015-160 regarding gate facilities in Alternative D. Facilities that comprise Alternative D are designed to serve approximately 78.9 MAP.

The domestic air carrier passenger activity would be 40 MAP in 2015 under Alternative D, which represents a decrease from 42 MAP in the No Action/No Project Alternative. However, the total air carrier passengers include domestic air carrier, domestic Hawaii, and international air carriers. The total air carrier passengers served by Alternative D would be 78.9 MAP and 65.4 MAP for the No Action/No Project Alternative. The difference is due to the attempt made by Alternative D to maintain LAX as the International Gateway to Southern California. Alternative D would provide facilities capable of accommodating New Large Aircraft (NLA) to maximize its ability to serve unconstrained international demand to the greatest extent possible. The No Action/No Project Alternative fails to provide sufficient gate facilities capable of accommodating NLA. Commuter operations would likely be reduced from 1996 levels, consistent with the forecast for No Action/No Project Alternative and Alternative C, in order to maximize the number of passengers that could be served with a limited number of operations. It is also projected that some of the forecast commuter O&D demand would be served by domestic air carrier flights. Please see Section 3.3.2, Alternative D - Enhanced Safety and Security Plan, of the Supplement to the Draft of EIS/EIR for more information.

SAL00015-162

Comment:

5. Collateral Development Trip Cap Is Incorrect - Page 2-117 indicates there will be a cap associated with the LAX Northside Development to limit trips to a level comparable to the Westchester Southside Development shown with Alternatives A, B, and C. Page 2-117 indicates "The total development of the subject property shall not generate more than 3,152 project related outbound vehicle trips in the a.m. peak hour and 3,040 project related outbound vehicle trips in the p.m. peak hour." With the LAX Northside Development including a business park with up to 4.5 million square feet of office, retail, and hotel space on 340 acres, it cannot possibly generate 3,152 outbound a.m. peak hour trips. Instead, a.m. peak hour trips will be predominately inbound as employees drive to the proposed business park. The collateral development must have an a.m. peak hour trip cap for inbound trips, not for the outbound trips which will be nominal in comparison.

Response:

The subject statement on page 2-117 of the Draft Master Plan Addendum is in error, and should instead read as follows: "The total development of the subject property shall not generate more than 3,152 project-related inbound vehicle trips in the a.m. peak hour and 3,040 project-related outbound vehicle trips in the p.m. peak hour." This change has been incorporated in the Errata to the Draft Master Plan Addendum. The same error also appeared on page 3-48 of the Supplement to the Draft EIS/EIR, but has been corrected in the Final EIS/EIR. It should be noted that Technical Report S-2b, Supplement Off-Airport Surface Transportation Technical Report, which provides the technical details of the traffic analysis completed for Alternative D, correctly references the inbound and outbound vehicle trip limits proposed to be established through the trip cap (see page 21 of Technical Report S-2b).

SAL00015-163

Comment:

6. Reduced Trip Cap for Collateral Development May Not Be Possible - Page 2- 117 indicates "The original LAX Northside Development provided entitlements for 4.5 million square feet of development, subject to a limitation on the total number of daily vehicle trips (a 'trip cap.')

Alternative D includes a proposed reduction in the existing trip cap included in the original LAX Northside Development." While the LAX Northside Development is proposed to occur on about 340 acres of airport owned land, it may not be possible to commit to a reduced trip cap as the LAX Northside Development has already been entitled at a much higher density that would have generated considerably more vehicle trips. Furthermore, the conversion from the approved daily trip cap associated with the larger entitled development to the proposed peak hour trip caps for the collateral development has not been documented in the Master Plan or in the Supplement. Supporting calculations must be provided to ensure the reductions of 50 percent in the a.m. peak hour and 57 percent in the p.m. peak hour claimed on Page 2-117 will be achieved.

3. Comments and Responses

Response:

Please see Response to Comment SAL00015-17.

SAL00015-164

Comment:

LAX Master Plan Supplement Traffic Comments

The following concerns, omissions, and deficiencies relate to traffic impacts associated with Alternative D upon the City of El Segundo. These comments were developed during our detailed review of the traffic related portions of the Supplement as well as the S2b June 2003 Supplemental Off Airport Surface Transportation Technical Report prepared by Parsons Transportation Group.

Response:

Comment noted. Surface transportation impacts were addressed in Section 4.3, Surface Transportation, of the Draft EIS/EIR and Supplement to the Draft EIS/EIR, with supporting technical data and analyses provided in Technical Reports 2 and 3 of the Draft EIS/EIR and Technical Reports S-2a and S-2b of the Supplement to the Draft EIS/EIR. In addition, please see Response to Comment AL00043-3 regarding proposed traffic improvements for off-airport roadways and Topical Response TR-ST-2 regarding surface transportation analysis methodology.

SAL00015-165

Comment:

1. Interim Year Analyses Are Required for Alternative D - Page 4-5 of the Supplement indicates that no interim year analysis in 2005 was prepared for Alternative D. The primary reason for this cited the major project features common to Alternatives A, B, and C that are not included in Alternative D. However, with the three separate phases shown on Pages 3-50 through 3-56 of the Supplement, analyses must be conducted for each phase of Alternative D so the timely mitigation of associated traffic impacts will occur.

Each phase of Alternative D contains major components that will significantly alter traffic patterns and impacts. As examples, the 12,400 space employee parking structure will consolidate many scattered employee parking lots into one facility, increasing employee vehicle trips along the south side of LAX.

Construction of the Intermodal Transportation Center with its replacement parking for the structures in the Central Terminal Area will shift traffic volumes and associated impacts to areas southeast of LAX. The Ground Transportation Center will shift traffic volumes and impacts to areas northeast of LAX. The traffic impacts after completion of each phase must be identified, together with the timely implementation of necessary mitigation measures.

While the Supplement does examine traffic impacts in 2008 during the peak of construction activity for Alternative D, this is insufficient given the three major components in Alternative D. Demolition of the parking structures in the Central Terminal Area and construction of the Intermodal Transportation Center and Ground Transportation Center will each cause significant vehicle traffic shifts that require timely implementation of mitigation measures. Further study is required to ensure this occurs and impacts are mitigated.

Response:

No year 2005 analysis was completed for Alternative D since realistically no notable component of the project could be completed by that time.

Table S4.3.2-13 of the Supplement to the Draft EIS/EIR provides the proposed phasing of traffic mitigations associated with each of the major project components which will affect traffic patterns on the surface street network in order for timely mitigation of associated traffic impacts to occur. The mitigations associated with the major project components were based on location and the anticipated traffic patterns to that facility. For instance, many of the mitigations along the west side of the project

study area are tied to the West Employee Parking Garage, which is also on the west side of the airport. Tying each of the mitigations with a specific project component is more meaningful than tying each of the mitigations to a particular year. However, based on the construction schedule of the project components, some of these mitigations would be completed by 2008 (the peak construction year) while other mitigations would not be completed until after 2008. (See Tables S4.3.2-11 and S4.3.2-12).

SAL00015-166

Comment:

2. Inappropriate Baseline Traffic Counts Have Been Used - Page 4-218 of the Supplement indicates the airport peak hour traffic data were collected in the Central Terminal Area in August 1996 while the traffic count data for morning and evening commuter peak hours were collected in March 1997. Additional traffic counts were also made in the Central Terminal Area on three Fridays in August 2000 for the airport peak hour and on two Fridays in March 2000 for the a.m. and p.m. peak commuter traffic hours. Table S4.3.1-1 shows the comparison in trips between 1997 and 2000 in the Central Terminal Area. The 1.8 percent increase per year in the airport peak hour trips, 7.2 percent over the four years, is significant. Similarly, the 0.6 percent increase per year in the p.m. peak hour trips, 1.9 percent over 3 years, is also significant.

We disagree with the Supplement statement that "The results of the surveys completed for Year 2000 conditions showed no material or consistent change in traffic growth or reduction in on airport traffic since August 1996/March 1997." The increases of 1.8 percent per year for the airport peak hour trips as well as the increases of 0.6 percent per year in the p.m. peak hour trips are both significant. Annual growth rate adjustments must be made to the future baseline background traffic to properly reflect the increasing peak hour traffic volumes associated with activities at LAX.

Response:

The continued use of the 1996/97 traffic volumes as the baseline for analysis is a conservative approach, since use of the lower 1996/97 traffic volumes for the airport peak hour and PM peak hour would result in a larger change in traffic resulting from the projects. This would lead to an indication of more impacts resulting from the build alternatives.

SAL00015-167

Comment:

Our July 16, 2001 comments on the LAX Draft EIS/EIR for Alternatives A, B, and C, questioned the use of summer airport peak hour traffic volumes to evaluate a worst case scenario. We believe traffic during holiday periods, and in particular Thanksgiving and Christmas, may be significantly higher than the traffic levels during August or during March. The Supplement must provide the factual basis for relying on August and March traffic volumes for the airport peak hour and for the a.m. and p.m. peak hours respectively instead of higher holiday traffic volumes.

Response:

Traffic volume information from LAWA reveals that the month of August had the highest volume of average daily traffic for 1997, 1998, and 2000. In 1999, the average daily traffic in July was only 490 vehicles higher than August.

Using traffic data from the month of March to establish proper design day commuter volumes is appropriate and typical for a traffic impact analysis. The Los Angeles Department of Transportation requires that a month in spring or autumn be chosen for a traffic analysis. In these months, school is in session and there are few, if any, holidays to disrupt the typical traffic patterns. LADOT has approved the use of March traffic volumes for this study.

The volume of traffic at LAX may be higher during holidays such as Thanksgiving and Christmas than it is during the weekday in August studied. However, if Thanksgiving or Christmas were to be used for the analysis, it would result in an overdesign of the airport facilities. Just as a parking facility for a shopping center would not be designed for the traffic expected during the week before Christmas, it is more appropriate to design the airport facilities for a busy period rather than for a few extreme days of the year. As is done at the airport currently during the holidays, it would be expected that additional

3. Comments and Responses

traffic officers and transportation engineering staff would be employed to facilitate the flow of vehicles during the holidays.

Please see Topical Response TR-ST-2 and, in particular, Subtopic Response TR-ST-2.13.7 for further discussion regarding the incorporation of seasonal variations in airport trips.

SAL00015-168

Comment:

Regarding baseline traffic volumes at intersections, Page 4-244 of the Supplement indicates data was provided by LADOT for 38 intersections near the airport, with traffic counts made in 1994, 1995, and 1997. The Supplement indicates traffic counts were made at the intersections on June 1, 2001, and "A comparison of the data showed that the average annual growth for the combined intersections was approximately 1.5 percent and 1.0 percent per year for the a.m. and p.m. peak hours respectively." Page 2-244 concludes "It is a small growth rate and indicates that 1996 conditions are still applicable as an environmental baseline condition."

No data has been provided in the Supplement or in Technical Report S-2b to support the conclusion that 1996 conditions are the appropriate baseline. The 38 intersections counted and compared represent less than half of the 85 intersections evaluated in the Supplement. Each of these 38 intersections are in the City of Los Angeles, but traffic volume trends at these intersections may not be representative of traffic growth in the other adjacent jurisdictions such as the City of El Segundo or the County of Los Angeles.

Response:

In order to make the document clearer, the referenced section on page 4-244 of the Supplement to the Draft EIS/EIR has been revised in the Final EIS/EIR.

The environmental baseline represents existing conditions as they existed in 1996. An analysis was performed to determine whether the baseline conditions have changed materially since then. Year 2001 traffic counts were obtained for 52 of the original 61 Tier I intersections, including counts in different jurisdictions within the study area. A comparison of the 2001 counts to the counts used to establish the year 1996 baseline shows that traffic has been increasing slowly since 1996. Overall, traffic has increased by approximately 5 percent during this five-year period. This low growth rate is consistent with the LAX Ground Access Model's future year forecasts. The traffic impact and mitigation analysis is not based on the environmental baseline, which is a year 1996 scenario, but is based on the adjusted environmental baseline, which is a year 2015 scenario, and therefore the definition of the adjusted environmental baseline does not affect the traffic impact and mitigation analysis.

Background documentation for the conclusion given above is provided in the attached tables. These tables show that the overall growth rates are based on weighted averages of 52 intersections (85 percent of the original 61 Tier I study intersections) located in various jurisdictions within the study area, including El Segundo and Los Angeles County, and is therefore a good indicator of traffic growth throughout the study area. Since the environmental baseline is not used in the traffic impact and mitigation analysis but the adjusted environmental baseline is, the most critical issue is whether the adjusted environmental baseline incorporates traffic growth that is consistent with the level of traffic growth indicated by the new traffic counts. This issue is addressed in Topical Response TR-ST-2. The Topical Response indicates, based on the information summarized in the attached tables, that actual traffic growth based on traffic counts is in the range of 0.70 to 1.2 percent per year. In comparison, the LAX Ground Model is estimating traffic growth rates of 1.32 to 1.83 percent per year. The model is therefore projecting growth at a somewhat more rapid pace than has actually occurred over the last five years. The fact that the model is over-estimating traffic growth a bit compared to current traffic counts means that the model's forecasts of future year traffic conditions may be conservatively high. As a result, the number of project impacts and the magnitude of the mitigation measures may be over-stated in the current analysis. Updating the model to incorporate year 2001 counts may reduce future year traffic estimates. However, the region has been in an economic downturn, and may experience higher growth rates in the near future as the economy improves. Therefore it would be better to continue using

the current model forecasts, which may be conservatively high, than to reduce the forecasts and later discover that the revised estimates were too low.

SAL00015-169

Comment:

Further, there was no comparison of traffic volume increases on any of the 30 street segments or at any of the 39 ramps or four freeway segments included in Technical Report S-2b. Without further comparison, the Supplement cannot conclude "that 1996 conditions are still applicable as an environmental baseline condition."

According to counts provided by the City of El Segundo, traffic volumes on arterial segments have increased significantly between 1998 and 2003, particularly on Sepulveda Boulevard. The 1998 daily traffic volumes south of Imperial Highway of 64,700 increased to 69,800 in 2003, nearly 8 percent over the five years. South of El Segundo Boulevard, the 1998 daily traffic volumes of 57,500 increased to 61,800 in 2003, also nearly 8 percent over the five years. These increases in traffic on Sepulveda Boulevard require the Supplement to compare traffic growth in the area and to thoroughly document "1996 conditions are still applicable as an environmental baseline condition."

Response:

The environmental baseline described in Section 4.3.2, Off-Airport Surface Transportation (subsection 4.3.2.3), of the Supplement to the Draft EIS/EIR is not the baseline used in determining surface transportation impacts. As further described in this same subsection, the Adjusted Environmental Baseline is used to determine surface transportation impacts. The Adjusted Environmental Baseline represents future year traffic conditions without the project. The procedures used to develop the Adjusted Environmental Baseline are described in Topical Response TR-ST-2 regarding surface transportation analysis methodology, together with a discussion on why the traffic counts used in the analysis are appropriate. The topical response further indicates that the rate of growth assumed in the analysis exceeds observed growth in traffic since 1995.

The City of El Segundo traffic volumes presented by the Commentor reflect annual compound rates of increase of 1.53 percent for Sepulveda Boulevard south of Imperial Highway and 1.45 percent for Sepulveda Boulevard south of El Segundo Boulevard. Although the Commentor's traffic volumes were not substantiated by LAWA staff, these growth rates support the findings discussed in Subtopical Response TR-ST-2.12.4, which compare the actual traffic growth rate to the modeled traffic growth rate.

SAL00015-170

Comment:

The preferred practice in conducting environmental analyses requires evaluation of reasonably expected worst case conditions. There was no attempt to factor or update the old traffic counts to include seasonal adjustments reflecting higher holiday traffic volumes. The Supplement does not indicate if an annual growth rate was applied or what percentage annual growth rate was used to establish conditions in 2015. The use of outdated baseline traffic counts results in an inaccurate analysis of existing conditions and traffic impacts of Alternative D. New traffic counts must be made at all intersections studied. The calculations and subsequent analysis must also be redone as outlined in this report to properly analyze the traffic impacts.

Response:

The environmental baseline described in Section 4.3, Off-Airport Surface Transportation (subsection 4.3.2.3), of the Supplement to the Draft EIS/EIR is not the baseline used in determining surface transportation impacts. As further described in this same subsection, the Adjusted Environmental Baseline, which represents the "reasonably expected worst case condition" referred to by the Commentor, is used to determine surface transportation impacts. The Adjusted Environmental Baseline represents future year traffic conditions without the project. The procedures used to develop the Adjusted Environmental Baseline are described in Topical Response TR-ST-2, together with a discussion on why the traffic counts used in the analysis are appropriate. The topical response further indicates that the rate of growth assumed in the analysis exceeds observed growth in traffic since 1995.

3. Comments and Responses

SAL00015-171

Comment:

3. Caltrans Traffic Study Guidelines Were Not Followed - The traffic analysis of Alternative D should have been prepared in accordance with the California Department of Transportation's "Guide for the Preparation of Traffic Impact Studies." A number of freeway ramps as well as mainline sections of the adjacent I-405 and I-105 Freeways will be significantly impacted by Alternative D. Adding even a single trip to freeway segments operating at Level of Service E or F requires detailed study according to these Guidelines.

Response:

Caltrans informed LAWA that a separate Caltrans' Traffic Impact Study would not be required. The Final EIS/EIR is a programmatic document; if Alternative D and its mitigation measures are adopted by the Los Angeles City Council, further environmental review will be conducted, including the preparation of Project Study Reports for the proposed interchanges. The Project Study Reports will analyze in more detail the effects of the proposed interchanges on the movement of traffic on the I-405 and I-105 mainlines and ramps in the vicinity of LAX.

SAL00015-172

Comment:

4. Primary Mitigation Measures May Not Be Built Together As One Project - The primary mitigation of traffic impacts associated with Alternative D relies heavily on both a new interchange with I-405 at Lennox Boulevard as well as new connector ramps to and from I-105. These significant improvements have been analyzed together in the Supplement as a single project rather than as two separate improvements. There is no indication in the Supplement that the State will support either or both of these projects. The traffic impacts of Alternative D must be evaluated separately with only the Lennox Boulevard Interchange in place as mitigation and with only the I-105 connectors in place as mitigation. This additional evaluation is necessary given the complex nature of these improvements and the many uncertainties that will be faced in the lengthy State process. This will also complement the analyses already performed in the Supplement for future conditions without both of these significant improvements. The Supplement must also address the cost, financing, scheduling, and responsibility for implementation of these mitigation measures as required in the Caltrans Traffic Study Guidelines.

Response:

The title of Attachment F in Technical Report S-2b has been revised to "Alternative Mitigation Plan for Alternative D (No Lennox Interchange)." This alternative mitigation plan does assume the construction of the proposed I-105 Interchange. Please see Appendix F-C, Errata to the Draft EIS/EIR and the Supplement to the Draft EIS/EIR, of this Final EIS/EIR.

Feasibility studies are being prepared to obtain the conceptual approval by Caltrans and the FHWA for the proposed I-405 and I-105 interchanges. These reports compare the freeway operation under conditions with and without the interchanges.

Please see Response to Comment SAL00015-171 regarding the Caltrans' Traffic Impact Study.

SAL00015-173

Comment:

5. Public Parking Provided in Year 2015 May Be Insufficient - Table S4.3.1-7 on Page 4-235 of the Supplement indicates Alternative D creates a daily demand of 35,636 public parking spaces, and that this daily demand will exceed the planned public parking capacity by 634 parking spaces. The Supplement should indicate this is a significant environmental impact, but it does not recommend any measures to mitigate impacts of inadequate public parking.

Response:

The demand over capacity ratio is improved in Alternative D over the parking situation in the No Action/No Project scenario. Public parking demand is expected to exceed the available parking capacity by only 1.8 percent, and then only during periods of highest demand. For the vast majority of the time, there will be sufficient parking. Mitigation measures such as an electronic parking space identification system would allow drivers to locate parking spaces more quickly as they become available.

This occasional imbalance is not considered a significant environmental impact because this small excess in demand does not regularly occur.

SAL00015-174

Comment:

Table S4.3.1-7 also indicates that the daily public parking demand for each of the four build alternatives (A, B, C, and D) is precisely identical at 35,636 public parking spaces. At the same time, the number of originating daily passengers ranges from 95,026 for Alternative D to 108,355 for Alternatives A and B. This significant range of over 13,000 originating daily passengers cannot possibly produce precisely identical public parking demands.

Response:

The daily demand for parking is based on a number of factors, including the percentage of origin and destination passengers, vehicle mode splits, and vehicle occupancy. Most of the parking demand is determined by peak hour demand, which will be similar in all alternatives.

SAL00015-175

Comment:

It is also unclear why the No Action/No Project alternative serving 87,280 originating daily passengers, 8,000 per day less than Alternative D, would require 1,000 more public parking spaces than any of the other four alternatives. Page 4-235 indicates "There would be fewer connecting passengers in Alternative D than in the No Action/No Project Alternative" but this contradicts the significant increase in commuter flights shown in Table S3-3 (160,400 annual in 2015 for the No Action/No Project vs. 182,800 annual in 2015 for Alternative D.)

Response:

Trip generation for all alternatives were based on the design day passenger schedules for each alternative.

SAL00015-176

Comment:

More originating daily passengers for Alternative D will either produce more vehicle trips or more significant transit impacts, neither of which has been identified or adequately addressed in the Supplement. These various discrepancies associated with public parking spaces, vehicle trips, and transit impacts must be corrected and appropriate mitigation measures developed.

Response:

The design day trip generations for ground transportation forecasts for each alternative were based on 1) the proposed flight schedules, including percent of enplanements and deplanements that are originating, terminating, and connecting, 2) the number of visitors associated with each originating and terminating passenger, and 3) the lead and lag times associated with the flight activity. Because of these variables, there is not a direct correlation between the number of originating passengers per day and the number of hourly vehicle trips made during the AM, PM and Airport Peak hours. The significant impacts for Alternative D are based on these peak time periods, and not based on daily traffic volumes.

3. Comments and Responses

SAL00015-177

Comment:

6. Excessive Employee Parking Is Being Proposed - Page 4-235 indicates a new 12,400 stall garage would be built on the west side of the airport and there are also 1,200 employee parking spaces available in the existing Century Cargo Complex. In combination, 13,600 employee parking spaces are proposed with Alternative D. However, the demand for employee parking is shown as 12,400 parking spaces in Table S4.3.1-8 on Page 4-236 under each of the four build alternatives as well as under the No Action/No Project alternative. Providing an additional 1,200 employee parking spaces above what is needed to accommodate the forecast employee parking demand in a new, expensive parking structure is unnecessary and a further indication that the Master Plan contemplates greater growth than is being disclosed under Alternative D. The Master Plan and Supplement must be revised to reduce employee parking to match forecast demand and provide additional public parking to address the forecast shortage discussed above.

Response:

Under Alternative D, the number of proposed employee parking spaces in the Western Employee Parking Garage is equal to the anticipated 2015 demand. During times of high security threat levels, if the Transportation Security Agency requires all employees to be screened at a single location, employees who would normally park in the existing structure at the intersection of Avion Drive and Century Boulevard could be temporarily accommodated in the Western Employee Parking Garage.

SAL00015-178

Comment:

7. Discrepancies in the Peak Hour Trip Forecasts Must Be Corrected - Table S4.3.2-1 on Page 4-251 provides estimates of peak hour trips in 2015 for the No Action/No Project alternative but the numbers in this table do not match the sum of the inbound and outbound trips presented earlier in Table S4.3.1-3 on Page 4-227 as follows:

No Action/No Project Peak Hour Trips in 2015

Peak Hour	Table S4.3.1-3	Table S4.3.2-1
a.m.	13,096	13,105
Airport	17,602	18,296
p.m.	14,314	14,270

Similar discrepancies occur for peak hour trips in 2015 forecast for Alternative D between Table S4.3.2-1 on Page 4-252 and the sum of the inbound and outbound trips shown in Table S4.3.1-4 on Page 4-228 as follows:

Alternative D Peak Hour Trips in 2015

Peak Hour	Table S4.3.1-4	Table S4.3.2-1
a.m.	11,447	11,891
Airport	20,594	21,107
p.m.	12,602	13,072

These discrepancies in peak hour trips indicate that the analysis of the Supplement may be fundamentality flawed. The data must be reviewed and these discrepancies reconciled and corrected.

Response:

The trip generation estimates for the No Action/No Project Alternative for on-airport and off-airport analyses are exactly the same. They appear to have different totals because some trip categories are totaled in different ways. For example, most airport trips have one trip-end on the airport and one trip-end off the airport. Some airport trips, however, have both their origins and destinations on the airport. An airport parking lot shuttle trip is an example of such an instance. If both of the end-trips are on-airport, then one of the trip-ends is omitted in the on-airport analysis so that the trip is counted only once. Please also see Topical Response TR-ST-2 regarding surface transportation analysis methodology. In particular see Subtopical Response TR-ST-2.13.2 regarding this issue.

SAL00015-179

Comment:

8. Trip Cap for LAX Northside Collateral Development Is Incorrect - Page 3-50 of the Supplement indicates the LAX Northside Development "would include a mix of office park, hotel, retail/restaurant, and research/development business park uses." When describing the proposed trip cap associated with the LAX Northside Development, Page 3-50 of the Supplement indicates "The total development of the subject property shall not generate more than 3,152 project related outbound trips in the a.m. peak hour."

The "outbound" trip cap is nonsensical. It is not clear whether any meaningful cap is included in Alternative D. Table S8 on Page 22 of Technical Report S2-b and Table S4.3.2-1 on Page 4-252 of the Supplement indicate the collateral trips associated with Alternative D, LAX Northside, would total 4,134 in the a.m. peak hour with the trip cap in place. The table does not specify the direction of these trips. However, the predominance of a.m. trips associated with the uses proposed in LAX Northside would be inbound in the a.m. peak hour, not outbound. Application of a very high a.m. peak hour outbound trip cap is meaningless. Further, the trip distribution in the Supplement analysis must correlate with the appropriate number of inbound and outbound peak hour trips associated with the LAX Northside Development.

Response:

The statement made in the Supplement to the Draft EIS/EIR was an error and should have read "3,152 project-related inbound trips in the a.m. peak hour." This statement will be corrected in the Final EIS/EIR.

Please see Topical Response TR-ST-7 regarding Westchester Southside Traffic.

SAL00015-180

Comment:

9. Reduced Trip Cap for Collateral Development May Not Be Possible - Page 3- 50 of the Supplement indicates "The original LAX Northside Development provided entitlements for 4.5 million square feet of development, subject to a limitation on the total number of daily vehicle trips (a 'trip cap.')

Alternative D includes a proposed reduction in the existing trip cap included in the original LAX Northside Development." While the LAX Northside Development is proposed to occur on about 340 acres of airport owned land, it may not be possible to commit to a reduced trip cap as the LAX Northside Development has already been entitled at a much higher density that would have generated considerably more vehicle trips. Furthermore, the conversion from the approved daily trip cap associated with the larger entitled development to the proposed peak hour trip caps for the collateral development has not been documented in the Supplement. Supporting calculations must be provided to ensure the reductions of 50 percent in the a.m. peak hour and 57 percent in the p.m. peak hour claimed on Page 3-50 of the Supplement will be achieved.

Response:

The proposed reduction in the existing LAX Northside trip cap, including a 50 percent reduction in the allowable A.M. peak hour traffic and a 57 percent reduction in the allowable P.M. peak hour traffic, is a part of the Alternative D proposal that would be effectuated in conjunction with the various approval

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actions associated with the project. The proposed reductions of 50 percent in the A.M. peak hour and 57 percent in the P.M. peak hour reflect the actual amount of reduction in the number of trips allowed in each peak period. The existing A.M. peak hour trip allowance of 6,340 would be reduced to 3,152 (i.e., a 50.28 percent reduction) and the existing P.M. peak hour trip allowance of 7,000 would be reduced to 3,040 (i.e., a 56.57 percent reduction). Should Alternative D be selected and approved by the Los Angeles City Council, the existing entitlement allowances of LAX Northside would effectively be reduced by virtue of the reduction in the existing trip cap (i.e., it would be impossible to build-out the 4.5 million square feet of entitled development and remain within the limitations of the reduced trip cap).

SAL00015-181

Comment:

10. Inconsistencies in Alternative D Construction Schedule Must Be Corrected - The Supplement indicates substantial shifts in airport traffic patterns will occur as the major components of Alternative D are constructed. Page 4-264 indicates "When the ITC comes on line, there is expected to be a substantial shift in airport traffic patterns, as much of the CTA traffic shifts to the ITC. This traffic shift would result in significant impacts to various roadway intersections and ramps. As much as possible, it is important that the mitigation of these impacts be in place prior to opening the ITC, so that the corresponding traffic shifts can be adequately accommodated." We agree. However, several contradictions to this idealized construction schedule appear in Table S3-15 including the following:

a) Intermodal Transportation Center Construction - This project is shown as a design build project beginning in the 4th quarter of 2003, completion of construction at the end of the 4th quarter in 2005, and testing in the 1st quarter of 2006.

b) Central Terminal Area Parking Structure Demolition - This project is scheduled to begin in the 4th quarter of 2005 and to be completed at the end of the second quarter of 2006. If this schedule is followed, there would be no short term parking in the Central Terminal Area or at the Intermodal Transportation Center for at least six months, creating chaos.

c) Off Site Roadway Improvements - These projects are scheduled to begin during the 1st quarter of 2006, with completion at the end of the 2nd quarter of 2008. If this schedule is followed, there would be no mitigation measures in place at impacted intersections for over two years following completion and opening of the Intermodal Transportation Center at the end of the 1st quarter of 2006.

Construction of the off site roadway improvements, which are assumed in the analysis in the Supplement, must be accelerated so they are in place prior to opening of the Intermodal Transportation Center, not more than two years after as shown in the project schedule. The construction of the major components of Alternative D must also be rescheduled to retain short term public parking in the Central Terminal Area until the Intermodal Transportation Center is ready for use. There will be significant impacts if the construction schedule is not modified to address these concerns.

Response:

The construction schedule in Table S3-15 of the Supplement to the Draft EIS/EIR will be revised to begin the Offsite Roadway Improvements earlier. Certain project component roadway improvements, such as the widening of Aviation Boulevard and 111th Street adjacent to the ITC, are not included in the proposed construction period for the ITC. Traffic mitigations are not included in this table. The specific traffic mitigation measures which are expected to be in place prior to the opening of specific Alternative D projects that affect ground transportation were listed in Table S4.3.2-13 of the Supplement to the Draft EIS/EIR (now shown in Table F4.3.2-30 of the Final EIS/EIR).

As currently planned, demolition of the parking structures within the CTA will begin before the ITC is opened. It is expected that, during this period, airport passengers will use either one of the remaining CTA parking structures, the airport's remote parking lots B or C, or private parking facilities.

SAL00015-182

Comment:

11. Construction Worker and Truck Trip Estimates Are Inconsistent - Table 4.3.2-9 provides estimates of construction employee and truck traffic in 2008, the peak year of construction activity according to the Supplement. This table indicates there will be 5,953 daily construction employee trips and 5,326 passenger car equivalent truck trips, but the sum of these trips (11,279) does not equal the total construction trips of 11,273 shown in the table.

Page 4-544 of the Supplement provides a significantly higher estimate of construction workers during the peak construction years in 2007 and 2008, indicating "the workforce would equate to 5,992 personnel." Assuming that each construction employee would drive alone to and from LAX, this workforce would generate 11,984 daily construction employee trips. This is a huge difference, more than double the number of employee trips shown in Table S4.3.2-9 which was used as the basis for analysis of construction trips throughout the Supplement. The number of employees in the workforce and the subsequent evaluation of traffic impacts in Section 4.3.2 of the Supplement were based on less than 50 percent of the workforce estimated in Section 4.20 on Page 4-544, significantly understating the traffic impacts associated with construction employee trips. These significant and unexplained discrepancies must be addressed and resolved, and appropriate mitigation measures for construction traffic developed.

When describing the highest construction workforce and truck demand in 2008, Page 4-556 of the Supplement provides yet a different estimate by indicating "During the peak construction year, there will be an average daily employment of 5,125 and an average of 1,064 truck trips per day." Assuming that each construction employee would drive alone to and from LAX, this workforce would generate 10,250 daily construction employee trips. This is another huge discrepancy, nearly double the number of employee trips shown in Table S4.3.2-9 which was used as the basis for analysis of construction trips throughout the Supplement. The number of employees in the workforce and the subsequent evaluation of traffic impacts in Section 4.3.2 of the Supplement were based on 60 percent of the workforce estimated on Page 4-556, significantly understating the traffic impacts associated with construction employee trips. These discrepancies must be addressed and resolved, and appropriate mitigation measures developed.

The Supplement fails to adequately evaluate the traffic impacts associated with construction employees and truck traffic. As noted above, Table S4.3.2-9 is based upon the lowest estimate of the number of construction employees found in the Supplement, a number that is less than half of that disclosed in Chapter 4.20 of the Supplement. Thus, the traffic analysis shows less than half of the traffic that should have been analyzed, and must be redone using the corrected construction employee and truck trip data.

Response:

The numbers in Table S4.3.2-9 represent vehicle trips (in passenger car equivalents), not person-trips, and are rounded off to integers. Differences in the totals are due to the effect of the rounding, and have no significant effect in the outcome of the analysis. The analysis of airport-related construction impacts on surface transportation was conducted based on the average daily employment during the peak construction year of 2008 of 5,125 construction employees. The 5,992 construction employees referenced on page 4-544 of the Supplement to the Draft represents the highest quarter construction period, which takes place in 2007.

The Commentor's assumption that each construction employee would drive alone to and from LAX is incorrect. As described in Section 7.7 of Technical Report S-2b of the Supplement to the Draft EIS/EIR, one of the policies to address construction-related employee traffic impacts is to establish remote parking locations for construction employees to be shuttled into the LAX area rather than driving their personal vehicles to work. Because of this policy, more than 5,000 daily employees will arrive in the LAX area in fewer than 3,000 vehicles.

3. Comments and Responses

SAL00015-183

Comment:

12. Peak Hours at Intersections and Central Terminal Area May Be Different - Page 4-269 indicates "no construction related trips between LAX construction sites and off airport locations occur during the peak commute hours of 8:00 to 9:00 a.m. and 5:00 to 6:00 p.m. Also, very few vehicle trips occur during the airport peak hour of 11:00 a.m. to noon."

The peak hours used throughout the Supplement were defined by reviewing data at the Central Terminal Area for LAX operations. According to Page 4-556 and footnotes in Table S4.3.1-1 on Page 4-221, the morning peak hour occurs from 8:00 to 9:00 a.m., the airport peak hour occurs from 11:00 a.m. to 12:00 noon, and the afternoon peak hour occurs from 5:00 to 6:00 p.m. However, these hours may not actually correspond to the highest 60 minutes of traffic during the morning and the afternoon peak periods at the various intersections and freeway segments studied. Intersections experience their highest peak hour volumes during the four consecutive 15 minute periods such as from 7:15 to 8:15 a.m. rather than corresponding exactly to even hours such as from 8:00 to 9:00 a.m. The Supplement must document the highest 60 minute period in both the morning and evening peak periods at each of the intersections and roadway segments and then analyze the traffic impacts of Alternative D in these true peak hours.

Response:

While an individual intersection may have a peak-hour that does not correspond specifically to those peak hours studied, it is standard practice for a traffic study to use 8-9 AM and 5-6 PM to establish project impacts. It would be impractical for a traffic study of this magnitude to determine the individual peak hours for each intersection, particularly since these peak hours could vary seasonally, monthly, weekly, or even daily. LADOT recognizes and accepts the use of 8-9 AM and 5-6 PM as acceptable hours of analysis for this traffic study.

SAL00015-184

Comment:

13. Analysis of Construction Related Traffic During Additional High Volume Hours Must Also Be Made - Both of the statements on Page 4-269 regarding no construction related trips during peak hours are also misleading for the additional reason that the morning and afternoon peak traffic periods extend well beyond a single hour. Traffic at intersections and on various freeway segments near LAX approaches or exceeds capacity for several hours in the morning and for the majority of the afternoon and evening hours, and the traffic impacts associated with Alternative D upon these facilities must be analyzed and mitigated as discussed below.

Table S4.3.2-10 provides a comparison of hourly traffic volumes on various freeway and arterial roadway segments, both without construction traffic and then with construction traffic added. However, this table fails to assess the freeway and arterial roadway segment capacities and the levels of service associated with these construction traffic increases. The Supplement must properly evaluate the impacts of construction related traffic by direction on the freeway and arterial street segments shown in Table S4.3.2-10 as well as upon freeway segments adjacent to LAX.

As one example, Table S4.3.2-10 fails to properly quantify the amount of construction traffic that will impact Sepulveda Boulevard south of El Segundo Boulevard. Between 11:00 a.m. and 12:00 noon, this table indicates there will be 1,016 airport related trips in 2008 on this roadway segment without any construction traffic. Between 11:00 a.m. and 12:00 noon, this table also indicates there will be exactly 1,016 airport related trips in 2008 on this roadway segment with construction traffic. However, Table S4.3.2-9 indicates there will be 975 passenger car equivalent construction trips in 2008 between 11:00 a.m. and 12:00 noon. Airport related traffic forecast on Sepulveda Boulevard south of El Segundo Boulevard cannot possibly be identical with and without construction traffic between 11:00 a.m. and 12:00 noon with 975 trips related to construction forecast to occur during this hour.

Response:

The analysis of traffic impacts due to airport construction looks at five distinct peak hours, representing the highest hours of background traffic (8-9 AM and 5-6 PM), the highest hour of airport traffic (11AM to noon), and the highest hours of construction traffic (6-7 AM and 3-4 PM). This ensures that every reasonable effort has been made to identify all possible traffic impacts due to airport construction activity during the year of highest airport activity. Therefore, the statement made by the Commentor that the peak traffic periods extend well beyond a single hour is not relevant, since the traffic analysis looked at the worst hours during the day.

An assessment of the freeway and arterial roadway segments associated with the project's construction traffic was conducted. As stated on Page 59 of Technical Report S-2b of the Supplement to the Draft EIS/EIR, based on the 2008 construction traffic analysis, it is concluded that no additional significant traffic impacts are introduced by airport construction traffic that are not already included in the analysis of the AM, PM, and airport peak periods.

To address the specific issue regarding construction impacts on Sepulveda Boulevard south of El Segundo Boulevard between 11:00 AM and noon, reference is made to Table S4.3.2-9 in Chapter 4.3.2 of the Supplement to the Draft EIS/EIR and Figure S7 in Technical Report S-2b. Table S4.3.2-9 indicates that the only airport construction trips occurring between 11 AM and noon are truck trips. Figure S7 shows that no construction truck trips will travel on Sepulveda Boulevard south of Imperial Highway. Therefore Table S4.3.2-10 correctly shows that there is no difference between the "without construction" traffic volumes and the "with construction" traffic volumes on Sepulveda Boulevard south of El Segundo Boulevard.

SAL00015-185

Comment:

As another example, the eight mixed flow lanes on the mainline of I-405 south of Rosecrans Avenue have a total capacity of 16,000 vehicles per hour. Using the volumes shown in Table S4.3.2-10, the freeway mainline operates at Level of Service E between 3:00 and 4:00 p.m. without any LAX construction traffic. Without construction traffic, this table indicates there will be 5,406 airport trips on I-405 south of Rosecrans Avenue during this hour. With construction traffic, this table indicates there will be 6,162 airport trips on I-405 south of Rosecrans Avenue during this hour. Subtracting the airport traffic without construction vehicles from the airport traffic with construction traffic indicates 756 LAX construction related vehicles will use I-405 south of Rosecrans Avenue between 3:00 and 4:00 p.m. These construction vehicles bring the total volume between 3:00 and 4:00 p.m. on I-405 south of Rosecrans Avenue to 16,459 as shown in Table S4.3.2-10. This exceeds the 16,000 vehicles per hour mainline freeway capacity and causes the level of service to degrade from LOS E to LOS F. This is a significant traffic impact which is not disclosed in the Supplement.

The Supplement's failure to disclose this significant adverse effect on I-405 south of Rosecrans Avenue is a significant flaw. The Supplement must be substantially revised to reflect the correct number of construction workers, disclose their associated traffic impacts and provide measures to mitigate construction traffic impacts upon intersections, street segments, and freeway facilities that will be impacted during high traffic hours.

Response:

It is not possible to perform a traffic impact analysis for the 3-4 PM peak hour identified in the construction impact analysis that would be consistent with the detailed analysis performed for the AM, PM and airport peak hours. This is because the available information for this hour is not of sufficient detail. The LAX Ground Access Model cannot be used to model the hour between 3 PM and 4 PM. The traffic volume information in Table S4.3.2-10 in the Supplement to the Draft EIS/EIR gives information on total two-way traffic, and cannot be used to estimate traffic in each direction during the hour between 3 PM and 4 PM. One cannot draw a conclusion on any existing or future level of service for a particular freeway direction based on the information provided in Table S4.3.2-10.

As required under CEQA and the LADOT guidelines for traffic impact analysis, the traffic analyses in the Draft EIS/EIR and in the Supplement to the Draft EIS/EIR are performed for three reasonable worst-case scenarios representing the hours of highest combined background and airport traffic. Analysis of the airport peak hour already exceeds the typical requirements for peak hour analysis. Table 4.3.2-10

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is used to determine whether the addition of construction traffic creates any new reasonable worst case scenarios that would represent an hour with higher combined background and airport traffic than has already been analyzed. The hours of 6-7 AM and 3-4 PM have therefore been examined. Table S-4.3.2-10 shows that the overall traffic on the I-405 freeway south of Rosecrans Avenue is expected to be higher during the primary peak hours of 11 AM to noon and 5-6 PM than during the hour from 3-4 PM. The analysis already includes two peak hours with higher combined background and airport traffic than would occur between 3-4 PM during the period of highest construction activity. Therefore, it is concluded that no additional analysis is required for the 3-4 PM hour.

SAL00015-186

Comment:

14. The Full Impacts of Construction Traffic Are Not Fully Disclosed and Require Additional Mitigation at Intersections - According to Table S4.3.2-8, eight of the nine intersections studied in the City of El Segundo will be impacted by Alternative D in 2008 prior to mitigation. According to this table, significant traffic impacts will occur as follows:

- Aviation Boulevard at El Segundo Boulevard (LOS E in all peak hours)
- Aviation Boulevard at Imperial Highway (LOS E in the a.m. peak hour)
- Aviation Boulevard at Rosecrans Avenue (LOS F in the airport peak hour)
- Imperial Highway at Douglas Street (LOS C in the p.m. peak hour)
- Sepulveda Boulevard at El Segundo Boulevard (LOS F in the a.m. and LOS E in the airport peak hours)
- Sepulveda Boulevard at Imperial Highway (LOS D in the a.m. and LOS F in the airport and p.m. peak hours)
- Sepulveda Boulevard at Mariposa Avenue (LOS D in the a.m. and LOS F in the airport and p.m. peak hours)
- Sepulveda Boulevard at Rosecrans Avenue (LOS F in the a.m. and p.m. peak hours)

However, Table S4.3.2-8 does not adequately identify conditions that will occur during the airport peak hour in 2008 as it omits the additional impacts of construction traffic upon these intersections. Pages 4-264 and 4-265 indicate the procedures used to calculate intersection capacity "do not account for construction traffic for the three primary peak hours" and "the project would be managed to ensure that there would not be any notable construction related traffic generated by the project during those critical hours." For the airport peak hour from 11:00 a.m. to 12 noon, these statements directly contradict the Summary of 2008 Airport Construction Trip Generation in Table S4.3.2-9 on Page 4-270 which shows 975 passenger car equivalents for truck trips between 11:00 a.m. and 12:00 noon. The analysis of the airport peak hour in the Supplement must be modified to include these passenger car equivalent truck trips. The volume/capacity ratios and LOS shown in Table S4.3.2-8 must be corrected and further measures must be developed to mitigate these additional construction traffic impacts in the airport peak hour.

It is extremely unreasonable to assume there will be no construction trips occurring in 2008 between 8:00 a.m. and 11:00 a.m. as well as between 5:00 and 7:00 p.m. as has been shown in Table S4.3.2-9. Certainly, some of the 11,273 daily construction trips that are forecast in this table will occur during the hours when absolutely no activity has been shown, particularly during the a.m. and p.m. peak hours. The Supplement's statement that "the project would be managed to ensure that there would not be any notable construction related traffic generated by the project during those critical hours" is unsupported by any definitive plans or measures to ensure that there will be zero construction traffic during the a.m. and p.m. peak hours. Table S4.3.2-9 must be revised to properly forecast construction trips. The volume/capacity ratios and LOS shown in Table S4.3.2-8 must be corrected and further measures must be developed to mitigate these additional construction traffic impacts in the a.m. and p.m. peak hours.

Response:

The analysis shown in Table S4.3.2-8 in Chapter 4.3.2 of the Supplement to the Draft EIS/EIR does take into account all traffic, including construction traffic anticipated between 11 AM and noon.

Year 2008 conditions were analyzed to determine potential significant impacts on off-airport surface transportation facilities during the AM, PM, and airport peak hours of the peak construction year. A

mitigation plan has been recommended to address the impacts identified in this analysis. This mitigation plan is presented in Table S4.3.2-11 of the Supplement to the Draft EIS/EIR. In addition, a separate study, described in Section 7 of Technical Report S-2b of the Supplement to the Draft concluded that there are no additional traffic impacts beyond those already identified in the year 2008 analysis. Therefore, all year 2008 impacts, whether caused by airport activity or airport construction activity, are addressed in the mitigation plan for the year 2008.

The wording quoted by the Commentor from page 4-264 of the Supplement to the Draft - "While those procedures do not account for the construction traffic for the three primary peak hours" - refer to the General Approach and Methodology of the traffic impact analysis. The wording has been revised in this section of the Final EIS/EIR to clarify that construction traffic for the three primary peak hours and the two peak construction hours were analyzed for the 2008 peak construction year. The analysis does include the passenger car equivalent truck trips estimated for the airport peak hour.

A footnote has been added to the Alternative D Summary of 2008 Airport Construction Trip Generation table in the Final EIS/EIR to clarify that this table reflects a worst-case condition with respect to the number of mid-day truck arrivals and departures. Mid-day construction trucks could arrive as early as 9:30 AM and depart as late as 4:30 PM. Truck trips could also shift from the mid-day period to nighttime hours.

The proposed Ground Transportation/Construction Coordination Office, as described in Project Commitment C-1, would ensure compliance of the peak-period construction traffic prohibitions through contractual obligations with the various contractors. Contracts between LAWA and the construction contractors would include penalties for violations of these rules.

SAL00015-187

Comment:

15. Century Boulevard Lane Closures Are Not Adequately Analyzed - Page 4-547 of the Supplement indicates lanes on Century Boulevard will be closed as a result of the construction of various components of Alternative D as follows: "The traffic to and from the airport may be rerouted to southbound Sepulveda Boulevard for I-105 and Imperial Highway access, and to northbound Sepulveda Boulevard on to La Tijera Boulevard for I-405 access. These alternative routes may stay in effect for over two years." The Supplement has not assessed or properly evaluated the traffic impacts of the Century Boulevard long term lane closures on Sepulveda Boulevard south or north of LAX. Further study and disclosure of the impacts is required, together with the formulation and adoption of mitigation measures.

Response:

Although the Supplement to the Draft EIS/EIR states that Sepulveda Boulevard may be used as an alternative route to and from the airport while lanes of traffic are closed on Century Boulevard during construction, it was not intended that Sepulveda Boulevard be the only alternate route. Changeable message signs and static signs on the freeways and arterial surface streets might encourage drivers to use La Tijera Boulevard, Airport Boulevard, Imperial Highway, La Cienega Boulevard, and Arbor Vitae Street as other alternative routes during construction. The details of the detour routes, methods of relaying information to the driving public, etc. will be determined for each specific construction project through the proposed Ground Transportation/Construction Coordination Office. Temporary traffic controls along the detour routes such as lane restriping, signal timing modifications, and signal phasing will be considered on a case-by-case basis.

SAL00015-188

Comment:

16. Construction Staging Area Traffic Impacts Are Not Adequately Analyzed - Pages 4-548 and 4-549 indicate six construction staging areas have been identified. These include Staging Area 4 at the west end of the south runways north of Imperial Highway and east of Pershing Drive and Staging Area 5 at the west end of the south runways just east of Staging Area 4. The Supplement fails to provide any details regarding how or when the various staging areas may be used. Important issues relating to each staging area including when it will be used, how long it will be used, where access will be provided, and

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how many trips will occur, must be addressed and disclosed. The impacts must be analyzed and disclosed, and mitigation measures must be formulated and included in the Supplement.

Response:

Staging Areas 4 and 5 are batch plants which generate little traffic. Off-site construction trips do not occur during the commuter peak hours. Please see Table S38 of Technical Report S-2a of the Supplement to the Draft EIS/EIR for the projected volume of on-airport traffic during the AM, PM, and airport peak periods.

Since this is a programmatic document, the details requested by the commentor such as duration of the staging areas and their access locations have not been determined at this time.

SAL00015-189

Comment:

17. Improved Mitigation for Construction Traffic Must Be Formulated - Page 4-568 of the Supplement indicates "Although surface transportation commitments would reduce the impacts to on and off airport transportation facilities during construction, these impacts would remain significant and temporarily unavoidable." As pointed out in this letter, there are many inconsistencies and errors in the estimates of construction traffic shown in the Supplement. The subsequent analysis based upon only a fraction of the projected construction traffic is inadequate, and the resulting traffic impacts have been grossly understated. These errors and inconsistencies must be rectified and appropriate mitigation measures must be developed and adopted for Alternative D.

Response:

This comment is a paragraph summarizing specific concerns expressed in comments SAL00015-182 through SAL00015-188. Please see responses to these comments.

SAL00015-190

Comment:

18. Lennox Interchange and I-105 Connectors Are Not Adequately Analyzed - The Lennox Boulevard interchange with I-405 as well as the new connector ramps to and from the east on I-105 are very important components of the overall mitigation for Alternative D. Page 36 of Technical Report S2-b indicates "There are four on ramps to southbound I-405 and four off ramps from southbound I-405. One or two of these on ramps and up to two of these off ramps may need to be eliminated. Other ramps may be realigned" with the proposed mitigation. Closing of existing ramps must be evaluated in much more detail to assess whether the ramps remaining open such as at El Segundo Boulevard would become overloaded with diverted traffic associated with the proposed mitigation, and the project designed to avoid such impacts. The total of 5,750 CMP credits shown on Page 53 of Technical Report S-2b, 1,150 for each of the five new freeway ramps, must also be adjusted to reflect the final net change in on and off ramps.

The Supplement and Technical Report S-2b do not adequately address the role of the State Department of Transportation in the proposed Lennox Boulevard Interchange with I-405 and in the proposed eastbound I-105 connectors. Caltrans must review and approve all changes involving the I-405 and I-105 Freeways. These two significant mitigation measures must also be evaluated separately and independently rather than together as a single project as has been done in the Supplement. While alternate mitigation to both projects together has been developed, the Supplement must also develop alternate mitigation for the Lennox Boulevard Interchange and for the I-105 eastbound connectors separately.

Response:

As stated on Page 4-288 of the Supplement to the Draft EIS/EIR, feasibility studies are underway to determine the best design for the Lennox Boulevard interchange on the I-405 Freeway and for the new connector ramps to and from the east on the I-105 freeway. LAWA has met on several occasions with Caltrans and the Federal Highway Administration regarding these proposed freeway improvements. It is acknowledged that Project Study Reports (PSRs) are required in order to obtain final approval from

Caltrans and the FHWA for both these interchanges. The possible closure of existing ramps and the traffic impact associated with potential ramp closures will be analyzed to the satisfaction of both these agencies. The PSRs for these interchanges will be prepared at a later date.

The wording referenced by the Commentor from page 36 of Technical Report S-2b represents a worst-case condition for ramp closures. The estimate of freeway ramp credits described on page 53 of Technical Report S-2b of the Supplement to the Draft EIS/EIR indicates that there will be six additional on- or off-ramps (four at the Lennox Boulevard Interchange with the I-405 and two at the I-105 Interchange) and one removed ramp (southbound on-ramp to the I-405 Freeway south of Century Boulevard), for a net increase of five ramps. This is based on the preferred alternative for the Lennox Boulevard Interchange, as described in the feasibility report submitted to Caltrans and the FHWA. The approved design of the interchanges may have a different number of ramp closures that would require an update to the calculated CMP credits. This will not be known until the PSR for the Lennox interchange is completed.

The proposed Lennox Boulevard interchange and the proposed I-105 interchange are being evaluated separately and independently rather than together as a single project. The alternative mitigation plan described in Attachment F of Technical Report S-2b of the Supplement to the Draft EIS/EIR includes the proposed I-105 interchange but does not include the Lennox Interchange. The title page was in error and implied otherwise. The title should have read "Alternative Mitigation Plan for Alternative D (No Lennox Boulevard Interchange)." A revised title page is included in Appendix F-C, Errata to the Draft EIS/EIR and the Supplement to the Draft EIS/EIR, of this Final EIS/EIR.

SAL00015-191

Comment:

19. Traffic Impacts to Freeway Mainlines Not Adequately Analyzed or Mitigated - Page 4-253 describes "poor traffic conditions that already exist on the I-405 and I-105 mainlines." To address this critical problem, Page 4-254 of the Supplement indicates "It is important that Alternative D include a mitigation strategy that would help to alleviate this issue. Effective methods of encouraging airport traffic to stay on the freeway rather than off load would include provision of direct and non stop access ramps to and from I-405 and I-105..... Analysis shows that these two important mitigation components would be effective in encouraging airport traffic to stay on the freeway system and avoid off loading onto surface streets."

As indicated previously, the proposed mitigation involving the Lennox Boulevard interchange at I-405 together with the new connector ramps to and from the east on I-105 are important components of the overall mitigation for Alternative D. However, without significant improvement to both the I-405 and I-105 mainlines, airport traffic will still divert off both freeways onto surface streets upstream of LAX, even with the new interchange and the connectors.

Response:

The proposed Lennox Boulevard interchange will encourage airport traffic to use the I-405 freeway over the surface streets. Airport passengers will be able to travel from the freeway to the GTC or ITC without stopping at any traffic signals. In general, the traffic model indicates that as airport-related traffic increases on the I-405 Freeway, non-airport related traffic shifts to the parallel surface streets. However, the impact of these interchanges on surface streets is limited to a small area. The project also calls for widening surface streets in the vicinity of the GTC and ITC, including Aviation Boulevard, La Cienega Boulevard, Arbor Vitae Street, and 111th Street to improve the movement of traffic on the surface streets. It is not the responsibility of the project to reduce existing traffic congestion on the mainlines of the I-105 and I-405 Freeways.

SAL00015-192

Comment:

Existing traffic volumes during the a.m., Airport, and p.m. peak hours as well as during most of the afternoon already approach capacity on both I-405 and on I-105. Various tables such as the Levels of Service for Freeway Mainline Segments in Attachment C to Technical Report S-2b show traffic forecasts exceeding the mainline freeway capacity. These volume projections indicate the demand to

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use the freeway but this is a theoretical number because these volumes exceed the actual capacity of the freeway segments. When the number of vehicles exceeds the mainline freeway capacity, vehicles will either divert to surface streets, causing additional adverse impacts on those streets, or they will be severely delayed, significantly extending peak hours.

Response:

Capacity values cited in the analysis are theoretical capacities, not physical capacities. LOS designations used in this analysis were taken from the CMP for Los Angeles County. These LOS designations include multiple grades of LOS F (F1, F2, etc.), for over-capacity conditions. The multiple grades reflect the length of time that traffic exceeds the theoretical capacity. Some sections of the freeways analyzed for the LAX Master Plan have traffic volumes in excess of capacity as the existing condition. The LAX Ground Access Model takes into account the lengthy delay that occurs when a facility has traffic volumes above capacity, and shifts traffic away to other facilities, if shorter travel times can be achieved. The model has been calibrated to match the degree of diversion that occurs throughout the study area, and to add the additional delay to facilities that are over the theoretical capacity.

SAL00015-193

Comment:

I-405 south of Rosecrans Avenue provides four through lanes and one HOV lane in each direction with a corresponding directional capacity of 10,000 vehicles per hour. Unfortunately, a comparison of total freeway directional demand on I-405 cannot be made as the various tables in Attachment C for 2015 contain numerous errors regarding projections for the HOV lanes. (E.g., HOV volumes for 2015, shown to be only half of the 2008 HOV projections, must be corrected.)

Response:

Estimates of freeway and HOV lane volumes for 2008 and 2015 are appropriate as documented in Technical Report S-2b of the Supplement to the Draft EIS/EIR. As described on page 15 of the technical report, the I-405 HOV lanes are assumed to shift in the year 2015 from allowing vehicles with at least two persons to allowing only vehicles with at least three persons. This assumption is made because the volumes of vehicles on the HOV lanes in 2015 when two-person vehicles are allowed to use the facility become unreasonably high. The result of removing two-person vehicles from the I-405 HOV lanes in 2015 is a reduction in the total peak hour volume on the HOV lanes in 2015 compared to the peak hour volumes in 2008.

SAL00015-194

Comment:

Comparing the traffic volume forecasts in the four through mainline lanes with their associated capacity of 8,000 vehicles per hour indicates significantly more demand than these lanes can actually accommodate. According to the table in Attachment C for I-405 south of Rosecrans Avenue in 2008, the northbound a.m. peak hour demand will be 8,698 vehicles, 698 more than can be served on the mainline. During the Airport peak hour, the northbound demand will be 8,953 vehicles, 953 more than can be served. During the Airport peak hour, the southbound demand will be 8,408 vehicles, 408 more than can be served. During the p.m. peak hour, the southbound demand will be 9,271 vehicles, 1,271 more than can be served. To retain the traffic on the freeway, mainline improvements are needed to accommodate the number of vehicles exceeding the current freeway capacity. LAWA must pay its "fair share" of the required freeway widening.

Response:

Capacity values cited in the analysis are theoretical capacities, not physical capacities. LOS designations used in this analysis were taken from the CMP for Los Angeles County. These LOS designations include multiple grades of LOS F (F1, F2, etc.), for over-capacity conditions. The multiple grades reflect the length of time that traffic exceeds the theoretical capacity. Some sections of the freeways analyzed for the LAX Master Plan have traffic volumes in excess of capacity as the existing condition. The LAX Ground Access Model takes into account the lengthy delay that occurs when a facility has traffic volumes above capacity, and shifts traffic away to other facilities, if shorter travel times

can be achieved. The model has been calibrated to match the degree of diversion that occurs throughout the study area, and to add the additional delay to facilities that are over the theoretical capacity. Analysis of freeway impacts is covered in Section 6 of Technical Report S-2b of the Supplement to the Draft EIS/EIR, and meets the requirements for analysis of regional facilities as provided in the Congestion Management Program for Los Angeles County.

SAL00015-195

Comment:

Conditions in 2015 on the mainline of I-405 south of Rosecrans Avenue will be worse than those in 2008. According to the table in Attachment C for I-405 with the Lennox Boulevard Interchange, the northbound a.m. peak hour demand will be 9,054 vehicles, 1,054 more than can be served. During the Airport peak hour, the northbound demand will be 9,973 vehicles, 1,973 more than can be served. During the Airport peak hour, the southbound demand will be 9,668 vehicles, 1,668 more vehicles than can be served. During the p.m. peak hour, the northbound demand will be 8,632 vehicles, 632 more than can be served. During the Airport peak hour, the southbound demand will be 10,027 vehicles, 2,027 more vehicles than can be served. Again, in order to retain on I-405 the vehicles exceeding the freeway capacity, mainline improvements are required, and LAWA must pay its "fair share" of the required freeway widening.

Response:

Capacity values cited in the analysis are theoretical capacities, not physical capacities. LOS designations used in this analysis were taken from the CMP for Los Angeles County. These LOS designations include multiple grades of LOS F (F1, F2, etc.), for over-capacity conditions. The multiple grades reflect the length of time that traffic exceeds the theoretical capacity. Some sections of the freeways analyzed for the LAX Master Plan have traffic volumes in excess of capacity as the existing condition. The LAX Ground Access Model takes into account the lengthy delay that occurs when a facility has traffic volumes above capacity, and shifts traffic away to other facilities, if shorter travel times can be achieved. The model has been calibrated to match the degree of diversion that occurs throughout the study area, and to add the additional delay to facilities that are over the theoretical capacity. Analysis of freeway impacts is covered in Section 6 of Technical Report S-2b of the Supplement to the Draft EIS/EIR, and meets the requirements for analysis of regional facilities as provided in the Congestion Management Program for Los Angeles County.

SAL00015-196

Comment:

A significant portion of the evaluation of traffic impacts of freeway mainlines contained in the Supplement in Table S4.3.2-5 includes remote freeway facilities far removed from LAX such as I-5 and I-405 over 25 miles north of LAX in the San Fernando Valley. The Supplement must examine the Alternative D traffic impacts on the I-405 and I-105 mainline freeway segments in the vicinity of LAX, where the impacts will be obvious and severe, in far more detail. This analysis will require special attention to the I-105 as freeway segments at I-405, Prairie Avenue, at Crenshaw Boulevard, and at I-110 provide only three through lanes and one HOV lane in each direction. These constrictions act as bottlenecks along I-105, and provide significantly less capacity than the wider four through lane and one HOV lane segment east of Crenshaw Boulevard mentioned in the Supplement. The traffic impacts of Alternative D on the constricted sections of I-105 must be evaluated and properly analyzed, with measures developed and added to the Supplement as necessary to mitigate these traffic impacts and avoid off loading of excess traffic volumes onto local surface streets.

Response:

Analysis of freeway impacts is covered in Section 6 and Attachment G of Technical Report S-2b of the Supplement to the Draft EIS/EIR, and meets the requirements for analysis of regional facilities as provided in the Congestion Management Program for Los Angeles County.

Assuming adoption of Alternative D and approval of its proposed mitigation measures by the Los Angeles City Council, Project Study Reports will be prepared which will analyze in more detail the

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effects of the proposed interchanges on the movement of traffic on the I-105 and I-405 mainlines and ramps in the vicinity of LAX.

The traffic model used in the off-airport traffic impact analysis took into account the number of lanes and the anticipated volume of future traffic on the mainlines of the I-405 and I-105 freeways to determine future traffic movements in the airport area.

Drivers currently exiting the northbound Sepulveda Boulevard off-ramp, which most drivers westbound on the I-105 Freeway use to access the LAX Central Terminal Area, typically experience delays and queues which effect the mainline of the westbound I-105 Freeway. Unlike the Sepulveda Boulevard off-ramp, the proposed interchanges from the I-405 and westbound I-105 freeways would have direct access to the airport's GTC and ITC facilities, without being impeded by traffic signals or mixing with non-airport traffic.

SAL00015-197

Comment:

The proposed freeway mainline mitigation shown in Attachment G to Technical Report S-2b includes only three improvement projects to freeway mainlines. All are located on I-405, with one at Santa Fe Avenue near I-710 in the City of Long Beach, one east of I-110 in the City of Carson, and one north of Inglewood Avenue in the City of Redondo Beach. No details whatsoever are provided regarding the scope or the costs of these proposed "future freeway improvements." No back up calculations have been provided to verify the "fair share" of proposed Alternative D participation of 7.7 percent, 10.0 percent, 75.0 percent, respectively, in these three projects. These flaws in the Supplement must be remedied in order to provide full disclosure of traffic impacts and potential mitigation.

Response:

Analysis of freeway impacts is covered in Section 6 of Technical Report S-2b of the Supplement to the Draft EIS/EIR, and meets the requirements for analysis of regional facilities as provided in the Congestion Management Program for Los Angeles County. It is further noted that neither LACMTA nor Caltrans has requested additional analysis or supporting documentation in regard to the freeway mainline improvement projects described in the CMP analysis.

SAL00015-198

Comment:

20. Erroneous Calculations and Flawed Mitigation Measures For City of El Segundo Intersections Must Be Corrected - Each of the capacity calculations for intersections in the City of El Segundo in Attachment I to the S-2b Supplemental Off Airport Transportation Technical Report has been reviewed. These calculations contain numerous errors which have then been carried throughout Technical Report S-2b as well as in the Supplement. Each of the following comments must be addressed by correcting the intersection capacity calculations and modifying the recommended mitigation measures appropriately as follows:

Response:

Comment noted. Surface transportation impacts were addressed in Section 4.3, Surface Transportation, of the Draft EIS/EIR and Supplement to the Draft EIS/EIR, with supporting technical data and analyses provided in Technical Reports 2 and 3 of the Draft EIS/EIR and Technical Reports S-2a and S-2b of the Supplement to the Draft EIS/EIR. In addition, please see Response to Comment AL00043-3 regarding proposed traffic improvements for off-airport roadways and Topical Response TR-ST-2 regarding surface transportation analysis methodology.

SAL00015-199

Comment:

a) Aviation Boulevard and El Segundo Boulevard

i) Los Angeles County Widening Project Benefits Alternative D - The capacity calculations assume a Los Angeles County project will add a third through lane in each direction on Aviation Boulevard prior to 2008. These additional lanes result in significantly improved capacity and level of service over what will actually occur if the County project is not constructed by 2008. Alternative D obtains a significant increase in capacity at this intersection from a project being implemented by another jurisdiction. LAWA should contribute its "fair share" to the cost of the County improvement project as mitigation of Alternative D.

Response:

At a meeting held on September 5, 2002 at the MTA to discuss Aviation Boulevard, staff from the Public Works Department of LA County stated that the widening of Aviation Boulevard from Imperial Highway to Hawaii Street would be released for construction bids in late 2003. Therefore, the assumption that this improvement would be in place by 2008 is appropriate. Completed projects would not require a "fair share" mitigation by LAWA.

SAL00015-200

Comment:

ii) Southbound Aviation Boulevard Restriping Is Not Included - The a.m. peak hour calculations for 2015 with the Lennox Boulevard Interchange match the recommended mitigation. However, for both the airport and p.m. peak hours, calculations do not reflect restriping southbound Aviation Boulevard to two left turn lanes, 2 through lanes, and 1 through/right lane as recommended in the mitigation of impacts at this intersection.

Response:

Some of the worksheets in Attachment I for this intersection were incorrect. The corrected worksheets for 2015/recommended mitigation plan are provided in Appendix F-C, Errata to the Draft EIS/EIR and the Supplement to the Draft EIS/EIR, of this Final EIS/EIR. When the corrected worksheets are considered there is no longer a need to add a second southbound left turn lane. Therefore the mitigation plan is revised to keep the southbound striping the same as existing - 1 left turn lane, 3 through lanes, and 1 right turn lane. With this revised configuration, all peak hours are fully mitigated. Please also see Appendix F-C for modifications to Attachments D, E, and F of Technical Report S-2b. A summary of the revised traffic impact analysis and mitigation plan is provided in Section 4.3.2, Off-Airport Surface Transportation, of this Final EIS/EIR.

SAL00015-201

Comment:

iii) ATSAC/ATCS System Is Now Being Designed - Calculations in 2015 include capacity benefits with implementation of ATSAC/ATCS signal control. The County of Los Angeles is currently designing an ITS traffic signal system improvement project throughout the City of El Segundo. The Supplement incorrectly credits Alternative D for traffic signal system mitigation that will already be in place long before 2015. LAWA should contribute its "fair share" to the cost of the County improvement project as mitigation of Alternative D. The Supplement must also develop other measures to mitigate the traffic impacts of Alternative D at this intersection.

Response:

CEQA and LADOT traffic impact study guidelines require that the future year baseline scenario contain all funded transportation improvements affecting the study area. A listing of all funded transportation improvements was obtained from many jurisdictions, including El Segundo, on multiple occasions. Evidence of a funded program to provide signal control improvements to this intersection was not provided to the LAX Master Plan team. The analysis was therefore performed assuming that no such improvements were funded. The fact that a funded program to provide these improvements has subsequently been approved does not in any way invalidate the analysis. The recommended mitigation plan includes the addition of ATSAC/ATCS equivalent signal control improvements. It is not known whether the programmed improvements will achieve ATSAC/ATCS equivalent. If they do, then the improvements themselves fully mitigate project impacts. If they do not, then additional upgrade is recommended to fully mitigate the impacts. LAWA will coordinate with the City of El Segundo to

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determine whether the programmed improvements will suffice, and whether LAWA should provide additional upgrades or contribute to the funding of the programmed improvements.

SAL00015-202

Comment:

iv) Mitigation Measures Are Incorrect - Dual left turn lanes for only southbound traffic have been recommended as mitigation in 2015. Dual left turn lanes are generally beneficial to intersection capacity when left turning traffic volumes exceed 300 in a peak hour. At this intersection, southbound left turn volumes are considerably less than this accepted threshold in all scenarios. While northbound left turn volumes exceed this threshold significantly in the Airport peak hour, northbound dual left turn lanes were not recommended as mitigation. In addition, dual left turn lanes in only one direction on Aviation Boulevard would create an adverse and potentially unsafe offset for through traffic as it passes through the intersection. These mitigation measures must be reviewed and redesigned to ensure that they serve their purpose without endangering public safety.

Response:

On subsequent analysis of the project impacts at this intersection, it has been determined that dual left-turn lanes for southbound traffic are not needed to mitigate this intersection. This recommended change has been deleted from the proposed mitigation plan.

SAL00015-203

Comment:

b) Aviation Boulevard and Imperial Highway

i) Southbound Aviation Boulevard Through Lanes Are Incorrect - Currently there is only one dedicated southbound through lane. All calculations for 2008 and 2015 include a second dedicated through lane but the project that will provide this second southbound through lane has not been identified.

Response:

The Adjusted Environmental Baseline includes funded improvements to the transportation system. These transportation improvements are itemized in Table S4 of Technical Report S-2b of the Supplement to the Draft EIS/EIR. Items 7 and 9 in that table involve the widening of Aviation Boulevard to six lanes between Rosecrans Boulevard and Arbor Vitae Street. This improvement results in one additional southbound through lane at the intersection of Aviation Boulevard and Imperial Highway. This is a funded improvement, and therefore must be included in the Adjusted Environmental Baseline in order to be consistent with CEQA guidelines. Therefore the additional southbound through lane is included in all baseline and build scenarios (Alternatives A, B, C and D), and is not a part of the mitigation plan.

SAL00015-204

Comment:

ii) Southbound Aviation Boulevard Right Turn Lanes Are Incorrect - Currently there is a dedicated southbound right turn lane as well as a southbound shared through/right turn lane. A southbound right turn arrow is also displayed by the traffic signal. All calculations for 2008 and 2015 include these lanes but do not correctly calculate the capacity of the shared through/right turn lane green arrow. The calculations must be adjusted to reflect blockage of the shared lane by a through motorist while the right turn green arrow is displayed.

Response:

The current operation of this intersection is sub-optimal in the sense that a green light is given for right turns on a shared through-right lane. Since not all vehicles in this lane turn right, the capacity created by the green right-turn light may occasionally be unrealized because a through vehicle blocks the lane. The software package developed by LADOT which is being used for this analysis is not designed to evaluate such a sub-optimal operation. The software essentially responds to this situation by assuming

that all right-turn vehicles blocked in this lane by other vehicles will change to the outside lane and continue making the right turn. To determine whether the blockage of some right-turn vehicles might result in different findings, a separate analysis was performed for all scenarios analyzed in Technical Report S-2b. In this separate analysis, 20 percent of all right-turning vehicles were assumed to be in the shared lane (joining the through-trip vehicles in that lane), and 80 percent of the right-turning vehicles were assumed to use the outside right-turn-only lane. The results of this separate analysis showed that the LOS estimates were unchanged in all but two instances. The 2015 mitigated scenario with the Lennox Interchange improved during the PM peak hour from a Volume Capacity Ratio (V/C) of 1.069 to 1.042, confirming the previous finding of full mitigation. The 2008 Alternative D unmitigated scenario for the PM peak hour changed from a V/C of 0.968 to 0.984, still below the LOS for the 2008 Adjusted Environmental Baseline for that peak hour. Therefore the fact that the intersection currently operates with a right-turn-only green phase on a shared through-right lane does not change the findings or the recommended mitigation measures for this intersection, and no change to the recommended mitigation plan is required. Please see Appendix F-C, Errata to the Draft EIS/EIR and the Supplement to the Draft EIS/EIR, of this Final EIS/EIR for modifications to Attachments D, E, and F of Technical Report S-2b. A summary of the revised traffic impact analysis and mitigation plan is provided in Section 4.3.2, Off-Airport Surface Transportation, of this Final EIS/EIR.

SAL00015-205

Comment:

iii) Arbitrary Volume Adjustments Were Made For 2015 - Calculations for the a.m. peak hour in 2015 for unmitigated and for mitigated conditions without the Lennox Boulevard Interchange include an increase of 300 northbound through vehicles and a decrease of 100 southbound left turn vehicles for the "Project." Many adjustments are made during the Airport peak hour in 2015 for "Ambient" including 175 more northbound right turns, 200 more southbound left turns, 50 fewer southbound through vehicles, 200 more westbound right turns, 300 fewer eastbound left turns, 300 more eastbound through, and 100 fewer eastbound right turns. In the p.m. peak hour, these "Ambient" adjustments include 200 fewer northbound left turns and 200 more southbound left turns. The Supplement must provide technical support for each of these arbitrary "Project" and "Ambient" peak hour volume adjustments as well as the rationale for making adjustments in seven movements during the Airport peak hour and in only two movements in the a.m. and p.m. peak hours.

Response:

As indicated in Technical Report S-2b, Supplemental Surface Transportation Technical Report, Off-Airport, Section 2.2, of the Draft Supplement to the Draft EIS/EIR, the forecasting procedures included the use of post-model adjustments to further refine the model results. These refinements included manual adjustments to specific intersection turning movements to improve upon the model forecasts. The adjustments made to the model results were not done arbitrarily. While the travel demand simulation model is a very effective transportation planning tool that can predict future travel patterns and volumes along roadways, it is, nonetheless, a common practice to manually adjust the intersection turning volumes predicted by the model to ensure reasonableness of the results. The adjustments were made to account for unrealistic loading from a centroid onto the simulated highway network. In most cases, this may have occurred because a centroid was disproportionately loading more traffic on one link than on another. Therefore, if it was determined that the traffic model was unrealistically overestimating or underestimating future traffic volumes, adjustments were necessary. The model-generated results for all of the future study scenarios were reviewed carefully and, if it was deemed that a specific turning demand as predicted by the traffic model was not realistic, manual adjustments were made. If refinements were made to an intersection, these adjustments are reflected in the level-of-service (LOS) worksheets for that specific study intersection. Adjustments made to an intersection turning movement for a specific time period are not necessarily made to the same movement for a different time period.

SAL00015-206

Comment:

c) Aviation Boulevard and Rosecrans Avenue

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i) Hawthorne Widening of Aviation Boulevard Benefits Alternative D - The capacity calculations assume a City of Hawthorne project will add a second northbound left turn lane, a dedicated northbound right turn lane, a second southbound left turn lane, two additional southbound through lanes, and a dedicated southbound right turn lane prior to 2008. These additional lanes result in significantly improved capacity and level of service over what will actually occur if the City of Hawthorne project is not constructed by 2008. Alternative D obtains a significant increase in capacity at this intersection from a project being implemented by another jurisdiction. LAWA should contribute its "fair share" to the cost of these improvements as mitigation of Alternative D.

Response:

The Adjusted Environmental Baseline includes funded improvements to the transportation system. These transportation improvements are itemized in Table S4 of Technical Report S-2b of the Supplement to the Draft EIS/EIR. Item 9 in that table references an improvement to Aviation Boulevard between Imperial Highway and 1000 feet south of Rosecrans Avenue. As shown in Table 2.3 of Technical Report S3 of the Draft EIS/EIR, this improvement is scheduled for completion by the year 2005. This improvement is already funded through another agency and must be included in the Adjusted Environmental Baseline in order to be consistent with CEQA guidelines. Therefore, the lane configuration planned with the improvement project is included in all baseline and build scenarios (Alternatives A, B, C and D), and is not a part of the mitigation plan.

SAL00015-207

Comment:

ii) Hawthorne Widening of Rosecrans Avenue Benefits Alternative D - The capacity calculations assume a City of Hawthorne project will add an additional westbound through lane, a second eastbound left turn lane, and an additional eastbound through lane prior to 2008. These additional lanes result in significantly improved capacity and level of service over what will actually occur if the City of Hawthorne project is not constructed by 2008. Alternative D obtains a significant increase in capacity at this intersection from a project being implemented by another jurisdiction. LAWA should contribute its "fair share" to the cost of these improvements as mitigation of Alternative D.

Response:

The Adjusted Environmental Baseline includes funded improvements to the transportation system. These transportation improvements are itemized in Table S4 of Technical Report S-2b of the Supplement to the Draft EIS/EIR. Item 42 in that table references an improvement to Rosecrans Avenue from 1000 feet east to 1000 feet west of Aviation Boulevard. As shown in Table 2.3 of Technical Report S3 of the Draft EIS/EIR, this improvement is scheduled for completion by the year 2005. This improvement is already funded through another agency and must be included in the Adjusted Environmental Baseline in order to be consistent with CEQA guidelines. Therefore, the lane configuration planned with the improvement project is included in all baseline and build scenarios (Alternatives A, B, C and D), and is not a part of the mitigation plan.

SAL00015-208

Comment:

d) Imperial Highway and Douglas Street

i) Traffic Signal Phasing Is Incorrect - Douglas Street and the access into the cargo area at LAX operate on separate or split phases at this time and in the calculations for conditions in 2008. However, all calculations for 2015 incorrectly assume removal of the split phasing and show northbound and southbound traffic entering Imperial Highway simultaneously. The 2015 calculations are incorrect as the split phasing operation must be retained with the multiple and shared turning lanes for northbound and southbound traffic. These errors result in incorrect conclusions about levels of congestion at this intersection and the analysis for 2015 understates the impacts of Alternative D upon this intersection.

Response:

This intersection was analyzed assuming split phase operation in the north-south direction. The 2015 Alternative D mitigated scenarios (with Lennox and without Lennox) were revised at the same time to

correct errors in the recommended striping plan. This separate analysis resulted in no change to the 2015 Adjusted Environmental Baseline LOS calculations, a change to the 2015 Alternative D unmitigated scenario for the AM peak hour, and changes to all of the mitigated scenarios. Please see Appendix F-C, Errata to the Draft EIS/EIR and the Supplement to the Draft EIS/EIR, of this Final EIS/EIR for modifications to Attachments D, E, and F of Technical Report S-2b. A summary of the revised traffic impact analysis and mitigation plan is provided in Section 4.3.2, Off-Airport Surface Transportation, of this Final EIS/EIR. Based on these results, the intersection continues to be impacted by the project, and the proposed mitigation measures continue to fully mitigate the impacts. Therefore no change to the recommended mitigation plan is required.

SAL00015-209

Comment:

ii) Arbitrary Volume Adjustments Were Made For 2015 - Calculations for the p.m. peak hour in 2015 for unmitigated and for mitigated conditions without the Lennox Boulevard Interchange include an increase of 200 northbound left turn vehicles for "Ambient." The Supplement must provide technical support for these arbitrary "Ambient" p.m. peak hour volume adjustments, as well as the rationale for making no adjustments during the a.m. and Airport peak hours.

Response:

Please see Response to Comment SAL00015-205.

SAL00015-210

Comment:

iii) 2015 Traffic Analysis Assumes Incorrect Mitigation Measures - Recommended mitigation involves elimination of the third eastbound through lane on Imperial Highway to create a northbound free right turn from Douglas Street. However, the Supplement's calculations for 2015 with the Lennox Boulevard Interchange in the a.m. peak hour still show three eastbound through lanes on Imperial Highway together with the northbound free right turn lane. In addition, each of the peak hour calculations for conditions in 2015 with the Lennox Boulevard Interchange incorrectly show a dual northbound free right turn whereas only a single northbound free right turn has been recommended. Each of these calculations must be corrected before the appropriate measures to mitigate this impacted intersection can be developed.

Response:

This intersection was re-analyzed assuming split phase operation in the north-south direction. The 2015 Alternative D mitigated scenarios (with Lennox and without Lennox) were revised at the same time to correct errors in the recommended striping plan. This separate analysis resulted in no change to the 2015 Adjusted Environmental Baseline LOS calculations, a change to the 2015 Alternative D unmitigated scenario for the AM peak hour, and changes to all of the mitigated scenarios. Please see Appendix F-C, Errata to the Draft EIS/EIR and the Supplement to the Draft EIS/EIR, of this Final EIS/EIR for modifications to Attachments D, E, and F of Technical Report S-2b. A summary of the revised traffic impact analysis and mitigation plan is provided in Section 4.3.2, Off-Airport Surface Transportation, of this Final EIS/EIR. Based on these results, the intersection continues to be impacted by the project, and the proposed mitigation measures continue to fully mitigate the impacts. Therefore no change to the recommended mitigation plan is required.

SAL00015-211

Comment:

iv) Impacts on Bicycle Lane Must Be Analyzed - The impacts of the proposed free right turn lane upon the existing striped eastbound bicycle lane on Imperial Highway must be evaluated.

Response:

The design of the free right-turn turn at this intersection would need to address the eastbound bicycle lane. It is possible to have the bicycle lane located between the eastbound through lanes of imperial

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Highway and the northbound free-right turning traffic. An appropriate merging/weaving area would be installed east of the intersection to allow bicyclists to traverse back to the south curb of Imperial Highway.

SAL00015-212

Comment:

v) Further Analysis of Two Way Operation Is Required - Douglas Street and Nash Street presently operate as a one way couplet south of Imperial Highway. Nash Street now carries only southbound traffic and Douglas Street now carries only northbound traffic. The City of El Segundo is considering converting this one way couplet to two way traffic flow on both streets. In addition to correcting the analysis of the Imperial Highway/Douglas Street intersection to address the comments above, the Supplement should also analyze the traffic impacts of Alternative D upon this intersection if Douglas Street is converted to two way traffic. The Supplement should also analyze the traffic impacts of Alternative D at the Imperial Highway/Nash Street intersection if Nash Street is converted to two way traffic.

Response:

Under CEQA as well as the LADOT guidelines for traffic impact studies, the analysis is required to assume all funded improvements are a part of the baseline. In the case of Douglas Street, there are no funded programs to change the street from one-way to two-way operations. Therefore the analysis is required to assume the current one-way operation in the analysis. There are possibly many locations throughout the study area where a jurisdiction is considering making changes to the existing transportation system. This is a natural outcome of the ongoing planning responsibilities of the jurisdictions. It would be unreasonable for any environmental process to consider all of the possible network changes that might be under consideration, and such analyses are not required under NEPA or CEQA.

SAL00015-213

Comment:

e) Sepulveda Boulevard and El Segundo Boulevard

i) Eastbound Lanes on El Segundo Boulevard Are Incorrect - All of the calculations for conditions in 2008 and 2015 incorrectly show one eastbound shared left turn/through lane on El Segundo Boulevard. This lane is a dedicated eastbound through lane and left turns cannot be legally made from this through lane.

Response:

It appeared from a field review that the condition noted by the commentor was made since the beginning of the traffic analysis for this project. Nonetheless, this intersection was analyzed assuming the change in eastbound traffic from a shared left turn/through lane to a through only lane. The analysis showed that no changes occurred to impacts, and the recommended mitigation measures continue to mitigate all impacts. See Appendix F-C, Errata to the Draft EIS/EIR and the Supplement to the Draft EIS/EIR, of this Final EIS/EIR for LOS calculations. Please also see Response to Comment SAL00015-214 regarding these calculations.

SAL00015-214

Comment:

ii) Split Phasing East/West Was Not Evaluated Correctly - Eastbound and westbound traffic on El Segundo Boulevard now operates on separate, or split, phases. During the traffic signal cycle, all westbound traffic proceeds on El Segundo Boulevard, followed by all eastbound traffic during a separate traffic signal phase. However, all calculations for 2008 and 2015 incorrectly assume removal of the split phasing and show eastbound and westbound traffic entering Sepulveda Boulevard simultaneously. The 2008 and 2015 calculations are incorrect as the split phasing operation must be retained with the multiple and shared turning lanes for eastbound and westbound traffic. These errors

result in incorrect conclusions about levels of congestion at this intersection and the analyses for 2008 and 2015 understate the impacts of Alternative D upon this intersection.

Response:

This intersection was re-analyzed assuming the new split phasing for east-west trips. Please see Appendix F-C, Errata to the Draft EIS/EIR and the Supplement to the Draft EIS/EIR, of this Final EIS/EIR for modifications to Attachments D, E, and F of Technical Report S-2b. A summary of the revised traffic impact analysis and mitigation plan is provided in Section 4.3.2, Off-Airport Surface Transportation, of this Final EIS/EIR. While several LOS values changed due to the new analysis, no changes occurred to impacts, and the recommended mitigation measures continue to fully mitigate all impacts.

SAL00015-215

Comment:

iii) Arbitrary Volume Adjustments Were Made For 2015 - Calculations for the a.m. peak hour in 2015 for unmitigated and for mitigated conditions without the Lennox Boulevard Interchange include a decrease of 100 northbound through vehicles and an increase of 100 westbound right turn vehicles for the "Project." No other adjustments were made during either the Airport peak hour in 2015 or in the p.m. peak hour in 2015. The Supplement must provide technical support for both of these arbitrary "Project" a.m. peak hour volume adjustments as well as the rationale for making no adjustments in any of the movements during the Airport or p.m. peak hours.

Response:

Please see Response to Comment SAL00015-205.

SAL00015-216

Comment:

iv) ATSAC/ATCS System Is Now Being Designed - Calculations in 2015 include capacity benefits with implementation of ATSAC/ATCS signal control. The County of Los Angeles is currently designing an ITS traffic signal system improvement project throughout the City of El Segundo. The Supplement incorrectly credits Alternative D for traffic signal system mitigation that will already be in place long before 2015. LAWA should contribute its "fair share" to the cost of the County improvement project as mitigation of Alternative D. The Supplement must also develop other measures to mitigate the traffic impacts of Alternative D at this intersection.

Response:

CEQA and LADOT traffic impact study guidelines require that the future year baseline scenario contain all funded transportation improvements affecting the study area. A listing of all funded transportation improvements was obtained from many jurisdictions, including El Segundo on multiple occasions. Evidence of a funded program to provide signal control improvements to this intersection was not provided to the LAX Master Plan team. The analysis was therefore performed assuming that no such improvements were funded. The fact that a funded program to provide these improvements has subsequently been approved does not in any way invalidate the analysis. The recommended mitigation plan includes the addition of ATSAC/ATCS equivalent signal control improvements. It is not known whether the programmed improvements will achieve ATSAC/ATCS equivalent. If they do, then the improvements themselves fully mitigate project impacts. If they do not, then additional upgrade is recommended to fully mitigate the impacts. LAWA will work with the City of El Segundo to determine whether the programmed improvements will suffice, and whether LAWA should provide additional upgrades or contribute to the funding of the programmed improvements.

SAL00015-217

Comment:

f) Imperial Highway and Main Street

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i) Northbound Main Street Lanes Are Incorrect - Northbound right turns are controlled by a YIELD sign outside of the traffic signal operation. In the Supplement, the northbound right turns have been incorrectly analyzed as a part of the traffic signal operation in all calculations for conditions in 2008 and 2015.

Response:

While it is correct that the northbound right-turn movement at the intersection of Main Street and Imperial Highway is controlled by a "Yield" sign, the critical movement analysis performed for this location intentionally treated this movement as part of the traffic signal. In doing so, the worst case condition for the intersection's service level can be estimated. However, to appropriately respond to this comment, several additional field observations of this intersection during peak commute hours were conducted. It was determined that the commentor is correct that the northbound right turn traffic can be accommodated outside of the traffic signal operation. The LOS results have been revised to remove this traffic movement from the critical movement analysis for the intersection. However, for the PM peak hour analysis, since the northbound right-turning vehicles are not part of the intersection's critical volume, the results reported in the Supplement to the Draft EIS/EIR will not change and the proposed mitigation measure would still be appropriate to mitigate the project's significant traffic impact during the PM peak hour.

SAL00015-218

Comment:

ii) Driveway Opposite Main Street Was Excluded - There is an existing driveway serving LAX directly opposite Main Street on the north side of Imperial Highway. This driveway has been erroneously omitted from the calculations of capacity at this intersection and no traffic volumes have been assigned in to or out of this existing driveway serving LAX.

Response:

While there is indeed a driveway on the north-side of the intersection, this driveway is rarely used, and traffic counts at the intersection showed zero vehicles entering or exiting the intersection via this driveway. Therefore, this driveway was intentionally not included in the critical movement analysis for the intersection of Main Street and Imperial Highway.

SAL00015-219

Comment:

iii) Eastbound Imperial Highway Lanes Are Incorrect - The separate eastbound right turn lane is controlled by a STOP sign outside the traffic signal operation. In the Supplement, the eastbound right turns have been incorrectly analyzed as a part of the traffic signal operation in all calculations for conditions in 2008 and 2015. Peak hour queuing in the eastbound through lanes which now blocks access to this right turn lane should also be analyzed and measures developed to mitigate additional impacts of Alternative D upon this condition at this location.

Response:

The procedures used to analyze all intersection impacts and levels of service at all locations are based on a comparison of critical turning movement volumes to intersection capacity, consistent with professional transportation engineering practices. The procedures do not consider vehicle delay. These procedures, if followed directly, would remove the eastbound right turns entirely since the right turns are not controlled by the signal. However, by maintaining the eastbound right-turn lane as an integral part of the intersection, rather than separating it out of the intersection, the analysis was able to consider both right-turn and through volumes in determining total intersection levels of service. This has resulted in higher numeric values for the PM peak hour than would have resulted from direct application of the procedures, and provides some measure of the kind of impacts identified in this comment. Therefore no further action is required.

SAL00015-220

Comment:

iv) Mitigation Measures Are Flawed and Inadequately Analyzed - Mitigation proposed in 2015 includes a second westbound left turn lane. Installation of this lane will require roadway widening and modification of the median to preserve the existing bicycle lane, not simple restriping as proposed. Secondly, a northbound right turn green arrow has been incorrectly proposed as mitigation when this movement is free and it now occurs outside the traffic signal operation. Thirdly, the calculations for mitigation in 2015 include ATSAC/ATSC benefits even though improvements at this intersection do not list or identify this as a mitigation measure. Finally, all mitigation at this intersection must be reevaluated to address traffic signal coordination with the existing traffic signal on Main Street at Imperial Avenue only 100 feet south of Imperial Highway.

Response:

Although the Supplement to the Draft EIS/EIR did not explicitly state as such, the proposed mitigation measure at this intersection would require modification to the center median to accommodate the proposed second westbound left-turn lane. The report states that "the westbound approach would be changed" to provide a second left-turn lane. The report does not state that this mitigation would simply require a restriping of the lane configuration. Nonetheless, the mitigation description has been modified in the Final EIS/EIR to clearly define the intent of the proposed improvement.

The commentor indicates that the northbound right-turn movement is currently a "free" move. However, northbound vehicles turning right at this location are governed by a "Yield" sign. Based on field observations, vehicles approaching the sign often slow down to a rolling stop as they wait for gaps in eastbound traffic before merging. The northbound right-turn lane does not operate as a "free" move. Nonetheless, as indicated in Response to Comment SAL00015-217, the northbound right-turn traffic volume will not be analyzed as part of the critical movement analysis for this intersection. Doing so would remove the need to modify the traffic signal to provide a northbound right-turn overlap. Therefore, this is no longer a proposed element of the mitigation.

The operation of ATSAC/ATCS at this intersection is not a proposed mitigation measure. Instead, this is a baseline assumption as the City of Los Angeles has recently upgraded the signal operation of this intersection to operate under the ATSAC system. The upgrade to a fully adaptive system (ATCS) is expected before the buildout year of the LAX Alternative D project.

SAL00015-221

Comment:

g) Sepulveda Boulevard and Imperial Highway

i) Arbitrary Volume Adjustments Were Made For 2015 - Calculations for the a.m. peak hour in 2015 for unmitigated and for mitigated conditions without the Lennox Boulevard Interchange include a decrease of 200 northbound right turn vehicles, a decrease of 300 southbound left turn vehicles, an increase of 150 southbound through vehicles, a decrease of 100 southbound right turn vehicles, and an increase of 175 westbound left turn vehicles for the "Project." Many adjustments were also made during the Airport peak hour in the 2015 unmitigated analysis for "Ambient" including 175 more southbound right turns, 175 fewer southbound through vehicles, 25 more westbound left turns, and 175 more westbound right turns. These same adjustments were also made during the Airport peak hour for alternate mitigation without the Lennox Boulevard Interchange and a deduction of 300 southbound right turns was made under "Related." In the p.m. peak hour, no adjustments were made. The Supplement must provide technical support for each of these arbitrary "Project," "Ambient," and "Related" peak hour volume adjustments as well as the rationale for making adjustments in five movements during the a.m. and Airport peak hours and none during the p.m. peak hours.

Response:

Please see Response to Comment SAL00015-205.

3. Comments and Responses

SAL00015-222

Comment:

ii) MTA Mitigation Measures Are Not Properly Analyzed - For conditions in 2015 without the Lennox Boulevard Interchange, the Supplement indicates 15 vehicles must be reduced from the intersection in the Airport peak hour and 5 vehicles must be reduced from the intersection in the P.M. peak hour. For conditions in 2015 with the Lennox Boulevard Interchange, the Supplement indicates 330 vehicles must be reduced from the intersection in the "critical" peak hour but does not define which peak hour is "critical." None of the calculations in the Appendix to S-2b show these reductions to support the effectiveness of the proposed mitigation. Further, there is absolutely no assurance or guarantee that providing funding to MTA for improved Rapid Bus or other transit services would actually mitigate Alternative D traffic impacts at the intersection of Sepulveda Boulevard and Imperial Highway. Reducing demand by 330 vehicles in the "critical" peak hour would require at least seven buses, and providing this as a mitigation measure is absurd.

Response:

In response to this comment as well as a request by LADOT to re-examine all estimates of vehicle reduction due to fair-share contributions to transit, a revised analysis of this intersection has been conducted. Please see Appendix F-C, Errata to the Draft EIS/EIR and the Supplement to the Draft EIS/EIR, of this Final EIS/EIR for modifications to Attachments D, E, and F of Technical Report S-2b. A summary of the revised traffic impact analysis and mitigation plan is provided in Section 4.3.2, Off-Airport Surface Transportation, of this Final EIS/EIR. The revised analysis concludes that the fair-share contribution to MTA's proposed Metro Rapid Program or other enhancements to benefit transit will need to fund enhancements to reduce vehicle trips by 246 northbound through vehicles along Sepulveda Boulevard during the airport peak hour in the recommended mitigation plan. No reduction is needed for the AM or PM peak hours. A reduction of 246 peak hour vehicles is equivalent to a reduction of 295 person-trips, assuming an average occupancy of 1.2 persons per vehicle. Assuming a bus capacity of 48 persons (sitting and standing at a load factor of 1.2), this corresponds to an additional 6.1 peak hour buses. This number of buses is equivalent to reducing the average headway from 10 minutes to 5.0 minutes. Given the extensive improvements to frequencies and speeds in the corridor as a part of the Metro Rapid Program, this level of increase is reasonable. For the alternative mitigation plan, the revised analysis concludes that the fair-share contribution to MTA's proposed Metro Rapid Program or other enhancements to benefit transit will need to fund enhancements to reduce vehicle trips by 174 northbound through vehicles along Sepulveda Boulevard during the PM peak hour and by 87 northbound through vehicles in the airport peak hour. No reduction is needed for the AM peak hour. A reduction of 174 peak hour vehicles is equivalent to a reduction of 209 person-trips. Assuming a bus capacity of 48 persons, this corresponds to an additional 4.4 peak hour buses. This number of buses is equivalent to reducing the average headway from 10 minutes to 5.8 minutes. Given the extensive improvements to frequencies and speeds in the corridor as a part of the Metro Rapid Program, this level of increase is reasonable. A reduction of 87 peak hour vehicles is equivalent to a reduction of 104 person-trips. Assuming a bus capacity of 48 persons, this corresponds to an additional 2.2 peak hour buses. This number of buses is equivalent to reducing the average headway from 10 minutes to 7.3 minutes. Given the extensive improvements to frequencies and speeds in the corridor as a part of the Metro Rapid Program, this level of increase is reasonable.

SAL00015-223

Comment:

h) Sepulveda Boulevard and Mariposa Avenue

i) Arbitrary Volume Adjustments Were Made For 2015 - Calculations for the a.m. peak hour in 2015 for unmitigated conditions without the Lennox Boulevard Interchange include a decrease of 200 northbound through vehicles, an increase of 200 northbound right turn vehicles, and an increase of 325 southbound left turn vehicles for the "Project." Calculations for the a.m. peak hour in 2015 for alternate mitigation conditions without the Lennox Boulevard Interchange also include a decrease of 200 northbound through vehicles, an increase of 200 northbound right turn vehicles, and an increase of 325 southbound left turn vehicles for "Ambient." No other adjustments were made during either the Airport peak hour in 2015 or in the p.m. peak hour in 2015. The Supplement must provide technical support for

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both of these arbitrary "Project" and "Ambient" a.m. peak hour volume adjustments as well as the rationale for making no adjustments in any of the movements during the Airport or p.m. peak hours.

Response:

Please see Response to Comment SAL00015-205.

SAL00015-224

Comment:

ii) ATCS/ATCS System Is Now being Designed - Calculations in 2015 include capacity benefits with implementation of ATCS/ATCS signal control. The County of Los Angeles is currently designing an ITS traffic signal system improvement project throughout the City of El Segundo. The Supplement incorrectly credits Alternative D for traffic signal system mitigation that will already be in place long before 2015. LAWA should contribute its "fair share" to the cost of the County improvement project as mitigation of Alternative D. The Supplement must also develop other measures to mitigate the traffic impacts of Alternative D at this intersection.

Response:

CEQA and LADOT traffic impact guidelines require that the future baseline scenario contain all funded transportation improvements affecting the study area. A listing of all transportation improvements was obtained from many jurisdictions, including El Segundo, on multiple occasions. Evidence of a funded program to provide signal control improvements to this intersection was not provided to the LAX Master Plan Team. The analysis was therefore performed assuming that no such improvements were funded. The fact that a funded program to provide traffic signal improvements has subsequently been approved does not in any way invalidate the traffic analysis in the Draft EIS/EIR or the Supplement to the Draft EIS/EIR. LAWA's recommended traffic mitigation plan includes the installation of ATCS/ATCS equivalent signal control. It is not known whether the signal improvements planned in the City of El Segundo will achieve the same level of effectiveness as ATCS/ATCS. If they do, then the traffic signal upgrades recommended under Alternative D for City of El Segundo signals would not be needed. If they do not, then LAWA recommends the additional signal upgrade to ATCS/ATCS equivalent to fully mitigate the project impacts. LAWA will coordinate with the City of El Segundo to determine whether their programmed improvements will negate the need for the signal improvements currently recommended in the Supplement to the Draft EIS/EIR, or whether LAWA should provide additional signal upgrades.

SAL00015-225

Comment:

iii) MTA Mitigation Measures Are Not Properly Analyzed - For 2015 conditions without the Lennox Boulevard Interchange, the Supplement indicates 76 vehicles must be reduced from the intersection in the a.m. peak hour. For conditions in 2015 with the Lennox Boulevard Interchange, the Supplement indicates 52 vehicles must be reduced from the intersection in the a.m. peak hour. None of the calculations in the Appendix to S-2b show these reductions to support the proposed mitigation. Further, there is absolutely no assurance or guarantee that providing funding to MTA for improved Rapid Bus or other transit services would actually mitigate Alternative D traffic impacts at the intersection of Sepulveda Boulevard and Mariposa Avenue. Reducing demand by 76 vehicles or by 52 vehicles in the a.m. peak hour would require at least two buses. Providing this as a mitigation measure is absurd.

Response:

In response to this comment as well as a request by LADOT to re-examine all estimates of vehicle reduction due to fair-share contributions to transit, a revised analysis of this intersection has been conducted. Please see Appendix F-C, Errata to the Draft EIS/EIR and the Supplement to the Draft EIS/EIR, of this Final EIS/EIR for modifications to Attachments D, E, and F of Technical Report S-2b. A summary of the revised traffic impact analysis and mitigation plan is provided in Section 4.3.2, Off-Airport Surface Transportation, of this Final EIS/EIR. The revised analysis concludes that the fair-share contribution to MTA's proposed Metro Rapid Program or other enhancements to benefit transit will need to fund enhancements to reduce vehicle trips by 204 northbound through vehicles along Sepulveda

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Boulevard during the AM peak hour in the recommended mitigation plan. No reduction is needed for the PM or airport peak hours. A reduction of 204 peak hour vehicles is equivalent to a reduction of 245 person-trips, assuming an average occupancy of 1.2 persons per vehicle. Assuming a bus capacity of 48 persons (sitting and standing at a load factor of 1.2), this corresponds to an additional 5.1 peak hour buses. This number of buses is equivalent to reducing the average headway from 10 minutes to 5.4 minutes. Given the extensive improvements to frequencies and speeds in the corridor as a part of the Metro Rapid Program, this level of increase is reasonable. For the alternative mitigation plan, the revised analysis concludes that the fair-share contribution to MTA's proposed Metro Rapid Program or other enhancements to benefit transit will need to fund enhancements to reduce vehicle trips by 192 northbound through vehicles along Sepulveda Boulevard during the AM peak hour in the recommended mitigation plan. No reduction is needed for the PM or airport peak hours. A reduction of 192 peak hour vehicles is equivalent to a reduction of 230 person-trips. Assuming a bus capacity of 48 persons (sitting and standing at a load factor of 1.2), this corresponds an additional 4.8 peak hour buses. This number of buses is equivalent to reducing the average headway from 10 minutes to 5.6 minutes. Given the extensive improvements to frequencies and speeds in the corridor as a part of the Metro Rapid Program, this level of increase is reasonable.

SAL00015-226

Comment:

i) Sepulveda Boulevard and Rosecrans Avenue

i) Right Turn On Red Prohibitions Have Been Omitted - While the intersection geometry does reflect the recent widening of Sepulveda Boulevard, all calculations for conditions in 2008 and 2015 erroneously ignore the existing right turn on red prohibitions currently posted at this intersection. Westbound traffic on Rosecrans Avenue is prohibited from turning right on a red light on Monday through Friday from 6:00 to 9:00 a.m. and from 3:00 to 7:00 p.m. Eastbound traffic on Rosecrans Avenue is prohibited from turning right on a red light on Monday through Friday from 3:00 to 7:00 p.m. Northbound traffic on Sepulveda Boulevard is prohibited from turning right on a red light at any time.

Response:

This intersection was re-analyzed assuming the right turn restrictions described in the comment. Please see Appendix F-C, Errata to the Draft EIS/EIR and the Supplement to the Draft EIS/EIR, of this Final EIS/EIR for modifications to Attachments D, E, and F of Technical Report S-2b. A summary of the revised traffic impact analysis and mitigation plan is provided in Section 4.3.2, Off-Airport Surface Transportation, of this Final EIS/EIR. While several LOS values changed due to the new analysis, no changes occurred to impacts, and the recommended mitigation measures continue to fully mitigate all impacts.

SAL00015-227

Comment:

ii) ATSAC/ATCS System Is Now Being Designed - Calculations in 2015 include capacity benefits with implementation of ATSAC/ATCS signal control. The County of Los Angeles is currently designing an ITS traffic signal system improvement project throughout the City of El Segundo. The Supplement incorrectly credits Alternative D for traffic signal system mitigation that will already be in place long before 2015. LAWA should contribute its "fair share" to the cost of the County improvement project as mitigation of Alternative D. The Supplement must also develop other measures to mitigate the traffic impacts of Alternative D at this intersection.

Response:

CEQA and LADOT traffic impact study guidelines require that the future year baseline scenario contain all funded transportation improvements affecting the study area. A listing of all funded transportation improvements was obtained from many jurisdictions, including El Segundo, on multiple occasions. Evidence of a funded program to provide signal control improvements to this intersection was not provided to the LAX Master Plan team. The analysis was therefore performed assuming that no such improvements were funded. The fact that a funded program to provide these improvements has subsequently been approved does not in any way invalidate the analysis. The recommended mitigation plan includes the addition of ATSAC/ATCS equivalent signal control improvements. It is not known

whether the programmed improvements will achieve ATSAC/ATCS equivalent. If they do, then the improvements themselves fully mitigate project impacts. If they do not, then additional upgrade is recommended to fully mitigate the impacts. LAWA will coordinate with the City of El Segundo to determine whether the programmed improvements will suffice, and whether LAWA should provide additional upgrades or contribute to the funding of the programmed improvements.

SAL00015-228

Comment:

j) Eastbound I-105 On Ramp from Atwood Way Omitted - The Supplement failed to examine the impacts of Alternative D at the eastbound I-105 on ramp on Atwood Way between Nash Street and Douglas Street. This two-lane on ramp includes ramp meters and the traffic impacts associated with Alternative D at this signalized intersection must be evaluated and mitigated as necessary.

Response:

The eastbound on-ramp from Atwood Way to eastbound I-105 is not omitted from the analysis, but is included as ramp number 39. Page 5 of Attachment D of Technical Report S-2b of the Supplement to the Draft EIS/EIR shows that this ramp does not have a significant impact with Alternative D. Please see Topical Response TR-ST-2, and in particular Subtopical Response TR-ST-2.2, for a discussion on the identification of key facilities studied.

SAL00015-229

Comment:

k) Eastbound I-105 On Ramp from Atwood Way Omitted - The Supplement failed to examine the impacts of Alternative D at the eastbound I-105 on ramp from Imperial Highway just east of Nash Street. This single lane on ramp includes ramp meters and the traffic impacts associated with Alternative D must be evaluated and mitigated as may be necessary.

Response:

The eastbound on-ramp from Atwood Way to eastbound I-105 is not omitted from the analysis, but is included as ramp number 39. Page 5 in Attachment D of Technical Report S-2b of the Supplement to the Draft EIS/EIR shows that this ramp does not have a significant impact with Alternative D. Refer to Topical Response TR-ST-2 regarding surface transportation analysis methodology, and in particular Subtopical Response TR-ST-2.2, for a discussion on the identification of key facilities studied.

SAL00015-230

Comment:

21. Neighborhood Traffic Management Is Inadequately Analyzed and Unfunded - Page 35 of Technical Report S-2b indicates "Protecting neighborhoods is one of the four principles guiding the design of this alternative and its transportation analysis." Neighborhood traffic management is then discussed in very broad and general terms but no specifics are identified. No funding for neighborhood protection is identified in either Technical Report S-2b or the Supplement, a very serious omission for "one of the four principles guiding" Alternative D.

Page 36 indicates "It is important to note that any Neighborhood Traffic Management Plan must have final approval by LADOT prior to implementation." The Supplement must be corrected to indicate the responsible local agency such as the City of El Segundo or the County of Los Angeles will have responsibility for neighborhood traffic management plans within their respective jurisdictions.

Response:

Neighborhood traffic management is discussed in broad terms in the Draft EIS/EIR and in the Supplement to the Draft EIS/EIR because each neighborhood is unique and solutions to potential problems need to be developed with neighborhood participation. Also, please see Topical Response TR-ST-6 regarding neighborhood traffic impacts.

3. Comments and Responses

Please see Response to Comment AL00008-6 regarding project funding.

LAWA acknowledges that the appropriate local agency will have responsibility for neighborhood traffic management plans within their respective jurisdictions.

SAL00015-231

Comment:

22. Listing of Mitigation Measures Is Incomplete - Attachment E to Technical Report S-2b provides a listing of "Proposed Final Mitigations" for Alternative D. This listing omits the recommended new Lennox Boulevard Interchange with I-405 as well as the I-105 eastbound connections. It also omits freeway mainline widenings shown in Attachment G to Technical Report S-2b. It adds a "fair share" contribution toward a future widening of the southbound I-405 Freeway on ramp at El Segundo Boulevard but does not identify the scope of this proposed project. This listing also does not include any participation in neighborhood traffic management plans and it fails to provide "fair share" cost estimates for any of the proposed intersection or segment improvements. Attachment F to Technical Report S-2b, the Alternative Mitigation Plan for Alternative D without the Lennox Interchange and I-105 Ramps, contains many of the same errors and omissions identified above for Attachment E. As a result, the Supplement fails to incorporate all of the feasible mitigation measures to reduce significant traffic impacts of Alternative D.

Response:

The full list of surface transportation mitigation measures is provided in Chapter 4.3.2 of the Supplement to the Draft EIS/EIR, subsection 4.3.2.8.2, beginning on page 4-274. The I-405/Lennox Interchange is Mitigation Measure MM-ST-13 (page 4-288). The new ramps to/from I-105 is Mitigation Measure MM-ST-12 (page 4-287). The CMP impacts identified in Attachment G to Technical Report S-2b are evaluated under the CMP guidelines for Los Angeles County. These guidelines do not require mitigation measures for CMP impacts. The scope of the referenced ramp widening will be established at the time Caltrans or another agency initiates the project. LAWA's commitment to neighborhood traffic management plans is an essential element of the project definition (see page 35 of Technical Report S-2b), and is therefore not identified as a mitigation measure. The actual "fair-share" costs of the recommended intersection and segment improvements will be determined through consultation with the implementing jurisdictions at a later date.

This response also applies to the alternative mitigation plan in Attachment F of Technical Report S-2b. The alternative mitigation plan includes the proposed I-105 interchange but does not include the Lennox Boulevard/I-405 Interchange. It should be noted, however, that the title page was in error and implied otherwise. The title should have read "Alternative Mitigation Plan for Alternative D (No Lennox Boulevard Interchange)." This revision is included in Appendix F-C, Errata to the Draft EIS/EIR and the Supplement to the Draft EIS/EIR, of this Final EIS/EIR.

SAL00015-232

Comment:

23. Mitigation Measure Completion Not Coordinated With Alternative D Phasing - Table S4.3.2-11 beginning on Page 4-275 of the Supplement provides a listing of the various mitigation measures to be implemented in 2008. Table S4.3.2-12 beginning on Page 4-279 of the Supplement provides a listing of the various mitigation measures to be implemented in 2015. However, comparison of these tables to the proposed schedule for Alternative D as shown on Page 3-54 indicates several discrepancies in the proposed timing of the mitigation. As one example, mitigation measures at Imperial Highway and Main Street must be constructed prior to the scheduled completion of the proposed west employee parking structure in 2006, not in 2015 long after increased LAX employee traffic occurs along Imperial Highway. The timing of the construction of all of the proposed mitigation measures must be reevaluated to insure they will be operational prior to opening of the various major components in Alternative D.

Response:

The Conceptual Summary Schedule shown on Figure S3-15 has been revised in the Final EIS/EIR to begin the Offsite Roadway Improvements earlier in the schedule. Table S4.3.2-13 provides further detail on the off-airport surface transportation phasing plan.

SAL00015-233

Comment:

24. Supplement Fails to Incorporate All Feasible Mitigation - LAWA must mitigate project traffic impacts at the locations that will be identified as part of the revisions in response to the numerous comments in this letter. Cost estimates for the necessary mitigation measures must be developed and the proportionate "fair share" contributions calculated for Alternative D. The Caltrans study guidelines require that mitigation measures include "financing, scheduling, implementation responsibilities, and lead agency monitoring" and these items must be added to the Supplement. Without addressing these numerous significant issues, the Supplement fails to incorporate all feasible mitigation measures to reduce significant traffic impacts.

Response:

Please see Topical Response TR-ST-2 regarding surface transportation analysis methodology. In particular, please see Subtopical Response TR-ST-2.2 regarding the study area and facilities analyzed in the traffic study.

Some of the proposed traffic mitigations do involve fair-share contributions by LAWA toward projects sponsored by another agency. Correspondence was sent to LADOT and the Los Angeles County Department of Public Works in August 2003 seeking comment on a LAWA-proposed methodology to determine LAWA's future fair-share contribution toward LA County's extension of SR-90. However, it is premature to develop the specific costs for these fair-share contributions. Cost estimates are not necessary for a program-level document. Caltrans' traffic study guidelines are only those - guidelines - and are for Caltrans-sponsored projects in the State right-of-way, not development projects undertaken by other agency.

Please see Response to Comment AL00008-6 regarding funding.

SAL00015-234

Comment:

Based on the numerous errors and omissions in the Supplement and Technical Report S2-b pointed out in this letter, the necessary reevaluation of Alternative D will likely disclose many additional significant traffic impacts. The various issues outlined in this letter must be carefully studied and evaluated before reaching any conclusion about the significance of traffic impacts, and the design of appropriate mitigation measures. The Supplement's current conclusion, that most of the project impacts from Alternative D would be reduced to insignificance in the areas of transportation and circulation by implementation of the mitigation measures as proposed, is questionable in light of the myriad of technical problems in the analysis.

Response:

Comment noted.

SAL00015-235

Comment:

COMMENTS

Los Angeles World Airports ("LAWA" or "the Applicant"), the operator of the Los Angeles International Airport ("LAX"), has published a Draft Master Plan Addendum1 ("DMPA"), a Supplement to the Draft Environmental Impact Statement/Environmental Impact Report2 ("Supplement"), and Airport Layout Plans Package on the modernization of LAX ("Project"). These documents supplement the Draft Environmental Impact Statement/Environmental Impact Report3 ("Draft EIS/EIR") and add discussion of Alternative D to the previously discussed Master Plan alternatives.

3. Comments and Responses

The comments below provide an analysis of the Supplement's failure to meet the requirements of CEQA and NEPA. These comments expand upon our previous comments on the Draft EIS/EIR and address new issues raised by the Supplement. (Comments on Air Quality and Human Health and Safety, LAX Master Plan Draft EIS/EIR (July 13, 2001) by J. Phyllis Fox, Ph.D., Attachment C to September 18, 2001 Comments Submitted on Behalf of the City of El Segundo by Shute, Mihaly & Weinberger ("2001 Fox Comments").)

The documents do not supply the data required for us to verify the calculations and modeling used to determine air quality impacts. El Segundo submitted requests to LAWA and the Federal Aviation Administration ("FAA") under the California Public Records Act and the Federal Freedom of Information Act in October 2003, seeking this important information. Although we have been informed that some or all of the information will be provided, we have not received it in time to prepare these comments. After receiving the requested data, we intend to review them and reserve the right to submit additional comments based on this review.

1 LAX Master Plan Addendum, July 2003.

2 LAX Master Plan, Supplement to the Draft Environmental Impact Statement/Environmental Impact Report, July 2003.

3 LAX Master Plan, Draft Environmental Impact Statement/Environmental Impact Report, January 2001.

Response:

Comment noted. Please see Response to Comment SAL00015-64 regarding data requests.

SAL00015-236

Comment:

AIR QUALITY

I. THE BASELINE IS UNSUPPORTED AND FLAWED

The environmental baseline is the heart of a CEQA or NEPA analysis because the significance of environmental impacts is measured by the change from the baseline. Neither the Draft EIS/EIR nor the Supplement contains sufficient information to allow a subject matter expert to evaluate the accuracy of the air quality data for the 1996/1997, 2000, or No Action/No Project ("NA/NP") baseline conditions used in these documents. Supporting calculations are not included in the Draft EIS/EIR, the Supplement, or technical reports and appendices. Further, our requests to LAWA and FAA to produce the data necessary for a review of these calculations have not been responded to in time. However, a number of factors suggest, based on our careful review, that the baseline is flawed.

We previously pointed out discrepancies between the baseline emissions in the Draft EIS/EIR and the supporting technical appendices. (2001 Fox Comments, II.A, pp. 7-8.) The Supplement does not resolve these discrepancies. We previously commented that it is improper to evaluate off-airport emissions against future baselines. (2001 Fox Comments, II.B, pp. 8-9.) The Supplement continues to evaluate off-airport emissions against future baselines. (Supplement Table S4.6-10.) We previously commented that the NA/NP alternative does not fairly reflect future conditions because it assumes the airport can grow nearly unrestrained. The Supplement is silent on this issue. We previously noted that it was not possible to evaluate the projected NA/NP emissions because supporting calculations were not provided. The Supplement does not contain the supporting calculations. In addition to failing to address our previous comments on the baseline, the Supplement introduces a new problem by using an invalid ratio method to adjust baseline emissions.

Response:

The table in Section 4.6 and the table in Technical Report S-4, as referenced by the commentor, do not present the same information. The tables referenced in Section 4.6 of both the Draft EIS/EIR and the Supplement to the Draft EIS/EIR represent on-airport emissions only. The tables being references in Technical Report 4 of the Draft EIS/EIR and Technical Report S-4 of the Supplement to the Draft EIS/EIR contain, in addition to on-airport emissions, off-airport emissions as well.

Please see Response to Comment AR00003-46 regarding the No Action/No Project Alternative emission calculation. Please see Topical Response TR-GEN-2 regarding assumptions associated with the No Action/No Project Alternative, Topical Response TR-GEN-1 regarding the adjusted environmental baseline, and Response to Comment SAL00015-64 regarding data requests. Please see Response to Comment SAL00013-115 regarding use of the ratio method.

SAL00015-237

Comment:

I.A The Ratio Method Is Invalid

The on-site Project impacts for CEQA purposes are evaluated relative to the 1996 baseline emission inventory, which is stated to represent activity levels at LAX in 1996 and facilities as of 1997. (Draft EIS/EIR, p. 4-462.) The Supplement updated this baseline using ratios between emission model results from EDSM 3.2 and 4.11 for Alternative D.

Since publication of the Draft EIS/EIR in January 2001, the FAA has released an updated version of the Emissions and Dispersion Modeling System ("EDMS") used to develop airport emission inventories. The Supplement calculated emissions and concentrations resulting from Alternative D with both the old model version, EDMS 3.2, and with the new version, EDMS 4.11, for the year 2015. From these model runs for Alternative D, the Supplement developed ratios between the predicted emissions for each criteria pollutant. Rather than running the updated model version for the baseline, the Supplement used these ratios to develop revised baseline (1997) emissions and to quantify year 2000 emissions. The Supplement also applied this ratio method to estimate impacts for Alternatives A through C and the NA/NP Alternative, previously analyzed using EDMS 3.2 in the Draft EIS/EIR. (Supplement, pp. 4-357/358 and Supplement Appx. S-E4, p. 4.)

As discussed in the following, this approach is scientifically flawed, does not yield comparable emissions data for the alternatives, and is therefore unacceptable. Compared to the old version, EDSM 3.2, the updated version EDSM 4.11 incorporates several technical changes that affect modeled emissions inventories including an updated emission factor database for aircraft; updated ground support equipment emission factors based on model year, power output, and fuel type; additional assessment of emissions from aircraft landing roll time-in-mode; inclusion of aircraft flight profile to model dispersion after takeoff and on approach; use of the most current dispersion modeling methods; and an improved characterization of aircraft plume dispersion behavior. (Supplement Appx. S-E, pp. 3/4 and 15/16.)

Obviously, differences among the alternatives in the annual number of aircraft, the fleet-mix, etc., will affect the results of modeled emissions and ambient concentrations. The evaluated alternatives are based on greatly differing airport capacities and/or regional distributions and, thus, the corresponding annual number of aircraft and fleet mix are substantially different. For example, the modeling for the NA/NP alternative and Alternative D assume a much lower number of annual aircraft operations (~780,000 flights/year) than either Alternatives A and B (~935,000 flights/year). (Supplement, p. 3-14.) Thus, using a constant ratio to adjust emissions for all alternatives would result in errors in emissions and invalidate the inter-alternative comparisons using this methodology. Consequently, emissions from all alternatives need to be remodeled using EDSM 4.11.

4 LAX Master Plan Supplement to the Draft Environmental Impact Statement/Environmental Impact Report, Appendix S-E: Supplemental Air Quality Impact Analysis, June 2003.

Response:

Please see Response to Comment SAL00013-115 regarding use of the ratio method.

SAL00015-238

Comment:

Further, while the Supplement states that ratios were developed for each criteria pollutant in year 2015 for Alternative D, these ratios are nowhere to be found in either the Supplement, the Supplement's extensive Technical Report5 ("TRS-4"), or its appendices. (Supplement, pp. 4-357/358 and Supplement

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Appx. S-E, pp. 3/4.) The Supplement also does not provide the modeling input/output files from the two EDSM versions, which supposedly form the basis for the calculation of these ratios. Clearly, the information provided in the Supplement is deficient and inadequate to verify any calculations.

5 LAX Master Plan Supplement to the Draft Environmental Impact Statement/Environmental Impact Report, Technical Report S-4: Air Quality, Attachment N: Incremental Emissions by Alternative and Year, July 2003.

Response:

Additional information on the ratio method, including the ratios used is provided in the Final EIS/EIR.

SAL00015-239

Comment:

Finally, the ratios between unmitigated operational emissions in the Draft EIS/EIR, Table 4.6-8 and the Supplement, Table S4.6-9, are not constant, nor even nearly so. For example, the ratios for VOC, SO₂, and PM₁₀ between the baseline and the NA/N Alternative, the baseline and Alternatives A through C, are drastically different. For VOC and SO₂ they are further different between the horizon years for each alternative. The ratios for PM₁₀ between the horizon years remain constant, however, they are different for the baseline, the NA/NP alternative and the Alternatives A through C. (See Table 1, attached to this document.) In a word, with the exception of the CO and NO_x ratio, it appears that none of the ratios for the other pollutants was applied consistently to derive operational emissions for the alternatives and year combinations. The Supplement has not fully disclosed the procedure that it used to revise the emissions calculations. In addition, it appears that errors were made in revising the emissions with the ratio method. We are unable to check the Supplement's calculations because adequate information was not provided.

Response:

Individual ratios were developed for each pollutant and source group. Additional information on the ratio method, including the ratios used, is provided in the Final EIS/EIR. Please see Response to Comment SAL00015-64 regarding data requests.

SAL00015-240

Comment:

I.B Underlying Data Set Questionable

In addition to the ratio method being scientifically flawed, it is unclear from the description provided in the Supplement, Section 4.6.3.4, which dataset was used to update calculations. As we pointed out in our earlier comments on the Draft EIS/EIR, the 1996 environmental baseline emissions for all criteria pollutants reported in Tables 4.6-6 of the Draft EIS/EIR differ substantially from those reported in the corresponding Draft EIS/EIR Air Quality Technical Report ("TR4"), Attachment C, which supposedly provides the support for emission estimates. (2001 Fox Comments, II.A, pp. 7-8.) The emission estimates reported in the Draft EIS/EIR are 14% to 47% lower than those indicated in the TR4. The Supplement does not comment on these discrepancies, nor does it specify which dataset the updated calculations are based on.

The Supplement does not contain any information to resolve the noted discrepancies. Thus, there is no creditable support for the baseline emissions used to evaluate the significance of impacts under CEQA. These discrepancies should be resolved and the Supplement and supporting technical reports of the Draft EIS/EIR recirculated for public review.

Response:

Please see Response to Comment AL00033-319 regarding 1996 environmental baseline emission inventories.

SAL00015-241

Comment:

II. AIR QUALITY IMPACT ANALYSIS IS INADEQUATE

II.A New PM10 And PM2.5 Standards Not Acknowledged

The Supplement did not analyze PM2.5 impacts and evaluated PM10 impacts against the existing PM10 standard of 30 µg/m³. We previously commented on the Draft EIS/EIR's failure to evaluate PM2.5 impacts. (2001 Fox Comment, III.D, pp. 18/19.) The Supplement declined to analyze PM2.5 impacts despite the fact that it was known during the preparation of this document that a PM2.5 standard would be established and a lower PM10 standard of 20 µg/m³ would go in effect in summer 2003. In fact, the Supplement states in Footnote 5 to Table S4.6-3 and Footnote 9 to Table 4.6-12 that "[o]n June 20, 2002, CARB approved the recommendation to revise the PM10 annual average standard to 20 µg/m³ and to establish an annual average standard for PM2.5 of 12 µg/m³ and continues "[t]hese standards will take effect upon final approval by the Office of Administrative Law, which is expected in summer 2003." (Supplement, pp. 4-363 and 4-374.)

In fact, the Office of Administrative Law ("OAL") approved the amendments to the regulations for the State Ambient Air Quality Standards ("CAAQS") for particulate matter ("PM") on Thursday, June 5, 2003, before the publication of the Supplement in July 2003. The new standards became effective on July 5, 2003.⁶ These new standards should have been used to determine the significance of impacts from the proposed Project alternatives. The Supplement, in the face of clearly acknowledged indications that the standards would become effective before an alternative would be selected, still declined to analyze PM2.5 impacts and continued to evaluate PM10 impacts against the old standard.

The Supplement justifies this questionable approach by arguing that "[u]ntil USEPA issues guidance on the implementation of the PM2.5 ambient air quality standards, that agency has recommended that compliance with the PM10 standards be considered as a surrogate for compliance with the PM2.5 standards, and the analysis in this document follows that guidance," citing 1997 U.S. Environmental Protection Agency ("U.S. EPA") guidance. (Supplement, p. 4-363 and footnote 116.) This guidance is irrelevant to the instant case for a large number of reasons.

⁶ California Air Resources Board, Ambient Air Quality Standards for Suspended Particulate Matter (PM) and Sulfates, Rulemaking To Consider Amendments To Regulations For The State Ambient Air Quality Standards For Suspended Particulate Matter (PM) And Sulfates, June 20, 2002 Hearing, <http://www.arb.ca.gov/regact/aaqspm/aaqspm.htm>; accessed October 27, 2003.

Response:

Please see Response to Comment AL00033-329 regarding PM2.5.

SAL00015-242

Comment:

First, the cited EPA guidance memo was intended as an interim guidance "for meeting new source review (NSR) requirements under the Clean Air Act (Act), including the permit programs for prevention of significant deterioration of air quality (PSD)." (U.S. EPA 10/97.)⁷ It was not intended to be used as guidance for CEQA or NEPA purposes.

⁷ U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Interim Implementation of New Source Review Requirements for PM2.5, Memorandum from John S. Seitz, Director Office of Air Quality Planning and Standards, October 21, 1997.

Response:

Please see Response to Comment AL00033-329 regarding PM2.5.

3. Comments and Responses

In the absence of specific CEQA or NEPA guidance or requirements pertaining to a particular environmental impact, it is not unusual to use other relevant regulatory policies and provisions to assess that impact. It should be noted that under CEQA, it is the lead agency's responsibility to determine the thresholds of significance. As the lead agency, LAWA has chosen to use the significance thresholds presented in SCAQMD's CEQA Guidelines for assessing air quality impacts. The SCAQMD has not yet developed significance thresholds for PM_{2.5} or any guidance regarding PM_{2.5} analysis for CEQA documents (SCAQMD 2003). In addition, the U.S. EPA has not yet designated the South Coast Air Basin as attainment or nonattainment for PM_{2.5} (although it is expected to become a nonattainment area once the designation is made). Therefore, the U.S. EPA memorandum (USEPA 1997) provides a reasonable basis for conducting particulate matter impact analyses.

SCAQMD 2003. Personal communication between S. Smith (SCAQMD) and J. Pehrson (CDM), December 17, 2003.

SAL00015-243

Comment:

Second, the guidance was intended to be valid until the "significant technical difficulties that now exist with respect to PM_{2.5} monitoring, emissions estimation, and modeling" were resolved. Some of these issues were never applicable to CEQA or NEPA review. Further, since publication of the guidance memo in 1997, most of these technical difficulties have been addressed. A large body of information has been developed, incorporated into methodologies, and tested in practice since publication of the guidance memo six years ago.⁸ For example, a nationwide monitoring network for PM_{2.5} has been implemented. As of 2001, a total of 82 twenty-four-hour mass monitors and 21 continuous mass monitors ("CMM") had been deployed and 15 new CMM sites were planned.⁹

⁸ See U.S. Environmental Protection Agency, Technology Transfer Network, Ambient Monitoring Technology Information Center, PM_{2.5} Monitoring Information, <http://www.epa.gov/ttn/amtic/amticpm.html>, accessed October 28, 2003.

⁹ California Environmental Protection Agency, Air Resources Board, 2001 California PM_{2.5} Monitoring Network Description, August 2001; <http://www.arb.ca.gov/aqd/pm25/pmfnet01.htm>, accessed October 28, 2003.

Response:

Please see Response to Comment AL00033-329 regarding PM_{2.5}. Section 4.6, Air Quality, of the Supplement to the Draft EIS/EIR notes the establishment of new PM_{2.5} and lower PM₁₀ CAAQS. As noted in Section 4.6.6, concentrations from on-airport and construction related sources were found to be significant.

SAL00015-244

Comment:

Third, there are two sets of standards, federal and state. The cited EPA guidance does not apply to state standards, which were adopted before the Supplement was released.

Response:

Please see Response to Comment AL00033-329 regarding PM_{2.5}. Section 4.6, Air Quality, of the Supplement to the Draft EIS/EIR notes the establishment of new PM_{2.5} and lower PM₁₀ CAAQS. As noted in Section 4.6.6, concentrations from on-airport and construction related sources were found to be significant.

SAL00015-245

Comment:

Fourth, PM₁₀ and PM_{2.5} are separate and distinguishable pollutants with separate and distinguishable effects, including serious health effects. To address this issue, the U.S. EPA in 1997 promulgated a new

national ambient air quality standard for PM_{2.5} of 15 µg/m³ annual average. (62 FR 38652 10.) The ambient air quality standards for PM_{2.5} are much lower than for PM₁₀. By using the higher PM₁₀ ambient air quality standards, the Supplement has substantially underestimated the impacts of all alternatives.

10 National Ambient Air Quality Standards for Particulate Matter: Final Rule, Federal Register, v. 62, no. 138, July 18, 1997.

Response:

Please see Response to Comment AL00033-329 regarding PM_{2.5}.

SAL00015-246

Comment:

Finally, essentially 100% of the Project's operational emissions originate from combustion sources, e.g., aircraft, ground support equipment, passenger cars. The major fraction of the particulate matter emissions from combustion sources is typically smaller than 2.5 microns in size, i.e. PM_{2.5}, rather than PM₁₀. For example, the PM_{2.5} fraction of particulate matter emissions is 92% for diesel vehicle exhaust, 93% for gasoline vehicle with catalysts exhaust, and 99% for aircraft exhaust. The PM_{2.5} fraction of particulate matter emissions from stationary internal combustion engines firing gasoline or diesel, e.g., heaters, typically range from 87% to 99%.¹¹ Thus, well over 90% of the operational particulate matter emissions from the Project are PM_{2.5}. PM₁₀ standards are therefore an inadequate substitute for evaluation of compliance with PM_{2.5} standards. PM_{2.5} must be properly analyzed, and standards appropriate to this more prevalent pollutant should be used, to assure that the adverse environmental and health impacts of PM_{2.5} emissions are properly disclosed.

11 California Air Resource Board (CARB), Determination of Particle Size Distribution and Chemical Composition of Particulate Matter from Selected Sources in California, NTIS Report PB89-232805, June 30, 1989, Figure 5.2-2.

Response:

Please see Response to Comment AL00033-329 regarding PM_{2.5}.

SAL00015-247

Comment:

II.B The Air Quality Analysis Is Piecemealed

The Supplement used EDMS to convert the emissions into projected ambient air quality concentrations. These were compared to ambient air quality standards to determine if the various alternatives would cause new violations of or significantly contribute to existing violations of ambient air quality standards. The resulting ambient concentrations for unmitigated emissions are included in Table S4.6-12 and their significance summarized in Tables S4.6-15 and S4.6-17. The resulting ambient concentrations for mitigated emissions are included in Table S4.6-22 and their significance summarized in Tables S4.6-24 and S4.6-26.

Inspection of these tables indicates that the Supplement, and the Draft EIS/EIR as a whole, has improperly piecemealed the air quality analysis. The tables that report significance report it separately for modeled ambient air concentrations resulting (a) from on-airport operational plus construction emissions and (b) from off-airport operational emissions. This is an impermissible approach. Pollutant concentrations and their significance should be reported for the Project as a whole, to disclose the cumulative effects of on-airport, off-airport, and construction emissions.

The Supplement, and the Draft EIS/EIR, should have evaluated ambient air concentrations resulting from the combined emissions of the Project, i.e. on-airport operations plus off-airport operations plus construction, for every single year for every alternative. In other words, emissions from on-airport and off-airport operations plus the construction emissions should have been modeled for every year of the

3. Comments and Responses

Project. The off-airport emissions cannot be separately modeled from the operational emissions, as they occur simultaneously and affect the ambient air quality.

By failing to do this, the Supplement, and Draft EIS/EIR have failed to disclose the full impacts of the Project. Further, had all parts of the Project been combined into a single analysis, the air quality impacts would have likely been much higher than disclosed in the Supplement.

Response:

Please see Response to Comments AF00001-24 and AL00017-207 regarding combining emission inventories and concentration results for comparison against significance thresholds. Please note, combining the off-airport CO impacts (reported in Table S4.6-13 of the Supplement to Draft EIS/EIS with background concentrations included) with on-airport combined concentrations as presented in Table S4.6-22 of the Supplement to the Draft EIS/EIR results in concentrations that are still below ambient air quality standards and are less than significant.

SAL00015-248

Comment:

II.C Future Background Concentrations Are Invalid

The standard approach to evaluating air quality impacts uses dispersion models to convert project emissions into increases in ambient concentrations of each pollutant. These incremental concentrations are then added to background ambient concentrations to estimate ambient concentrations after the project is built. These projections are then compared with ambient air quality standards to determine if the project would cause a significant air quality impact.

It is standard practice to use the maximum measured existing ambient concentration at the nearest monitoring station as the background in these calculations. The Draft EIS/EIR and Supplement, however, deviate substantially from the accepted approach and estimate future background concentrations using a linear rollback approach. This approach was used in the 1997 AQMP for a different purpose to determine if the proposed region-wide controls would bring the basin into compliance with standards. (Draft EIS/EIR, Appx. G12, p. 45.) This approach assumes that changes in emissions will change ambient air concentrations proportionally. We previously commented on the inappropriate use of this methodology in the Draft EIS/EIR, noting that it resulted in very substantial reductions in future background concentrations that hide significant ambient air quality impacts. In particular, it reduces the background carbon monoxide ("CO") concentration by nearly a factor of two and hides what would otherwise, using a standard and more accurate analysis, be identified as violations of ambient air quality standards on CO. (2001 Fox Comments, II.B, pp. 8/9.)

In fact, the CEQA Guidelines published by the South Coast Air Quality Management District ("SCAQMD") contain a section on developing EIR baseline information, which clearly states that "[m]onitoring station data should be used to provide background concentration levels of criteria pollutants." (SCAQMD CEQA Guidelines 04/93 13, p. 8-2) Also, SCAQMD recently published a methodology which is intended as assistance for other public agencies in using the mass daily significance thresholds for construction and operation published in the District's 1993 CEQA Air Quality Handbook. (SCAQMD 06/03 14.) These significance thresholds are used to determine a project's significant adverse regional effects on air quality when preparing an air quality analysis for CEQA or NEPA analyses. The methodology is based on the use of the peak measured existing ambient concentration at the nearest monitoring station over a period of three years to determine whether or not construction activities create significant adverse localized air quality impacts. While this methodology is intended for projects smaller than 5 acres, it nonetheless demonstrates SCAQMD's standard practice of using the peak ambient concentration of a pollutant at the nearest monitoring station as the background concentration for modeling.

12 LAX Master Plan Supplement to the Draft Environmental Impact Statement/Environmental Impact Report, Appendix G: Air Quality Impact Analysis, June 2003.

13 South Coast Air Quality Management District, CEQA Air Quality Handbook, April 1993.

14 South Coast Air Quality Management District, Draft Localized Significance Threshold Methodology, June 19, 2003; http, accessed October 28, 2003.

Response:

As the commentor states, the "maximum measured existing ambient concentration at the nearest monitoring station" is an accepted practice to estimate a background concentration. It must be noted that this technique is accepted as a screening device to estimate a conservative worst-case background concentration, and a less conservative approach is allowable where circumstances warrant a more realistic estimate. Based on the reasonable assumption that SCAQMD's emission control efforts will be successful in the South Coast Air Basin throughout the next several years, and given the distant future for which background concentrations were estimated in both the Draft EIS/EIR and the Supplement to the Draft EIS/EIR, it is logical to conclude that at least by 2010 ambient concentrations of all criteria pollutants in the South Coast Air Basin will be significantly reduced from current levels. It would be unreasonable and unnecessarily punitive to require LAWA and FAA to estimate future background concentrations based solely on current measurements. Contrary to the assertions of the commentor, the purpose of the air quality analyses in both the Draft EIS/EIR and the Supplement to the Draft EIS/EIR was the same as that of SCAQMD in preparing an Air Quality Management Plan, i.e., to determine that the ambient air quality standards will be attained and maintained in the future. Regarding the commentor's statement about SCAQMD's recently proposed methodology for mass significance thresholds, SCAQMD reported that use of these localized significance thresholds (LSTs) is "advisory, not mandatory," and that project-specific modeling is recommended for projects larger than five acres (report presented at the July 11, 2003, Board meeting, summarized at www.aqmd.gov/hb/030736a.html, accessed 11/17/03). The air quality analysis methodologies used by LAWA and FAA in preparing the Draft EIS/EIR and the Supplement to the Draft EIS/EIR were consistent with this recommendation.

SAL00015-249

Comment:

We further note that the future background concentrations of CO used in the Supplement are inconsistent with the SCAQMD estimate of average annual day CO emissions for the South Coast air basin and projected future 1-hour and 8-hour CO concentrations. (SCAQMD Table 1 through 3 15.) SCAQMD Table 1 indicates that CO emissions are projected to decrease by 24% between the year 2000 and the year 2020. SCAQMD Table 2 indicates that 1-hour CO concentrations in Los Angeles are projected to decrease by 24%. SCAQMD Table 3 indicates that 8-hour CO concentrations in Los Angeles are projected to decrease by 22% to 24%. In comparison, the air quality analyses in the Supplement assume the year 2015 8-hour CO background concentration would decrease from 9.4 ppm in the year 2000 (Supplement, Table S4.6-5) to 3.4 ppm in the year 2015 (Supplement, Table S4.6-2) or by 64%. Similarly, the Supplement assumes the year 2000 1-hour CO background concentration would decrease from 11 ppm in the year 2000 to 4.2 ppm in the year 2015, or by 61%. Thus, the Supplement has underestimated ambient CO impacts by using an anomalously low future background concentration.

15 See www.aqmd.gov/ceqa/hdbk.html, CO Concentrations, Tables 1-3, accessed October 28, 2003.

Response:

According to the CO attainment demonstration provided in the 2003 AQMP (Appendix V Chapter 4 Table 4-15), the maximum areawide 8-hour CO concentration at La Cienega Boulevard and Century Boulevard (near LAX) is predicted to be 3.8 ppm in 2005 (the furthest year forecast in that analysis), and this value can be expected to decline in later years. This suggests that the latest CO predictions by SCAQMD are that CO concentrations will be reasonably similar to those estimated in the Supplement to the Draft EIS/EIR. Notwithstanding this consideration, even if the higher future CO concentrations suggested by the commentor were used in place of those future background values in the Supplement to the Draft EIS/EIR, neither the 1-hour nor the 8-hour CO NAAQS or CAAQS would be exceeded near LAX by Alternative D in the interim or horizon years.

SAL00015-250

Comment:

III. CONSTRUCTION EMISSIONS ESTIMATES ARE FLAWED

3. Comments and Responses

The Supplement presents a revised construction impact analysis, which results in substantially lower construction emissions and ambient impacts. The main text of the Supplement, Section 4.6, does not alert the reader to this substantial reduction. It must be discovered, for example, by comparing Table 4.6-10 in the Draft EIS/EIR with Table S4.6-11 in the Supplement. The Supplement provides no explanation or justification for the dramatic decrease in CO, volatile organic compounds ("VOC"), sulfur oxides ("SOx"), and PM10 and increase in nitrogen oxides ("NOx) emissions in the Supplement, compared to the Draft EIS/EIR. As detailed below, even though we have not yet received the data needed to review the modeling, there is ample reason to suspect that the construction emission estimates are flawed and fail to disclose the impacts of the proposed construction.

Response:

Please see Response to Comment SAL00015-59 regarding construction activities and Response to Comment SAL00015-64 regarding data requests.

SAL00015-251

Comment:

III.A Construction Emissions Estimates Are Unsupported

The Supplement contains no support for the new construction emission estimates beyond a few conclusory and summary paragraphs in Appendix S-E, Section 2.1.2. Hundreds of individual factors and assumptions go into a construction emission estimate. Construction exhaust emissions are estimated from an inventory of equipment that will be deployed as a function of time. This is referred to as activity data. For each piece of equipment, e.g., loader or scraper, an emission factor in grams per brake horsepower hour ("bhp-hr"), equipment size in horsepower, a load factor, a usage factor, and fuel type must be specified. Construction fugitive dust emissions are typically estimated from disturbed area, control efficiencies, and emission factors in pounds per acre ("lb/acre") disturbed per unit time. This information should be provided in a comprehensive and complete manner; it has not been.

Response:

Construction activity data used to develop the construction emission inventory for Alternative D is presented in Attachment D to Technical Report S-4 of the Supplement to the Draft EIS/EIR. Equipment types, sizes, manufacturers, and quantities were identified for the construction phases, including demolition, earthwork and foundation, utilities, structures, pavement and support. Construction equipment data, such as brake horsepower and fuel consumption estimates, were based on both construction equipment technical specifications taken from manufacturers websites and SCAQMD's CEQA Air Quality Handbook Tables A-9-82 and A-9-85.

Combustion emission factors for off-road construction equipment were revised based on ARB's OFFROAD Model. SOx emission factors were derived from sulfur limits set by SCAQMD Rule 431.2. Please see Appendix S-E of the Supplement to the Draft EIS/EIR for additional information regarding construction emissions estimates and the individual factors and assumptions used to derive the analysis. Please see Response to Comment SAL00015-64 regarding data requests.

SAL00015-252

Comment:

The new analysis of the Supplement employs the same ratio method used in the Draft EIS/EIR to calculate emissions from construction equipment, and a new model, CARB's OFFROAD Model, to estimate construction emissions. (Supplement, Appx. S-E, p. 3.) First, emission factors for off-road construction equipment were revised based on CARB's OFFROAD model and emission factors for on-road equipment were revised based on CARB's EMFAC 2002 model. Alternatives C and D were then analyzed using the updated emission factors. The ratio of old Alternative C emissions to new Alternative C emissions was then calculated and used to adjust old Alternatives A and B emissions to the new basis. (Supplement, Appx. S-E, p. 3.) Specifically, "[c]onstruction duration and activity levels were developed for Alternative C. Construction emission estimates for Alternatives A and B were based on ratios of construction areas for Alternatives A and B to those areas for Alternative C. (Draft EIS/EIR, Appx. G, p. 4.)

None of this information is provided in a comprehensive manner in the documents, and some critical information has been omitted. For example, nowhere in the air quality section can the above quoted "ratio of construction areas" or even the construction areas themselves be found. When information is provided, it is scattered throughout various documents, i.e. the Draft EIS/EIR, the Supplement, and their various technical appendices and technical reports. Because no comprehensive overview is provided regarding where the various pieces to the analysis can be found, the reader can only piece together the information gleaned from the various documents with painstaking detective work. Some of the information is mislabeled and, consequently hard to find. For example, construction activity data used to develop the construction emissions inventory for Alternative D is presented in Attachment C to Technical Report S-4 of the Draft EIS/EIR in instead of in Attachment D as claimed by the Supplement. (Supplement, Appx. S-E, p. 2.) Further, some of the information provided in appendices is illegible due to poor scanning and reproduction. See, for example, the "Resource Calculations (Truck Trips)" in Appendix E to TR4 of the Draft EIS/EIR.

Response:

A comprehensive and detailed emissions analysis was completed for all construction activities included in both Alternatives C and D. These construction activities were then compared with construction activities planned for both Alternatives A and B. Emissions resulting from Alternatives A and B were derived by comparing each of their respective construction schedules relative to that of Alternative C. The percentage of construction activities contained in Alternative C relative to those contained in Alternative A is approximately 110 percent. The percentage of construction activities contained in Alternative C relative to those contained in Alternative B is approximately 95 percent. The analysis for Alternative C is the baseline from which emissions from construction of Alternatives A and B were derived using these ratios.

Regarding the reference to Attachment C rather than Attachment D, the subject correction has been incorporated in Section 4.6, Air Quality, of the Final EIS/EIR. Regarding the quality of the document, FAA and LAWA were very mindful of the importance of public review of the Draft EIS/EIR and the Supplement to the Draft EIS/EIR. Please see Response to Comment AL00033-255 for details regarding the variety of media used to make the Draft EIS/EIR and the Supplement to the Draft EIS/EIR available to the public. There are technological limitations associated with the production of electronic files. However, the table referenced by the commentor is legible in the paper copy of the document. As indicated in Response to Comment AL00033-55, paper copies of the document were widely distributed and available for public review at numerous locations. It should be noted that LAWA's records reflect that Shute, Mihaly & Weinberger ordered a full paper copy of the Draft EIS/EIR, including all its appendices and technical reports (which include the table noted by the commentor). Additionally, the City of El Segundo was sent a full paper copy on January 18, 2001.

SAL00015-253

Comment:

This combination of errors, omissions, illegible documents, and the lack of a clear methodology description makes it impossible to comprehensively review and comment on the construction emissions and related air quality impact analysis. El Segundo has requested supporting calculations and data files from LAWA and FAA, but we have not received the necessary information in time to utilize them in our comments.

Response:

A very thorough construction emission calculation analysis was conducted for all aspects of this project. Further, the analysis was conducted using the most conservative approach, assuming all equipment operated on a full-time basis, taking into account overlapping construction phases, etc. Please see Response to Comment SAL00015-64 regarding data requests.

SAL00015-254

Comment:

III.B Ultra-low Sulfur Diesel Not Required As Mitigation

3. Comments and Responses

The Supplement claims that SOx emissions were estimated from sulfur limits set by SCAQMD Rule 431.2 16, which requires that all liquid fuels sold in the SCAQMD district are low sulfur fuels that contain no more than 500 parts per million by weight ("ppmw") sulfur through June 1, 2006 and 15 ppmw thereafter. However, low sulfur fuel is more expensive than high sulfur fuel. Thus, there is an economic incentive for contractors to import less expensive high sulfur fuel from outside of the SCAQMD, e.g., from Nevada, unless a mitigation measure for the Project specifically requires the use of low sulfur fuel with the sulfur contents assumed in the construction emission calculations. The proposed mitigation measures, however, do not require the use of low sulfur fuel in construction equipment. (Supplement, Table S4.6-18.) In fact, one of the construction mitigation measures contemplates the use of Lubrizol fuel (PuriNOx™), which is an alternative diesel formulation blended from 500 ppmw diesel. Thus, there is no assurance that low sulfur fuel would be used for Project construction.

Further, the Supplement quoted January 1, 2005 as the effective date for the reduction of fuel sulfur content to 15 ppmw sulfur. In fact, the effective date has been extended to match a later compliance date adopted by the California Air Resources Board, i.e. no later than June 1, 2006, which is also applicable to refiners and importers in the South Coast District. Thus, 500 ppmw sulfur diesel

16 South Coast Air Quality Management District, Rule 431.2. Sulfur Content of Liquid Fuels, Amended September 15, 2000.

Response:

Rule 431.2 - Sulfur Content of Liquid Fuels, specifies that the rule "applies to all refiners, importers, and other fuel suppliers such as distributors, marketers and retailers, as well as to users of diesel, low sulfur diesel, and other liquid fuels for stationary source applications in the District. The rule also affects diesel fuel supplied for mobile source applications." Any import of fuel from outside of the Basin (i.e., Nevada) would be a direct violation of Rule 431.2.

Therefore, low sulfur fuel is not specifically listed in Table 4.6-18 because it is already a component of an adopted SCAQMD regulation.

Contractors working on the LAX Master Plan will be required to use low-sulfur fuel or alternative diesel formulations, wherever feasible, prior to the June 1, 2006, implementation date in Rule 431.2.

SAL00015-255

Comment:

The Draft EIS/EIR assumed that watering would reduce PM10 by 90% to 95%. (Draft EIR/EIS, Table 4.6-16, p. 4-516.) This control range is unrealistic. If the Supplement likewise assumed 90% to 95% control, it has substantially underestimated both unmitigated and mitigated fugitive PM10 emissions. Typical control efficiencies of watering at construction sites have been estimated at 50%.¹⁷ For example, the SCAQMD in its CEQA Guidelines for dust control during grading assumes control efficiency ranges for watering from 34 to 68% during grading and 45 to 85% for unpaved roads, parking areas, and staging areas. (SCAQMD 04/93, 18 Table 11-4.)

The Supplement does not indicate how much water would be applied, or, alternatively, establish any criteria, such as opacity limits, to assure that dust is effectively controlled. Large amounts of water would be required for dust control. This would potentially result in significant water impacts that have not been identified or evaluated. Further, even if large amounts of water are applied, it is not possible to achieve high control efficiencies using only water on these types of soil.

Thus, it is not clear that the (undisclosed) assumption as to fugitive dust control efficiency would actually achieve the assumed control efficiency. The Supplement is silent on mitigation effectiveness and the methods that would be used to monitor the implementation and effectiveness of the assumed, but not disclosed, control effectiveness. The Supplement should be revised to include the fugitive dust calculations and all assumptions used in preparing them, most notably, the dust control efficiency, watering frequency, and amount of applied water. The assumptions that fugitive dust calculations were based on should be stated in the Supplement, required as conditions of Project approval, and noted directly on all final construction drawings.

17 PEDCo Environmental Specialists, Investigations of Fugitive Dust Sources - Emissions and Control. Prepared for the Environmental Protection Agency, OAQPS, Contract No. 68-02-044, May 1977.
18 South Coast Air Quality Management District ("SCAQMD"), CEQA Air Quality Handbook, April 1993.

Response:

The actual amount of PM10 reduction assumed from implementation of all proposed fugitive dust control measures was 63 percent. This number is based on implementation of all proposed mitigation measures outlined in the Supplement to the Draft EIS/EIR subsection 4.6.8 Table S4.6-18 (pages 4-390 and 4-391). These measures include, but are not limited to: watering the site three times per day, use of chemical soil stabilizers, paving of all access roads, and use of staging areas for equipment etc.

SAL00015-256

Comment:

III.D Emission Reductions Not Supported

The Supplement estimates reductions in construction emissions that would be achieved for the peak year. (Supplement, Table S4.6-18.) However, the Supplement is silent on how these reductions were estimated. They appear to be inconsistent with the mitigation measures that are proposed.

Response:

A proposed mix of fugitive dust control measures and measures to control emissions from construction equipment is assumed to be implemented as part of this project. A very conservative 22 percent reduction in NOx was assumed to result from implementation of all measures. A very conservative 31 percent reduction in PM10 was assumed to result from implementation of all measures.

Please see Section 2.3 Appendix S-E of the Supplement to the Draft EIS/EIR regarding a discussion of construction emissions and associated air quality mitigation measures.

SAL00015-257

Comment:

III.D.1 NOx Reductions

The Supplement assumes that the proposed mitigation measures would reduce 300 to 1,100 ton/yr of NOx. (Supplement, Table S4.6-18.) This amounts to 22% of the total NOx from construction activities.¹⁹ However, only one of the proposed mitigation measures, a requirement to specify a combination of construction equipment using "cleaner burning diesel" fuel and exhaust emission controls, would reliably reduce NOx emissions. The various controls included in this measure - catalytic oxidizers, particulate traps, exhaust gas circulation, alternate fuel - are not capable of achieving a fleet-wide 22% NOx reduction, even if every single measure were required on every single piece of construction equipment.

This is an important issue because the air quality analysis in Table S4.6-22 indicates that the mitigated, combined operational and construction air pollutant ambient concentrations for annual average NOx in 2015 are very close to the significance threshold of 0.053 µg/m³. If construction NOx emissions were substantially higher than claimed, and we believe they likely are, the Project would result in new, unidentified violations of the annual average NO₂ ambient air quality standard for all alternatives in 2015.

Catalytic oxidizers remove VOCs and CO, not NOx. Particulate traps remove PM10, not NOx. Lubrizol fuel, which is presumably PuriNOx™, the only alternative Lubrizol fuel we are aware of, does remove NOx. However, it was verified by CARB on January 31, 2001 as achieving only a 14% reduction in NOx compared to CARB diesel. Thus, even if it were used in 100% of the diesel-fueled construction equipment, it would remove less than 14% of the overall NOx emissions because a portion of the construction emissions are from gasoline-fueled construction vehicles, delivery trucks, and commuting workers who predominately drive gasoline-fueled vehicles.

3. Comments and Responses

19 Estimated as [(Table S4.6-21 emissions) - (Table S4.6-11 emissions)]/(Table S4.6-11 emissions).

20 Letter from Dean C. Simeroth, Chief, Criteria Pollutants Branch, to Thomas J. Sheahan, Lubrizol, January 31, 2001.

Response:

The commentor's statement regarding CARB's certification of Lubrizol for achievement of 14 percent NOx reduction is correct. This percentage reduction is assumed to result from the use of Lubrizol in all diesel-powered construction equipment and all delivery/haul trucks. The remaining NOx emission reductions result from the replacement of 33 percent of all generators with electric power poles.

Therefore, the 22 percent NOx emission reductions can be broken down as follows: 14 percent for Lubrizol and the remaining emission reductions from the use of line electric power rather than using generators.

The use of electrical generators represents the single largest NOx contribution from construction sources. The NOx emission reductions associated with the generators assumes that only 33 percent of the generators needed will be replaced with an electric alternative such as line electric power.

Implementation of all proposed mitigation measures for NOx could reduce emissions up to 70 percent. The air quality analysis, however, conservatively assumed only a 22 percent total reduction in NOx.

SAL00015-258

Comment:

Finally, the Supplement proposes the use of diesel engines with exhaust gas recirculation ("EGR") for NOx control. (Supplement, Table S4.6-18.) However, EGR-equipped, diesel-fueled, off-road construction equipment is not commercially available. EGR retrofit systems are being introduced, but thus far, only for on-road trucks. Currently, a large number of diesel passenger cars use EGR under some operating conditions (low speeds and low loads). (Guibet 1999 21.) There are also several hundred systems operating on Volvo and Cummins on-road engines in Europe and Asia and several demonstrations are under way in the U.S. (MECA 01/03 22.) EGR works well for highway trucks because they have a constant supply of air as they move down the road but off-road equipment does not. Thus, enhanced fuel delivery, i.e. electronic injection, is more feasible for off-road applications such as construction equipment, because of their duty cycle. We are not aware that this technology is commercially available for the type of equipment that would be used to construct the Project.

21 J.C. Guibet and E. Faure-Birchem, Fuels and Engines: Technology, Energy, Environment, Editions TECHNIP, Paris, France, 1999.

22 Manufacturers of Emission Controls Association, Retrofit Emission Control Technologies for On- and Off-Road Diesel Engines, January 16-17, 2003.

Response:

The air quality analysis of potential mitigation measures included Exhaust Gas Recirculation (EGR) with the expectation that it may be commercially available at some point during the duration of project construction. No emission reduction credit was taken for this measure in the Supplement to the Draft EIS/EIR.

Please see Response to Comment SAL00015-257 regarding mitigation measures.

SAL00015-259

Comment:

Further, EGR technology results in secondary impacts that were not addressed in the Supplement. EGR can cause increases in particulate emissions and is a potential source of deposits in the intake system and in the combustion chamber of diesel engines. Thus, the large-scale use of EGR for construction of this project cannot occur without the use of detergent additives. See, for example, discussion in Guibet 1999 at page 463.

Response:

The project does not assume large-scale use of EGR for construction equipment. No mitigation credit was taken for this measure. Please see Response to Comment SAL00015-277 regarding mitigation measures.

SAL00015-260**Comment:**

The majority of the other mitigation measures in Table S4.6-18 would only reduce fugitive PM10, not construction NOx exhaust emissions. The only other mitigation measure that would reduce NOx is the use of electricity from power poles rather than diesel-powered generators. Emissions from these generators are a tiny fraction of construction NOx emissions, less than 1% of the total construction NOx emissions, and even so the Supplement concedes that it cannot succeed in eliminating these emissions ("cannot completely eliminate need for portable generators"). (Supplement, Table S4.6-18, p. 4-389.) The proposed mitigation fails to specify either a specific fraction of electrical demand that would be power pole versus diesel-generator or any specific percent reduction in NOx for the diesel-powered portion of the electrical demand.

Response:

The use of electrical generators represents the single largest NOx contribution for construction sources. The total NOx contribution of all generators is approximately 18 percent of all NOx emissions from construction of this project rather than the 1 percent figure mentioned by the commentator.

The mitigation analysis conservatively assumes that only 33 percent of generators would be replaced with power poles.

SAL00015-261**Comment:**

Thus, it is not clear how the Supplement proposes to achieve the 22% reduction in NOx emissions assumed in the mitigated construction emission analysis in Section 4.6.8.5. The assumed 22% is unsupported and unrealistic and results in the understating of impacts.

Response:

Please see Response to Comment SAL00015-257 regarding mitigation measures.

SAL00015-262**Comment:**

III.D.2 CO and VOC Reductions

The mitigated construction emissions assume that only 2 to 3% of the CO and 2 to 6% of the VOCs emissions would be reduced by the proposed mitigation program.²³ This is inconsistent with the post-combustion control mitigation measure, which includes the use of catalytic oxidizers, unless the Supplement has assumed that catalytic oxidizers would only be used on a very few pieces of equipment.

Catalytic oxidizers can remove up to 90% of both the CO and VOC. (MECA 01/03.) Catalytic oxidizers can be used on virtually all equipment that will be used to construct the Project. However, the Supplement has apparently assumed that only about 2 to 3% of the equipment would use catalytic oxidizers. The Supplement should be revised to require the use of catalytic oxidizers on all equipment, where feasible. A registered professional engineer should be required to certify that the use of an oxidizer is infeasible, where claimed.

²³ Estimated as $[(\text{Table S4.6-21 emissions}) - (\text{Table S4.6-11 emissions})]/(\text{Table S4.6-11 emissions})$.

3. Comments and Responses

Response:

The commentor is correct in asserting that actual emission reductions from the use of catalytic oxidizers would be significantly more than the assumed reductions given in Table S4.6-21. The assumption is that it should be technologically feasible to apply catalytic oxidizers to most types of construction equipment. However, since the actual number is unknown at this time, a very conservative emission reduction of approximately 2 percent for both CO and VOCs was assumed. Because it is unclear about the specific feasibility of this control device on each and every piece of construction equipment, it would be virtually impossible to predict what percentage of equipment will be equipped with this technology. This technology is based on a function of the engine, cost, availability, type of equipment, etc.

The Supplement to the Draft EIS/EIR, therefore, conservatively estimated emission reductions from this source category at 2 - 3 percent because of the high degree of uncertainty surrounding this control equipment. Every effort will be made to include this equipment wherever feasible and emission reductions from this source category will likely be much higher than estimated in the air quality analysis.

SAL00015-263

Comment:

IV. OPERATIONAL EMISSIONS ESTIMATES ARE FLAWED

The operational air quality impact analysis suffers from a number of problems including the overestimate of the baseline (see Comment I.A), the use of the wrong baseline (see Comment II.C), overestimates of control efficiencies that can be achieved with implementation of mitigation measures (see Comments III.D, IV.A, and IV.B), and substantially underestimates off-airport emissions because traffic assumptions are seriously flawed (see Comment IV.C).

We suspect that the combination of these factors resulted in substantial underestimates of mitigated incremental emissions from on- and off-airport operations. The Supplement now concludes that in 2015 NO₂ and SO₂ ambient air quality concentrations for all alternatives and CO for Alternatives A, B, and C would be less-than-significant. (Supplement S4.6-26.) Had the Supplement used more realistic assumptions for traffic emissions and mitigation control efficiencies and compared the incremental operational emissions to the correct baseline emissions, more air quality impacts would likely be significant after implementation of the proposed mitigation.

Response:

Please see Responses to Comments SAL00015-248, SAL00015-256 through SAL00015-262, and SAL00015-264 through SAL00015-266.

SAL00015-264

Comment:

IV.A Claimed Emissions Reductions Are Flawed And Unsupported

We previously commented that many of the estimated emissions reductions were unsupported in the record and demonstrated this lack of data for the conversion of ground support equipment ("GSE") to electric power. However, as we pointed out, all other mitigation measures had similar problems. (2001 Fox Comment, II.D, p. 11/12.) The Supplement contains very limited additional information to address these problems.

For example, the Supplement added two short paragraphs on the conversion of GSE and proposes "the virtual elimination of GSE emissions" beyond the "requirements of the memorandum of understanding ("MOU") with CARB" through "incentives and tenant lease requirements." (Supplement, TRS-4, Appx. SE, p. 40.) The Supplement does not specify what these incentives and lease requirements would be, when they would be implemented, and how many vehicles they would affect.

Presumably, the assumptions that went into estimating the emission reductions attributable to the conversion of GSE to electric power have not changed, yet the range of potential emission reductions has changed considerably for most pollutants. The Draft EIS/EIR previously reported ranges of potential

emissions reductions in 2015 of 250-450 tons per year ("ton/year") for NO_x, 100-130 ton/year for VOC, and 2000-2500 ton/year for CO. The Supplement now reports 400-600 ton/year for NO_x, 1600-1900 ton/year for VOC, and 2300-2800 ton/year for CO. (Draft EIS/EIR, p. 4-514; Supplement, p. 4-389.) The Supplement fails to provide an explanation what caused these considerable differences or why the proportion of potential emission reduction between the pollutants has changed so drastically. Further, it is unclear which end of the control range was applied to calculate the mitigated emissions.

An EIR must be transparent enough to allow a subject matter expert to evaluate the accuracy of its estimates. The Supplement is silent on the assumptions that went into these calculations. Thus, the air quality analysis is entirely inadequate and must be revised.

Response:

The mitigation component referenced by the commentor would include 100 percent conversion of all GSE to electric power (or extremely low emission technology, such as fuel cells) by 2015. The difference in reported ranges is due to the change in on-airport emission calculations as described in Section 4.6, Air Quality, and Appendix S-E of the Supplement to the Draft EIS/EIR. However, during development of the General Conformity Evaluation protocol for the project, it was concluded that revision of GSE emissions were necessary to ensure that the CARB OFFROAD model emission factors were incorporated into the GSE emission inventory calculation. These revised emission factors are incorporated into the Final General Conformity Determination, which will be published prior to the publication of the Final EIS/EIR that will be approved by the FAA. The resulting range of potential emission reductions will fall closer to the range estimated in the Draft EIS/EIR.

As required by Section 15097 of the CEQA Guidelines, the Mitigation Monitoring and Reporting Program for the approved project provides the mechanism to ensure the implementation of mitigation measures.

SAL00015-265

Comment:

IV.B ITC Emissions Reductions Are Overestimated For Alternative D And Not Applicable To Alternatives A Through C

The Supplement claims that substantial emission reductions can be achieved through the construction of five additional intermodal transportation centers ("ITCs"), so-called "flyaways." The Supplement further maintains that each of these ITCs would reduce traffic - and associated air emissions - by 750,000 vehicle round trips per year. (Supplement, TRS-4, Appx. S-E, p. 40.) The Supplement further claims that this mitigation measure is applicable to and proposed for all four alternatives and specifically lists the measure as "quantifiable." (TRS-4, Appx. S-E, p. 40.)

However, review of the description of alternatives shows that no such ITCs are planned for Alternatives A, B, and C and only one ITC is planned for Alternative D. (Draft Master Plan24, Chapter 3 and DMPA, Section 2.2.) Obviously, the Supplement can only claim emission reduction credits for mitigation measures that will be implemented, not for some hypothetically feasible measures, yet it appears that the Supplement has applied the control efficiency of this measure to all four alternatives. (TRS-4, Appx. S-E, p. 44.)

The Supplement estimates potential emissions reductions from ITCs of 80-100 ton/year NO_x, 50-60 ton/year VOCs, 1000-1200 ton/year CO, 1-2 ton/year SO₂, and 15-20 ton/year PM₁₀. (Supplement, p. 4-392.) The Supplement does not provide information on how the annual reduction of 750,000 vehicle round trips per ITC was derived, nor how these round trips were converted to emissions.

Application of these potential emission reductions to unmitigated traffic emissions results in substantially underestimated mitigated emissions and resulting modeled ambient air quality concentrations from on-airport and off-airport traffic for all alternatives. The measure should not have been applied to Alternatives A through C at all, and only one fifth of these potential emissions reductions should have been applied to Alternative D, as only one ITC will be built and not five. This would have substantially increased emissions for all criteria pollutants and likely resulted in more significant ambient air quality impacts than were found by the Supplement.

3. Comments and Responses

24 LAX Draft Master Plan, November 10, 2000.

Response:

Please note, the commentor is incorrect in their statement concerning the number of planned ITCs and the plan for ITCs included in Alternatives A, B, and C. Please see Response to Comment SAL00015-281 regarding mitigation emission calculations, including information on the inclusion of 5 ITCs for all build alternatives.

SAL00015-266

Comment:

IV.C Traffic Emissions Are Underestimated

The air quality analysis includes estimates of on-airport and off-airport operational emissions associated with traffic based on the number of vehicle trips associated with airport operations. Review of both the Draft EIS/EIR's and the Supplement's traffic analyses reveals that LAWA substantially underestimated traffic associated with all alternatives. (See comments by Tom Brohard and Associates, Attachment B to September 18, 2001 El Segundo comment letter, and Attachment 2 to the current comment letter.) Thus, LAWA has also underestimated operational emissions associated with traffic.

Response:

The methodology used for analyzing the surface transportation was appropriate and followed CEQA/NEPA guidelines and requirements. Documentation of the procedures used to estimate airport trip generation and distribution is provided in Sections 4.3.1.2 and 4.3.2.2 of the Supplement to the Draft EIS/EIR, Sections 2, 3, and 4 of Technical Report 2a, Sections 7.3.1 and 7.3.2 of Technical Report 2b, Section 2.6 of Technical Report 3a, Chapter III of the LAX Ground Access Calibration and Validation Report, and Section 3 of Technical Report 3b.

Please also see Topical Response TR-ST-2, and in particular, TR-ST-2.13.5 regarding the final trip generations of all scenarios and alternatives.

The traffic forecasts were determined using appropriate methodology and are considered reasonable and accurate. Therefore, the air quality analysis that used these traffic forecasts are also considered reasonable and accurate.

SAL00015-267

Comment:

V. PROPOSED MITIGATION PROGRAM IS INADEQUATE

The construction and operational air quality mitigation program proposed in the Supplement are inadequate because the measures are not enforceable, the proposed measures would reduce very little of the emissions, and all feasible mitigation measures have not been identified. The descriptions of the mitigation measures in the Supplement are too general to assure that they will actually be implemented. Enforceability is normally achieved by including mitigation measures in the requests for bids and resulting construction contracts, posting bonds, drawing up legal agreements, or recording conditions of approval on property titles or in agency permits. None of the proposed mitigation measures include any legally binding commitments or methods to ensure implementation and enforcement.

The study area is classified as nonattainment for three National Ambient Air Quality Standards ("NAAQS"): ozone, CO, and PM10. Further, the study area is classified by EPA as "extreme" nonattainment for ozone under the Federal Clean Air Act. Because of the air basin's nonattainment status, it is particularly important to reduce emissions of these nonattainment pollutants to the greatest extent feasible. The Draft EIS/EIR and the Supplement do not reduce operational or construction emissions to the greatest extent feasible.

Response:

The commentor is correct in asserting that the South Coast Air Basin is in nonattainment for ozone, CO, and PM10. This current nonattainment status exists regardless of the LAX Master Plan. However, LAWA agrees it is important to reduce emissions to the greatest extent feasible and has committed to this. All regulatory requirements will be adhered to such as: Rule 403 Dust Control Plan and use of Rule 431.2 low-sulfur diesel fuel. Mitigation measures are assumed to be addition mechanisms (beyond those required by law) which are technologically feasible to reduce emissions. Please see the enhanced discussion of air quality mitigation measures in the Supplement to the Draft EIS/EIR Appendix S-E Section 2.3. All mitigation measures will be included in the Mitigation Monitoring and Reporting Plan.

SAL00015-268

Comment:

V.A Mitigation Measures Are Not Enforceable

In our previous comments on the Draft EIS/EIR, we pointed out that several of the proposed mitigation measures were not enforceable. The same comment is valid for the numerous additional mitigation measures proposed by the Supplement.

First, many measures do not include specific performance standards that would allow these measures to be implemented, let alone allow their effectiveness to be evaluated. Three of the proposed operational mitigation measures would only "encourage" or "promote" participation, viz., the LAWA telecommuting program, the LAWA carpool and rideshare program, and the promotion of alternative-fueled vehicles or SULEV/ZEV engines in commercial and rental vehicles.

Response:

No additional mitigation "credit" was taken in the document for emission reduction measures already being implemented by LAWA. Measures required by an existing regulation (i.e., SCAQMD carpooling rules or fleet vehicle rules) or City of Los Angeles ordinance were assumed to be enforceable in the future, but not considered to be mitigation. All enforceable measures will be contained in the Mitigation Monitoring and Reporting Plan.

SAL00015-269

Comment:

Second, none of the proposed measures quantify the number of units that would be involved, the time frame over which the action would occur, nor describe the proposed measure with enough specificity to allow it to be implemented, let alone reviewed by the public or enforced if eventually adopted. The measures only require generic "acceleration," "promotion," "conversion," and "implementation." For example, the first operational measure proposes the conversion of GSE to electric power. The comment associated with this measure requires LAWA to [a]ccelerate full conversion, beyond the requirements of the GSE MOU" and to "provide incentives or tenant lease requirements." The range of potential emission reductions assumed for this measure is considerable yet the Supplement fails to describe what kind of incentives or requirements should bring about these reductions that are not already included in CARB's GSE MOU, nor in what timeframe these incentives are supposed to be implemented, or what the term "acceleration" constitutes. (See Comment V.D.)

To be enforceable, the mitigation measures must be quantifiable. Thus, the description of a measure must specifically state what the performance goal is, when it would be provided, and how compliance would be verified.

Response:

The mitigation component referenced by the commentor would include 100 percent conversion of all GSE to electric power (or extremely low emission technology, such as fuel cells) by 2015.

In accordance with Section 15126.4 of the CEQA Guidelines, "an EIR shall describe feasible measures that could minimize significant adverse impacts." As such, the list of recommended mitigation measures includes a variety of components intended to reduce air quality impacts. However, only a

3. Comments and Responses

limited number of the recommended mitigation measures were quantified for the post-mitigation analysis included in the Supplement to the Draft EIS/EIR. Please see Table S4.6-18, Recommending Mitigation Measure Components, of the Supplement to the Draft EIS/EIR for a range of emission reductions for those measures that could be quantified. Those mitigation components included in the analysis include GSE electrification, LAX dedicated clean-fuel buses, and construction mitigation measures which are enforceable through contract requirements.

As required by Section 15097 of the CEQA Guidelines, the Mitigation Monitoring and Reporting Program for the approved project provides the mechanism to ensure the implementation of mitigation measures.

SAL00015-270

Comment:

V.B The Proposed Construction Mitigation Is Inadequate

The construction mitigation program has been expanded to include 18 mitigation measures. (Supplement, Table S4.6-18.) However, many of the measures that are listed are too general to review, let alone implement. Further, many of them are not enforceable as a practical matter as the measures as drafted do not include any emission reduction targets or any means of assuring compliance. Some of the more egregious examples are discussed below. However, all of the measures listed in the Supplement should be expanded to include emission reduction targets that can be quantified, compliance procedures, and recordkeeping and reporting provisions.

Response:

Mitigation measures on a large-scale project such as this come in many different forms. They can include quantifiable emission reductions from measures such as watering, to non-quantifiable procedural measures such as the designation of a Mitigation Monitor at the site to ensure that all measures are being implemented and complied with at all times.

If a mitigation measure is listed with no quantifiable emission reduction target, it may indicate that there is no quantification possible. Further, CEQA and NEPA have no recordkeeping or reporting provisions required in association with the Mitigation Monitoring and Reporting Program. The Mitigation Monitoring and Reporting Program will be certified by the Los Angeles City Council as part of the approval process for this EIS/EIR. However, LAWA and the City of Los Angeles will ensure that all aspects of mitigation are fully implemented and that a Mitigation Monitor remains on-site throughout every aspect of the construction process.

Please see Responses to Comments SAL00015-271 through SAL00015-278 below. Please see Response to Comment AR00003-63 regarding the enforceability of proposed mitigation measures; as indicated in that response, adopted mitigation measures will be fully enforceable pursuant to a mitigation monitoring and reporting program.

SAL00015-271

Comment:

V.B.1 Construction Equipment Controls

The first listed construction mitigation measure in Table S4.6-18 would "[s]pecify combination of construction equipment using "cleaner burning diesel fuel" and exhaust emission controls." The comments to the table indicate that these mitigation measure "[o]ptions include: diesel engines with catalytic oxidizers (CO, VOC), diesel engines with particulate traps (PM), diesel engines with particulate traps (PM), diesel engines with exhaust gas circulation (NOx), diesel engine with Lubrizol fuel + catalytic oxidizer (PM, CO, VOC, NOx)."

This description is too general to evaluate. The construction activity data for Alternatives A through C in the Draft EIS/EIR in TR4 and for Alternative D in the Supplement, TRS-4 indicate that a large number of different types of equipment will be used. Efficacy of this mitigation measure and emission reductions

that it can achieve can only be determined if one knows which specific measures from this list will actually be applied to which pieces of equipment in each alternative.

Clearly, the preparers of the Supplement made assumptions as to the particular mix of these controls that would be implemented for each option and control efficiencies for each in order to calculate emission reductions. The public cannot comment on the adequacy or efficacy of this measure without knowing what particular mix of controls was assumed to derive the claimed emission reductions. Further, this measure cannot be implemented unless the specific mix of controls is clearly specified. The place to do this is in the Supplement. The total emission reductions for the entire construction mitigation program suggests that limited use is made of many of these options, while unrealistic control assumptions are made for others. (See Comment III.D.)

Response:

The assumption regarding the specified combination of mitigation measures assumed that each of the following measures was potentially feasible for all construction equipment: use of cleaner burning diesel fuel, catalytic oxidizers, particulate matter filter traps and exhaust gas recirculation. The combined emissions reductions from all construction mitigation measures was assumed to reduce NOx by up to 22 percent and PM10 by 31 percent. (Please see Table 24.6-21)

SAL00015-272

Comment:

V.B.2 Generators

The second listed construction mitigation measure in Table S4.6-18 would "[s]pecify combination of electricity from power poles and portable diesel- or gasoline-fueled generators using 'cleaner burning diesel' fuel and exhaust emission controls." The measure does not divulge the assumed mix of electric and diesel-fueled generators, specify any emission targets for the "cleaner burning diesel" fuel, identify the exhaust emission controls that would be used, or divulge the assumed emission reductions for the exhaust emission controls. Thus, the measure is not enforceable as a practical matter and cannot be reviewed by the public.

Response:

The construction analysis assumed a mix of 33 percent of all generators running on cleaner burning (emulsified) diesel fuel, 33 percent being replaced by electric power poles and the remaining 33 percent equipped with PM filter traps. The use of "cleaner burning diesel fuel" is assumed to result in an emission target reduction of a 14 percent NOx reduction and a 63 percent PM10 reduction which is based on CARB testing and certification.

SAL00015-273

Comment:

V.B.3 Off-Peak Hours

The third listed construction mitigation measure in Table S4.6-18 requires construction employees to "work" during off-peak hours. However, it is not clear what is meant by "off-peak hours." This term is generally applied to traffic and emissions therefrom, not on-site construction "work" per se. Thus, this measure should be reworded to identify the peak hours and to require that construction workers travel to and from the site during off-peak traffic hours. If another meaning is intended, the measure should be expanded to clarify the intent and define "off-peak hours."

Response:

The commentor is correct in assuming that the intention of this mitigation measure is to have construction workers travel to the construction site during off-peak hours, rather than work during off-peak hours. Depending on the construction activities at the time, some workers will be working at night, while others may travel to the site at approximately 6 am. No emission reduction credit was assumed for this measure.

3. Comments and Responses

SAL00015-274

Comment:

V.A.4 Use Of Non-toxic Soil Stabilizers

The fourth and fifth listed construction mitigation measures in Table S4.6-18 require the use of non-toxic soil stabilizers in all inactive construction areas and on outdoor storage piles, respectively. (Supplement, p. 4-390.) A note to the table referring to these measures indicates that reductions in particulate emissions can be 90% to 95%. (Supplement, p. 4-392, note 4.) A comment applicable to this measure further states that an "[e]mission reduction credit for this measure would only account for control efficiency beyond that provided by watering required by SCAQMD Rule 403." (Supplement, Table S4.6-18, p. 4-390, Comments column.)

However, the Supplement does not state what control efficiency was actually assumed in estimating emission reductions from this measure. It also does not state what baseline control efficiency was assumed from implementing SQAMD Rule 403. It further fails to mention to which portion of the construction emissions the emissions reduction is applied. Thus, it is impossible to evaluate the efficacy of this measure. The specific control efficiency assumed in the emission reduction calculations should be stated and required as part of the mitigation measure.

We note that 90% to 95% control for this measure is high and if assumed in the emission reduction calculations, reductions have been overestimated and actual air quality impacts understated. The SCAQMD CEQA Guidelines, for example, report a control range for the use of non-toxic soil stabilizers on inactive areas of 30 to 65% and on exposed storage piles with greater than 5% silt content of 30 to 74%. (SCAQMD 4/93, Table 11-4.)

Response:

The 90 percent to 95 percent figure in the document is incorrect. The correct estimate that was used in emission reduction calculations is 63 percent. The construction analysis only assumed a very conservative emission reduction estimate of 63 percent from implementation of all fugitive dust mitigation measures. The use of non-toxic soil stabilizers was one of several fugitive dust mitigation measures assumed to be included in the project construction. The correction has been incorporated into the Final EIS/EIR.

SAL00015-275

Comment:

V.B.5 SCAQMD Rule 403 Measures

The Project would qualify as a "large operation" under SCAQMD's Rule 403. The requirements for large operations include implementation of mitigation measures in SQAMD Rule 403 Tables 1 and 2 for each source of fugitive dust or obtaining an approved fugitive dust emissions control plan. (SQAMD Rule 403(f).) The mitigation measures listed in the Supplement do not include obtaining a SQAMD Rule 403 Control Plan. Further, even if they did, the measures included in this plan should be set out in the Supplement for public review.

Two of the measures listed as mitigation measures in Supplement Table S4.6-18 are listed in SCAQMD Rule 403 Tables 1 and 2 and thus are regulatory requirements and cannot be treated as mitigation measures - applying dust suppression in sufficient quantity and frequency to maintain a stabilized surface to disturbed areas and active storage piles. These measures are comparable to SCAQMD Rule 403 measures 2a, 2b, and 2c in Table 2. Thus, they are not valid mitigation, but part of the baseline. We previously commented that SCAQMD Rule 403 requires implementation of best available dust suppression control measures and that soil stabilization and watering cannot be claimed as mitigation. (2001 Fox Comments, IV.A, pp. 21/22.) In response, the Supplement removed watering from the list of proposed mitigation measures but inexplicably left soil stabilization of inactive construction areas and of storage piles listed as mitigation measures. (Supplement, Appx. S-E, p. 2 and Supplement, p. 4-390.)

Further, SCAQMD Rule 403 requires certain additional mitigation that is not listed in Table S4.6-18 and was not mentioned as included in the unmitigated baseline calculations. These include the trackout provision of SCAQMD Rule 403(d)(5) and the best available control measures for high wind conditions in SCAQMD Rule 403, Table 1. The Supplement must be revised to clarify and documentation of the assumptions underlying the unmitigated baseline as well as the mitigated scenarios.

Response:

A Dust Control Plan is required under SCAQMD's Rule 403 for large projects undertaken in the South Coast Air Basin as stated in Appendix S-E (Section 2.3.2.1) of the Supplement to the Draft EIS/EIR. This is not included as mitigation because it is a rule requirement. The Dust Control Plan is not part of the CEQA process; rather, it is approved by the SCAQMD as part of the permitting process for the project. The plan, when submitted to SCAQMD, will contain any and all feasible dust control measures, including those outlined in the section of Appendix S-E noted above.

The baseline conditions would be the project with no dust control measures applied. The measures applied are then quantified to determine what remaining dust impacts are associated with the proposed project. Rule 403's dust control measures overlap greatly with the SCAQMD's CEQA Handbook that does, in fact, consider these measures to be valid mitigation. Air quality mitigation is only credited for emission reductions conservatively expected to be achieved beyond that provided by watering required in SCAQMD Rule 403, as noted in Appendix S-E of the Supplement to the Draft EIS/EIR (Section 2.3, Table S23).

It is assumed that construction operations will cease during high wind conditions. This is, in fact, a rule requirement, and it will be strictly adhered to.

SAL00015-276

Comment:

V.C All Feasible Construction Mitigation Not Required

The Supplement indicates that the revised mitigated construction emissions are significant for all alternatives and all pollutants in the interim year and in 2015, except for sulfur dioxide ("SO₂") in the interim year for Alternative D and SO₂ for all alternatives in 2015. (Supplement, Tables S4.6-23, S4.6-25.) The Supplement also indicates that these construction emissions would variously cause or contribute to violations of ambient air quality standards on CO, NO₂, and PM₁₀ in the interim and horizon year. (Supplement, Table S4.6-22.) Therefore, all feasible construction mitigation must be required for all pollutants. The Supplement has not required all feasible construction mitigation.

Mitigated construction emissions are substantially higher than significance thresholds, running into many hundreds of tons (for VOC, SO_x, PM₁₀) to many thousands of tons per year (NO_x) of pollutants. (Supplement, Table S4.6-21.) In spite of these huge emissions and the severe ozone and PM₁₀ nonattainment problems in the South Coast, this Project is proposing to mitigate only a small fraction of its emissions. The Supplement indicates that the proposed construction mitigation would reduce CO emissions by 2% to 3%; VOC emissions by 2% to 6%; NO_x emissions by 22%; SO_x emissions by 3%; and PM₁₀ emissions by 31%.²⁵ As discussed in Comment III.D.1, the claimed NO_x and PM₁₀ reductions appear to be unrealistic, given the proposed mitigation program.

These construction emissions for the Project are not included in the current State Implementation Plan ("SIP") and thus have not been considered by SCAQMD in its efforts to come into compliance with ambient air quality standards. (Draft EIS/EIR, pp. 4-476/478.) Because the South Coast is required by law to come into compliance with federal and state ambient air quality standards, these emissions must be reduced by somebody. Therefore, the Supplement by failing to propose adequate mitigation, in effect, has placed the burden on other parties to mitigate emissions from the expansion of LAX.

We listed a large number of feasible construction mitigation measures in our comments on the Draft EIS/EIR. (2001 Fox Comments, IV.E, pp. 24-31.) Some of these were incorporated into the Supplement. However, many were not. The Supplement contains no explanation for its particular choice of construction mitigation measures from the list we proposed. Since our previous comments, a number of additional construction mitigation measures have been suggested and become feasible. Thus, we recommend that the Supplement be revised to require the additional feasible mitigation measures

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identified below. If these measures are not adopted, the Final EIS/EIR should explain with specificity why these measures are not feasible for this Project.

25 Percentage reductions in emissions estimated from [(Table S4.6-21 emissions) - (Table S4.6-11 emissions)]/(Table S4.6-11 emissions).

Response:

State CEQA Guidelines and federal NEPA regulations do not mandate that a project must bring its emissions below significance in order to obtain project approval and proceed. Projects are approved in the South Coast Air Basin regularly that are simply too large in scale or have other extenuating circumstances that preclude it from reaching a level of insignificance. Further, there are very few feasible mitigation measures currently available to control oxides of nitrogen, oxides of sulfur, and volatile organic compounds from construction operations. LAWA is implementing all feasible mitigation measures but the commentor is correct in asserting that the project will still have significant air quality impacts after such mitigation is implemented. LAWA and FAA believe that adequate construction emissions associated with the LAX Master Plan are included in the 2003 AQMP.

As stated in Response to Comment SAL00015-275, all feasible comments were incorporated into the Supplement to the Draft EIS/EIR. Those that were not included were found to be infeasible for reasons such as redundancy with another measure or that it was inapplicable to this project. Please see Section 2.3.2 in Appendix S-E of the Supplement to the Draft EIS/EIR for a discussion of how the air quality mitigation measures were selected. Please see Response to Comment SAL00015-277 and SAL00015-278.

SAL00015-277

Comment:

V.C.1 Fugitive Dust Mitigation Measures

The identification of the type and amount of construction mitigation for PM10 requires that the source of the emissions be separately calculated. However, the Supplement (and the Draft EIS/EIR) aggregate construction emissions, precluding meaningful analysis and evaluation. Thus, it is not possible to determine the amount of the total PM10 emissions that originate from fugitive dust sources (e.g., wind blown dust, drop operations, earth moving) and the amount that originates from equipment exhaust. Hence, it is not possible to determine the amount of fugitive dust mitigation versus engine exhaust mitigation that is required.

However, typically, 80% to 90% of the PM10 emissions from a construction Project originate from fugitive sources. Thus, fugitive PM10 emissions remain highly significant after imposition of the mitigation measures in the Supplement. (Supplement, Table S4.6-21.) There are numerous additional feasible mitigation measures that should be required. We believe the implementation of the following measures could significantly reduce fugitive dust PM10 emissions and they should be required as mitigation for this project:26

- For backfilling during earthmoving operations, water backfill material or apply dust palliative to maintain material moisture or to form crust when not actively handling; cover or enclose backfill material when not actively handling; mix backfill soil with water prior to moving; dedicate water truck or large hose to backfilling equipment and apply water as needed; water to form crust on soil immediately following backfilling; and empty loader bucket slowly; minimize drop height from loader bucket. (CCHD)27

- During clearing and grubbing, prewet surface soils where equipment will be operated; for areas without continuing construction, maintain live perennial vegetation and desert pavement; stabilize surface soil with dust palliative unless immediate construction is to continue; and use water or dust palliative to form crust on soil immediately following clearing/grubbing. (CCHD)

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- While clearing forms, use single stage pours where allowed; use water spray to clear forms; use sweeping and water spray to clear forms; use industrial shop vacuum to clear forms; and avoid use of high pressure air to blow soil and debris from the form. (CCHD)
- During cut and fill activities, prewater with sprinklers or wobblers to allow time for penetration; prewater with water trucks or water pulls to allow time for penetration; dig a test hole to depth of cut to determine if soils are moist at depth and continue to prewater if not moist to depth of cut; use water truck/pull to water soils to depth of cut prior to subsequent cuts; and apply water or dust palliative to form crust on soil following fill and compaction. (CCHD)
- For large tracts of disturbed land, prevent access by fencing, ditches, vegetation, berms, or other barrier; install perimeter wind barriers 3 to 5 feet high with low porosity; plant perimeter vegetation early; and for long-term stabilization, stabilize disturbed soil with dust palliative or vegetation or pave or apply surface rock. (CCHD)
- In staging areas, limit size of area; apply water to surface soils where support equipment and vehicles are operated; limit vehicle speeds to 15 mph; and limit ingress and egress points. (CCHD)
- For stockpiles, maintain at optimum moisture content; remove material from downwind side; avoid steep sides or faces; and stabilize material following stockpile-related activity. (CCHD)
- To prevent trackout, pave construction roadways as early as possible; install gravel pads; install wheel shakers or wheel washers, and limit site access. (CCHD)
- When materials are transported off-site, all material shall be covered, effectively wetted to limit visible dust emissions, or at least six inches of freeboard space from the top of the container shall be maintained (BAAQMD, SJVUAPCD, SCAQMD Rule 403 Handbook, 28 ADEQ29).
- Trucks transporting fill material to and from the site shall be tarped from the point of origin. (SBCAPCD, SCAQMD Rule 403 Handbook)
- Where feasible, use bedliners in bottom-dumping haul vehicles. (SCAQMD Rule 403 Handbook)
- Install wind breaks at windward side(s) of construction areas (BAAQMD, SJVUAPCD).
- Grade each phase separately, timed to coincide with construction phase or grade entire project, but apply chemical stabilizers or ground cover to graded areas where construction phase begins more than 60 days after grading phase ends (SCAQMD Rule 403 Handbook).
- All operations shall limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at least once every 24 hours when operations are occurring. (BAAQMD) The SJVUAPCD adds: The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions. Use of blower devices is expressly forbidden. (SJVUAPCD).
- Cover inactive storage piles. (BAAQMD, BCAQMD, SBCAPCD, MBUAPCD)
- Cover active storage piles. (SCAQMD Rule 403 Handbook)
- Install sandbags or other erosion control measures to prevent silt runoff to public roadways from sites with a slope greater than 1% (BAAQMD, SJVUAPCD).
- Limit areas subject to excavation, grading, and other construction activity at any one time (BAAQMD, SJVUAPCD).
- During initial grading, earth moving, or site preparation, projects 5 acres or greater may be required to construct a paved (or dust palliative treated) apron, at least 100 ft in length, onto the project site from the adjacent site if applicable. (BCAQMD)
- Replant vegetation in disturbed areas as quickly as possible. (BAAQMD)

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- Gravel pads must be installed at all access points to prevent tracking of mud on to public roads. (SBCAPCD)
- The contractor or builder shall designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust offsite. (SBCAPCD, SLOCAPCD)
- Prior to land use clearance, the applicant shall include, as a note on a separate informational sheet to be recorded with map, these dust control requirements. All requirements shall be shown on grading and building plans. (SBCAPCD, SLOCAPCD)
- Use 3- to 5-foot barriers with 50% or less porosity located adjacent to roadways or urban areas to reduce windblown material leaving site (SCAQMD Rule 403 Handbook).
- Barriers with 50% or less porosity located adjacent to roadways to reduce windblown material leaving a site. (SCAQMD Rule 403 Handbook)
- During high wind conditions, cease all land clearing and earth moving operations or apply water within 15 minutes to any soil surface that is being moved or otherwise disturbed. (SCAQMD Rule 403 Handbook, CCHD)
- Limit fugitive dust sources to 20% opacity. (ADEQ)
- Require a dust control plan for earthmoving operations. (ADEQ)
- Limit speed on unpaved roads. (SCAQMD, ADEQ)
- All demolition materials shall be wet crushed. (El Toro FEIR)³⁰
- Increase watering from twice a day to four times daily during initial storage pile placement and maximize application of non-toxic soil binders according to manufacturer's specification to exposed stockpiles (i.e. gravel, sand, dirt) with 5% or greater silt content. (El Toro FEIR)
- All grading equipment will be mounted with TrueFog dust suppression technology or comparable technology. This technology sprays a very fine mist of water around the construction equipment. This combines with the fugitive dust in the air causing it to fall back to the ground. (El Toro FEIR)
- All locations where scrapers, dozers and compactors will be traveling on exposed earth shall be watered four times per day and soil binders shall be used daily as necessary, consistent with manufacturers' directions. (El Toro FEIR)
- All demolition materials shall be wet crushed. (El Toro FEIR)

These measures have been widely used and required as CEQA mitigation in numerous EIRs. See, for example, the fugitive dust control program for the Big Dig (Kasprak and Stakutis 200031), for the El Toro Reuse Final EIR, and for the Padres Ballpark Final EIR.³²

²⁶ The following acronyms are used in this listing of mitigation measures: ADEQ = Arizona Department of Environmental Quality; BCAQMD = Butte County Air Quality Management District; BAAQMD = Bay Area Air Quality Management District; CCHD = Clark County (Nevada) Health Department; MBUAPCD = Monterey Bay Unified Air Pollution Control District; SBCAPCD = Santa Barbara County Air Pollution Control District; SCAQMD = South Coast Air Quality Management District; SJVUAPCD = San Joaquin Valley Unified Air Pollution Control District; SLOCAPCD = San Luis Obispo County Air Pollution Control District; VCAPCD = Ventura County Air Pollution Control District. The mitigation measures from air pollution control agencies are taken from their respective CEQA guidelines. The references to these guidelines were provided in our previous comments. (See 2001 Fox Comments, 1V.E.1, pp. 25 ff)

²⁷ Clark County [Nevada] District Board of Health, Construction Activities Notebook Including the Section 94 Handbook, August 24, 2000.

²⁸ South Coast Air Quality Management District (SCAQMD), Rule 403 Implementation Handbook, January 1999.

29 Arizona Department of Environmental Quality ("ADEQ"), Air Quality Exceptional and Natural Events Policy PM10 Best Available Control Measures, June 5, 2001.

30 County of Orange, Final Environmental Impact Report No. 573 for the Civilian Reuse of MCAS El Toro and the Airport System Master Plan for John Wayne Airport and Proposed Orange County International Airport, SCH No. 98101053, August 2001.

31 A. Kasprak and P.A. Stakutis, A Comprehensive Air Quality Control Program for a Large Roadway Tunnel Project, Proceedings of the Air & Waste Management Association's 93rd Annual Conference 7 Exhibition, June 18-22, 2000.

32 City of San Diego, Final Subsequent Environmental Impact Report to the Final Master Environmental Impact Report for the Centre City Redevelopment Project and Addressing the Centre City Community Plan and Related Documents for the Proposed Ballpark and Ancillary Development Projects, and Associated Plan Amendments, V. IV. Responses to Comments, September 13, 1999, pp. IV-254 to IV-256.

Response:

Fugitive dust emissions are based on an emission factor which equates to pound of dust per acre graded. The Supplement to the Draft EIS/EIR has conservatively calculated PM10 emissions from grading, earth moving, equipment, etc., as well as accounted for any overlap in construction phases. Please see Appendix S-E of the Supplement to the Draft EIS/EIR for a more detailed discussion of construction-related air quality impacts.

Many of the measures suggested by the commentator are a part of SCAQMD Rule 403 - Fugitive Dust. Rule 403 requires that a Dust Control Plan be developed and implemented as part of any large-scale construction project. Because Rule 403 is a legally mandated regulation, measures included in the Dust Control Plan cannot be considered mitigation.

The following paragraphs highlight the specific measures proposed by the commentator and the rationale for why the measures were included or excluded from the Supplement to the Draft EIS/EIR.

"Water backfill material or apply dust palliative to maintain material moisture or to form crust when not actively handling . . ." etc. This measure is considered part of Rule 403 and not a valid mitigation measure.

"During clearing and grubbing, prewet surface soils where equipment will be operated; for areas without continuing construction, maintain live perennial vegetation and desert pavement; stabilize surface soil with dust palliative unless immediate construction is to continue; and use water or dust palliative to form crust on soil immediately following clearing/grubbing." Both the use of dust suppressants and soil stabilizers will be included in the Final EIS/EIR. Perennial vegetation is not feasible at this time as there are no plans to leave graded areas for prolonged length of time. If a graded area were to be disturbed and left for a prolonged period of time, then LAWA will revisit this suggestion during that phase of construction. It is unexpected at this time.

"While clearing forms, use single stage pours where allowed; use water spray to clear forms; use sweeping and water spray to clear forms; etc." LAWA is committed to watering and applying the use of chemical dust suppressant as highlighted in Table S23. Further, there are no plans to use high-pressure air to blow soil and debris as the ultimate goal is to reduce emissions as a result of the proposed project rather than contribute to fugitive PM.

"During cut and fill activities, prewater with sprinklers or wobblers to allow time for penetration; prewater with water trucks or water pulls . . ." As stated in the Supplement to the Draft EIS/EIR, watering will occur no less than three times daily. Twice daily water is a component of Rule 403 with an additional control efficiency applied to three times daily.

"For large tracts of disturbed lands, prevent access by fencing, ditches, vegetation, etc." There are no current plans to provide fencing, as its control efficiency would be speculative. The combined control related to watering, paving, chemical dust suppressants and the myriad of other control measures provided in Table S23 make fencing unnecessary at this time. LAWA is not opposed to investigating this control option further if it becomes necessary during the construction phases of the project.

"In staging areas, limit size of area; apply water to surface soils where support equipment and vehicles are operated; limit vehicle speeds to 15 mph; and limit ingress and egress points." Limiting speed limits

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to 15 mph is a requirement of Rule 403 and is not considered a valid mitigation. LAWA intends, however, to incorporate this element into its Dust Control Plan.

"For stockpiles, maintain at optimum moisture content; remove material from downwind side; . . ." This suggested measure is already contained in Table S23, page 42.

"To prevent track out, pave construction roadways as early as possible; install gravel pads; install wheel shakers or wheel washers, and limit site access." Paving construction roadways is already included in Table S23. Further, wheel washers will be included at the site but were not specifically mentioned, as they are a component of Rule 403.

The commentor's three suggested measures related to trucks hauling materials and the associated bedliners, tarps and freeboard spaces can be addressed as follows: all of these suggestions are components of Rule 403's Implementation Manual and will be incorporated into the Dust Control Plan.

"Install wind breaks at windward sides of construction areas . . ." As stated above regarding fencing, the combined control related to watering, paving, chemical dust suppressants and the myriad of other control measures provided in Table S23 make fencing unnecessary at this time. LAWA is not unopposed to investigating this control option further if it becomes necessary during the construction phases of the project.

"Grade each phase separately, timed to coincide with construction phase or grade entire project, but apply chemical stabilizers or ground cover to graded areas. . . ." There are no plans to ever leave a graded area unattended for any length of time. Watering as well as soil stabilizers are included as part of fugitive mitigation.

"All operations shall limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at least once every 24 hours when operations are occurring." LAWA intends to pave construction access roads, provide wheel washers, etc., to limit the accumulation of mud or dirt from adjacent public streets. In addition, this is another component of SCAQMD Rule 403 and is considered a legal mandate.

"Cover active and inactive storage piles." These measures are part of Rule 403's Implementation Handbook. However, LAWA intends to stabilize any active or inactive piles with the use of watering and non-toxic soil stabilizers.

"Install sandbags or other erosion control measures to prevent silt runoff to public roadways from sites with a slope greater than 1%." There is no anticipated silt runoff from the project. There will be limited areas graded; construction access roads will be paved, watering and chemical dust suppressants will be applied, etc. LAWA does not find this measure necessary at this time but is not unopposed to revisiting it if it becomes necessary during the construction phases of the project.

"Limit areas subject to excavation, grading, and other construction activity at any one time." LAWA agrees with this measure and will incorporate it into the Final EIS/EIR.

"During initial grading, earth moving, or site preparation, projects 5 acres or greater may be required to construct a paved apron at least 100 feet in length . . ." LAWA will be paving access roads onto the construction site that will be at least 100 feet in length to reduce track out. Please see Table S23, page 43 for a discussion of this measure.

"Replant vegetation in disturbed areas as quickly as possible." This construction project is occurring at an already-existing international airport. Therefore, there is very little existing vegetation on site that would be disturbed as part of the proposed project. In addition, this is a component of Rule 403 and therefore, is not considered valid mitigation.

"Gravel pads must be installed at all access points . . ." This measure is unnecessary as the access roads will be paved, trucks covered and wheel washers installed.

"The contractor or builder shall designate a person or persons to monitor the dust control program and to order increased watering . . ." This measure is already included in Table S23, page 42.

"Prior to land clearance, the applicant shall include, as a note on a separate informational sheet to be recorded with map, these dust control requirements. . . ." All significant construction projects are required to complete a Dust Control Plan per the SCAQMD's Rule 403. The requested information will be contained in this public record and be viewed by any interested party by contacting the SCAQMD's Public Records Office at 396-2000.

The following two measures related to barriers can be addressed as follows: This construction activity is occurring at an already existing international airport. Small areas of the airport will be constructed at any given time to minimize emissions and help maintain the flow of the facility. As such, wind barriers are unnecessary given that the facility itself is creating a barrier against "adjacent roadways and urban areas." LAWA does not find this measure necessary at this time but is not unopposed to revisiting it if it becomes necessary during the construction phases of the project.

"During high wind conditions, cease all land clearing and earth moving operations or apply water within 15 minutes . . ." This measure can be found in Rule 403 and is not considered valid mitigation. LAWA intends to follow this policy at all times during project construction.

"Limit fugitive dust sources to 20% opacity." This measure is a requirement of Rule 401 - Visible Emissions and is not considered to be mitigation.

"Require a dust control plan for earthmoving operations." Please see the response above regarding a mandatory Dust Control Plan.

"Limit speed on unpaved roads." This proposal is a required component of SCAQMD Rule 403 and not considered to be mitigation. However, the Final EIS/EIR can be modified to reflect LAWA's intention of adhering to this policy. Construction access roads will be paved but a 15 mph speed limit will be adhered to on the construction site pursuant to Rule 403.

"All demolition materials shall be wet crushed." SCAQMD Rule 1403 requires the wetting of demolition materials if asbestos is found; therefore, this is a rule requirement and is not considered to be mitigation.

"Increase watering from twice a day to four times daily during initial storage pile placements . . ." Watering will be conducted no less than three times daily. If the Mitigation Monitor assigned to the site finds that additional watering or chemical stabilizers are necessary, it will be within his/her jurisdiction to request such watering.

"All grading equipment will be mounted with TrueFog dust suppression technology or comparable technology. . ." LAWA is still researching the various dust suppressions available as well as the various associated technologies. LAWA will research the commentor's suggestion closer to construction and consider this option.

"All locations where scrapers, dozers, and compactors will be traveling on exposed earth shall be watered four times per day . . ." Please see the comment above regarding increased watering and storage pile placements.

"All demolition materials shall be wet crushed." Please see the comment above regarding Rule 1403 and asbestos-containing materials.

SAL00015-278

Comment:

V.C.2 Construction Exhaust Mitigation Measures.

The CO, VOC, NOx, and SOx construction emissions originate solely from the combustion of fuel in engines of construction equipment. About 10% to 20% of the PM10 emissions also originate from engine exhaust. The mitigated construction emissions as disclosed in the Supplement and Draft EIS/EIR exceed the significance thresholds by substantial amounts in all years and for all alternatives for CO, VOC, and NOx and in 2004 for alternatives A through C. Nonetheless, the Supplement only proposes three measures with the potential to significantly reduce these emissions - the use of "cleaner

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burning fuels," the use of post-combustion controls and/or exhaust gas recirculation, and the use of electricity from power poles, where available. However, the emission reductions assumed in the mitigated air quality analyses suggest that these measures would not be used to the extent feasible. (See Comment III.D.) Further, there are additional feasible mitigation measures that could be implemented to further reduce exhaust emissions. These include:

- Configure construction parking to minimize traffic interference. (SCAQMD)
- Provide temporary traffic control during all phase of construction activities to improve traffic flow (e.g., flagperson). (SCAQMD)
- Develop a construction management plan that includes but is not limited to rerouting construction of congested streets, consolidating truck deliveries, providing dedicated turn lanes for movement of construction trucks and equipment on-site and off-site, and minimizing use of construction vehicles and equipment. (SCAQMD)
- Use alternative fueled (e.g., LNG, natural gas) construction equipment. (SJVUAPCD)
- Limit the idling time to 2 minutes (SCAQMD), instead of the proposed 10 minutes.
- Limit the hours of operation of heavy duty equipment and/or the amount of equipment in use. (SJVUAPCD)
- Implement activity management (e.g., rescheduling activities to reduce short-term impacts). (SJVUAPCD)
- Construction equipment operating onsite shall be equipped with two to four degree engine timing retard or pre-combustion chamber engines. (SBCAPCD, SLOCAPCD)
- Install high pressure injectors on diesel construction equipment. (SLOCAPCD)
- Install catalytic converters on gasoline-powered equipment, where feasible. (SBCAPCD, SLOCAPCD)
- Minimize construction worker trips by requiring carpooling or use of public transit. (SBCAPCD)
- During smog season (May through October), the construction period should be lengthened so as to minimize the number of vehicles and equipment operating at the same time. (VCAPCD)
- Construction would take place over an extended period of time, from 2004 through 2015. Thus, require the use of new technologies to control emissions as they become available and feasible. (VCAPCD)
- Require the use of catalytic oxidizers and particulate traps on all equipment where feasible, rather than the rather low percentage usage assumed in the Supplement. See Comment III.D.
- Require the recalibration (reflash) of engine software on applicable 1993 to 1998 electronically controlled engines to reduce NOx emissions.
- Require the use of ultra-low sulfur diesel (5 to 15 ppmw) in all diesel-fueled on-site construction equipment and all delivery trucks.
- If PuriNOxTM or equivalent diesel formulation is used, require that it be formulated from ultra-low sulfur diesel.
- Replace fuel injectors.
- Use closed loop crankcase filtration.
- Use lean NOx catalysts (MECA)
- Use enhanced combustion modifications, e.g., cams, coating, supercharger, engine rebuild kits (MECA)

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- Use selective catalytic reduction ("SCR") and oxidation system combinations on construction equipment to control PM (20-50% reduction, CO and VOCs (up to 90% reduction), and NOx (50-90%) reduction. (MECA)
- For all emissions above the significance thresholds not otherwise reduced, require emission offsets. (SLOCAPCD).
- All off-road construction equipment shall comply with the requirements of 40 CFR (9, 86, 89) Tier 2 emission requirements, which provide for strict emission limits for construction vehicles. (El Toro FEIR)
- All off-road construction equipment shall comply with the requirements of AQMP Measures M9 and M10, limiting NOx emissions to 2.5 g/bhp-hr, beginning the first day of construction. (El Toro FEIR.)
- Set CO, VOC, NOx, PM10, and SOx emission reduction goals for the construction fleet that require a minimum overall 80% reduction in emissions.
- All on-site mechanic and foreman trucks and vehicles will be required to meet Super Ultra-low Emission Vehicle ("SULEV") or Zero Emission Vehicle ("ZEV") emission standards. (El Toro FEIR)
- To the maximum extent permitted by law and regulations, the County and its contractors shall require that construction workers be housed (Monday through Friday) on-site in trailers/mobile homes/RVs or reused military housing, and shall provide rail/bus/metro passes or clean vehicle shuttle service for those construction workers that will not be housed on-site. (El Toro FEIR)
- LAWA and its contractors shall provide clean-fleet shuttles to major transit stations and multi-modal centers during construction phases of the Project.
- The construction contractors shall use emulsified asphalts that do not contain volatile hydrocarbons in lieu of cutback asphalts to avoid VOC emissions associated with cutback asphalts. (El Toro FEIR)
- The amount of architectural coatings shall be minimized by using spray equipment that has high transfer efficiencies, such as the electrostatic spray gun and manual paint applicators. (El Toro FEIR)
- Pre-coated materials or materials that have natural surfaces shall be used to the maximum extent feasible to avoid the use of VOC emissions from architectural coatings. The building surface areas used for the project shall be at least 70 percent precoated or composed of natural surfaces. (El Toro FEIR)
- The county shall use low or zero VOC content paints wherever feasible to reduce VOC emissions from architectural coatings. (El Toro FEIR)

These measures have been widely used and required as CEQA mitigation in numerous EIRs. See, for example, the exhaust emissions reduction program for the El Toro Reuse Final EIR.

Response:

The following paragraphs highlight the specific measures proposed by the commentor and the rationale for why the measures were included or excluded from the Supplement to the Draft EIS/EIR.

"Configure construction parking to minimize traffic interference." This measure is included on page 41 of the Supplement to the Draft EIS/EIR entitled "Construction-related Mitigation Measures Not Quantified." The document uses the terms staging areas and parking areas synonymously.

"Provide temporary traffic control during all phases of construction activities to improve traffic flow . . ." These flag persons will be included throughout the duration of project construction but were not included or quantified as mitigation.

"Develop a construction management plan . . ." This construction project is significant in both size and duration. It has been broken into phases, each carefully planned to minimize disruption to the airport and surrounding communities. There is no need for a construction management plan at this time.

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"Use alternative fueled construction equipment. . ." This measure has been implemented by committing to the use of cleaner burning diesel fuel and exhaust emission controls. Please see Table S23, page 41.

"Limit idling time to 2 minutes instead of the proposed 10 minutes." The idling time may be lowered in the future but is currently proposed to remain at 10 minutes. Depending upon the type of equipment, emissions from cold starts can exceed emissions from idling; therefore, mandating a shut down after only two minutes could be environmentally adverse.

"Limit the hours of operation of heavy duty equipment and/or the amount of equipment in use." The construction analysis conducted was based on the most conservative assumption that all pieces of construction equipment would be operating simultaneously during that phase of construction. This analysis was based on worst-case assumptions that are neither feasible nor realistic. Construction equipment has been phased in and will, of course, only be used when necessary.

"Implement activity management . . ." All efforts have been taken to minimize adverse impacts, both short-term and long-term. It is unclear what specific efforts the commentor is referring to but all activities will be scheduled to minimize short-term impacts.

"Construction equipment operating onsite shall be equipped with two to four degree engine retard or pre-combustion chamber engines." This is assumed to be unnecessary on a new engine.

"Install high pressure injectors on diesel construction equipment." This retrofit is assumed to be unnecessary on a new engine.

"Minimize construction worker trips by requiring carpooling or use of public transit." LAWA has already implemented a successful rideshare program for its permanent employees as part of SCAQMD Rule 2202. Construction workers, based on their various home locations, employers, phases of construction and contract durations, are not realistic candidates for a successful rideshare program. Rather than carpool, construction workers will begin work during off-peak traffic hours; staging areas will be designed to minimize traffic congestion, etc. Therefore, construction worker carpooling will not be a requirement in the Mitigation Monitoring and Reporting Plan.

"During smog season (May through October), the construction period should be lengthened so as to minimize the number of vehicles and equipment operating at the same time." There are no plans to expand the construction period during the smog season. Phases of construction are scheduled based on the completion of the previous task and to avoid overlapping of phases and creating additional emissions.

"Construction would take place over an extended period of time, from 2004 through 2015. Thus, require the use of new technologies to control emissions as they become available and feasible." LAWA agrees that any feasible and cost-effective technologies that reduce pollution should be implemented as they become feasible. Therefore, this suggestion will be incorporated into the Final EIS/EIR for the proposed project.

"Require the use of catalytic oxidizers and particulate traps on all equipment where feasible, rather than the low percentage usage assumed in the Supplement." LAWA agrees with the commentor and has included this mitigation measure in Table S23. All equipment will be equipped with catalytic oxidizers and particulate traps, where feasible. Any percentages given in the document are based on the most conservative analysis since it cannot be foreseen at this time whether each and every piece of equipment can be successfully equipped with these devices.

"Require the recalibration (reflash) of engine software on applicable 1993 to 1998 electronically controlled engines to reduce NOx emissions." It is LAWA's intention to use newer engines at the construction site, where feasible. Other NOx measures are being implemented to reduce emissions on all engines, not just older model engines. Therefore, there are no plans to incorporate this measure at this time.

"Require the use of ultra-low sulfur diesel (5 to 15 ppmw) in all diesel-fueled on-site construction equipment and all delivery trucks." This suggestion is a legally mandated requirement by the City of Los Angeles. This measure is assumed in the analysis but is not considered mitigation. "If PuriNOx TM or equivalent diesel formulation is used, require that it be formulated from ultra-low sulfur diesel." Any

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PuriNOx fuel used at the airport is required to comply with SCAQMD Rule 431.2. This rule has a declining allowable SOx emission limit, the lowest of which begins in 2005; the projected first year of construction.

"Replace fuel injectors." Equipment is assumed to be maintained as needed.

"Use closed loop crankcase filtration." It is assumed that this is part of the internal combustion engine design. No mitigation credit was taken for this.

"Use lean NOx catalysts." LAWA has committed to using oxidation catalysts wherever feasible.

"Use enhanced combustion modifications . . ." Retrofits such as engine rebuild kits are considered unnecessary at this time as LAWA plans to use new engines wherever feasible.

"Use selective catalytic reduction and oxidation system combinations on construction equipment to control PM and NOx reduction." SCR is considered technologically infeasible for mobile equipment at this time. All equipment, however, will be equipped with an oxidation catalyst where feasible.

"For all emissions above the significance thresholds not otherwise reduced, require emission offsets." This is not legally required on temporary construction projects nor is it considered legitimate mitigation for a project's localized impacts. This suggestion will not be considered in the Final EIS/EIR.

"All off-road construction equipment shall comply with the requirements of 40 CFR Tier 2 emission requirements, which provide for strict emission limits for construction vehicles." All engines being used at the proposed project site will comply with the California Air Resources Board's Off-Road Engine Standards.

"All off-road construction equipment shall comply with the requirements of AQMP Measures M9 and M10, limiting NOx emissions to 2.5 g/bhp-hr, beginning the first day of construction." All engines being used at the proposed project site will comply with the California Air Resources Board's Off-Road Engine Standards.

"Set CO, VOC, NOx, PM10 and SOx emission reduction goals for the construction fleet that require a minimum overall 80% reduction in emissions." Emission reduction goals can only be set based on what is technologically feasible and cost-effective. Setting a numerical goal of 80% with the anticipation that technology will improve is unrealistic and speculative at this time.

"All on-site mechanic and foreman trucks and vehicles will be required to meet Super Ultra-low Emission Vehicle or Zero Emission Vehicle emissions standards." All on-site construction vehicles will meet the lowest practical emission standards, where feasible and cost-effective. The Supplement to the Draft EIS/EIR does not consider or treat foreman trucks any differently than any other vehicles required to be operating at the site.

"To the maximum extent permitted by law and regulations, the County and its contractors shall require that construction workers be housed on-site in trailers/mobile homes/RVs or . . ." This suggested measure cannot be considered feasible at this time.

"LAWA and its contractors shall provide clean-fleet shuttles to major transit stations and multi-modal centers during construction phases of the project." LAWA has no plans to implement this proposed measure at this time. These shuttles would need to be purchased, equipped with drivers, and circling the vicinity of the airport, which would exacerbate traffic congestion in this area.

"The construction contractors shall use emulsified asphalts that do not contain volatile hydrocarbons in lieu of cutback asphalts to avoid VOC emissions associated with cutback asphalts." LAWA agrees with this comment and will be utilizing emulsified asphalts, wherever feasible. The Final EIS/EIR will be modified to reflect this suggestion.

"The amount of architectural coatings shall be minimized by using spray equipment that has high transfer efficiencies, such as the electrostatic spray gun and manual paint applicators." The VOC content of architectural coatings is regulated under SCAQMD Rule 1113 - Architectural Coatings. There are many low-VOC coatings available with lower limits set for future years. These low- and zero-emission coatings render the type of application irrelevant regarding the amount of VOCs emitted.

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However, LAWA will investigate the various types of applications methods during construction and will select the method that is the most cost-effective and efficient with the most minimal impact to the environment.

"Pre-coated materials or materials that have natural surfaces shall be used to the maximum extent feasible to avoid the use of VOC emissions from architectural coatings. The building surface areas used for the project shall be at least 70 percent precoated or composed of natural surfaces." Please refer to the comment above regarding low- and zero-emission VOC coatings.

"The county shall use low or zero VOC content paints wherever feasible to reduce VOC emissions from architectural coatings." LAWA agrees with the commentor. SCAQMD Rule 1113 will be complied with at all times that specify a variety of low- or zero-VOC options.

SAL00015-279

Comment:

V.D Operational Mitigation Measures Are Inadequate

The operational mitigation program has also been revised and now includes 19 mitigation measures. (Supplement, Table S4.6-18.) Again, many of the proposed measures are too general to review or implement because they do not include any emission reduction targets, timeline for their implementation, or any means of assuring compliance. (See Comment V.A.)

As discussed earlier, the Supplement's analyses of operational emissions and resulting projected ambient air quality concentrations are seriously flawed. (See Comment IV.) However, even with the Supplement's flawed results, mitigated PM10 air quality impacts remain significant for all alternatives in both the interim year and in the year 2015. Consequently, all feasible mitigation must be implemented.

In our previous comments on the Draft EIS/EIR, we recommended a number of additional feasible mitigation measures, such as reduction of existing sources at LAX, reducing emissions from sources outside of LAX, and offsetting emissions with Reclaim credits. (2001 Fox Comment, IV.F.) The Supplement ignored most of these recommendations. Because air quality impacts remain significant after mitigation, LAWA must adopt all feasible mitigation.

Response:

Please see Response to Comment SAL00015-278 regarding mitigation measures and Response to Comment AL00033-334 regarding feasibility of mitigation measures.

SAL00015-280

Comment:

V.D.1 Heat Island Effect And Energy Conservation Not Adequately Addressed

We previously commented on the fact that the Draft EIS/EIR ignored the urban heat island effect generated by the hot surfaces of dark pavements and roofs in its air quality analysis, and recommended the implementation of mitigation that requires the use of "cool surfaces" for paving and roofs. (2001 Fox Comments, III.E, p. 20.) We further commented on the lack of commitment to the measures described in the Master Plan's energy conservation and efficiency program, the absence of specific measures and performance goals, and the fact that the plan is not applicable to existing structures. We recommended a long list of potential mitigation measures to address these issues, including the use of energy star roof products, energy-efficient air conditioners (e.g., water-cooled, rather than air-cooled), high-efficiency lighting and glass, daylighting (e.g., skylights), high-efficiency motors, automatic controls for lighting and equipment, photocell dimming, higher insulation levels than required by code, reflective roofs, and photovoltaics, among others. (2001 Fox Comments, IV.G, pp. 33 ff.)

The Supplement addressed our comments by including a single mitigation measure that appears to combine these issues, the "Energy Conservation" measure, which proposes to "[c]over any parking structures that receive direct sunlight to reduce volatile emissions from vehicle gasoline tanks and install solar panels on these roofs where feasible to supply electricity or hot water." It adds that this measure

would "potentially apply to surface lots and the top deck of parking garages" and that "[i]n installation of solar panels may only be feasible in decentralized structures." (Supplement, p. 4-391.)

This measure does not contain a commitment to implement this measure, as it is only "potentially" applicable and "may only be feasible in decentralized structures." In addition, the measure as drafted would apply only to parking structures and only marginally reduce the heat island effect by reducing VOC emissions from vehicle gasoline tanks. The Supplement does not provide an explanation how it intends to further address the heat island effect. It does not commit to installing "cool surfaces" on either the parking structures or any buildings. The use of solar panels on the numerous airport buildings was also

not required and there is no explanation of why none of the many other proposed energy conservation measures were adopted. Clearly, this measure is window-dressing at best and does not adequately address LAWA's obligation to implement energy conservation and efficiency measures to mitigate the significant impacts from its operation.

Response:

Please see Response to Comment AL00033-330 regarding heat island effects and Response to Comment AL00033-336 regarding energy conservation measures.

SAL00015-281

Comment:

V.D.2 Establishment Of ITCs Not Valid Mitigation

The Supplement claims that substantial emission reductions can be achieved through the construction of five additional intermodal transportation centers ("ITCs"), so-called "flyaways." As discussed above in Comment IV.B above, only one such ITC is proposed in Alternative D and none for Alternatives A through C. Consequently, the potential emissions reductions need to be reduced to a fifth of their present values for the calculation of mitigated emissions from Alternative D. No emission reduction credits for ITCs can be applied to Alternatives A through C.

Response:

Table S23 in Appendix S-E of the Supplement to the Draft EIS/EIR specifically states that "up to five additional facilities similar to the Van Nuys "flyaway." As noted in Section 2.3.2.2 in Appendix S-E of the Supplement to the Draft EIS/EIR, LAWA proposed to construct two remote, intermodal check-in terminals (flyaways) by 2005 and an additional three flyaways by 2015 (total of five). LAWA used outside consulting firms to perform detailed analyses of potential locations and associated implementation cost and feasibility. The studies conducted examined various locations including the following: Long Beach, Inglewood area, Union Station in downtown Los Angeles, Carson, etc. In some cases, actual plots of land to be purchased or leased were already identified. In other cases, progress was more preliminary and further research was needed.

At the time the Supplement to the Draft EIS/EIR was published, there may have been only one site confirmed for a flyaway location, but it is LAWA's intention to construct as many as five additional flyaways throughout Southern California. Emission reduction credits were taken for the flyaways that LAWA intends to build for all build Alternatives (Alternatives A, B, C, and D) based on the historical trip reductions from the implementation of the Van Nuys Flyaway.

SAL00015-282

Comment:

VI. DOCUMENTS UPDATED AFTER INITIAL PUBLICATION

The documents pertaining to the Supplement that were provided to us on a CD-ROM by LAWA are inconsistent with the documents presented on LAWA's LAX Master Plan internet homepage³³. For example, Attachments I and N to the Technical Report S-4, Air Quality, contained only headers on otherwise empty pages in the CD-ROM copy we were provided with. The document provided on the internet on the other hand contains complete tables with data. We have not been notified by LAWA that changes were made to the Supplement and its associated documents. The LAWA Master Plan

3. Comments and Responses

homepage itself also does not contain any notification that documents have been updated nor do the documents themselves contain any note to alert the reader to the fact.

We were unable to verify whether the content of other documents had also been updated or changed from the version we were provided with by LAWA. LAWA and FAA have a legal obligation under CEQA and NEPA to make their environmental analysis readily accessible to the public. This was a problem with the publication of the Draft EIS/EIR as well as the Supplement. The publication of inconsistent, incomplete, and altered documents in different locations fails to satisfy the agencies' legal obligation, renders the documents confusing and difficult to understand, and requires an explanation of the discrepancies and publication of corrected documents.

33 LAX Master Plan, <http://www.laxmasterplan.org>, accessed October 29, 2003.

Response:

Please see Response to Comment AL00033-255 regarding availability of the Draft EIS/EIR and Supplement to the Draft EIS/EIR for public review. As the commentor noted, in addition to having ready access to the document on the internet and at the aforementioned library locations, LAWA provided them with a CD-ROM copy. The blank pages noted by the commentor were due to technical error in the reproduction of the CD-ROM. Any anomalies caused by this technical error in the CD-ROM reproduction do not, however, appear in any of the other published mediums, to which the commentor had ready access, and do not negate LAWA and the FAA's legal compliance in regard to the publication and distribution of the Supplement to the Draft EIS/EIR. A corrected version of the CD-ROM containing the Supplement to the Draft EIS/EIR will be produced along with the Final EIS/EIR. Please see Response to Comment SAL00001-2 for details regarding specific dates that copies (both in hard copy and CD ROM versions) of the Supplement to the Draft EIS/EIR and Draft Master Plan were distributed to your office and to the attention of the City Clerk and Mayor of the City of El Segundo.

Finally, no changes to the content of the Supplement to the Draft EIS/EIR were made following its publication on July 9, 2003. Any discrepancies between the CD-ROM and the Internet version are due to an unintentional technical error in the reproduction of the CD-ROM, as noted above.

SAL00015-283

Comment:

VII. PUBLIC HEALTH IMPACTS ARE UNDERESTIMATED

We previously commented on the serious inadequacy of the Draft EIS/EIR's human health risk assessment ("HHRA"), which resulted from the use of inappropriate thresholds of significance, the lack of an assessment of non-cancer acute health risks, the underestimation of acrolein chronic health impacts, the inadequate assessment of lead, the lack of an assessment of health impacts from construction emissions, the inappropriate use of high instead of low load factors to estimate aircraft engine emissions, the lack of an assessment of health risk to terminal passengers, and the lack of a cumulative health risk assessment. Further, the proposed mitigation program, identical to the air quality mitigation program discussed in Comment IV, is inadequate for human health impacts for the same reasons discussed above. Additionally, the proposed mitigation program fails to recognize the differences in approaches that are required to mitigate air quality versus human health impacts. (2001 Fox Comments, V., pp. 40 ff.)

The Supplement addressed only a few of these issues. Consequently, our previous comments remain applicable, and are applicable to the evaluation of Alternative D as well. In addition, the Supplement has introduced some new problems, which are discussed below.

VII.A Health Risk Assessment Is Inadequate

The conclusions drawn in the Supplement's HHRA regarding the - mostly insignificant - impacts of proposed expansions of LAX, particularly with respect to Alternative D, are questionable. Neither the Draft EIS/EIR, nor the Supplement or their associated technical reports provide detailed enough information to comprehend or reproduce the steps taken in the HHRA to estimate acute and chronic noncancer health risks and cancer health risks from Project emissions. However, there are a number of indications that the HHRA is substantially flawed.

The methodology and data sets used by both the Draft EIS/EIR and Supplement results in substantial underestimates of the toxic air pollutant ("TAP") emissions inventories for the Project. This, in turn, results in considerable underestimates of ambient air TAP concentrations and, consequently, in erroneous conclusions regarding the significance of Project impacts. A number of reasons contribute to this substantial underestimate, as discussed in the following.

Response:

The threshold of significance identified for noncancer health effects was selected based on South Coast Air Quality Management District (SCAQMD) policies. No regulations exist that establish thresholds of significance for an entire facility such as LAX. The thresholds selected are consistent with the SCAQMD CEQA Handbook (1993) for assessing impacts of new developments as well as recent, publicly available correspondence from SCAQMD. Please note that the CARB document, Risk Management Guidelines for New and Modified Sources of Toxic Air Pollutants, July 1993, suggests an action range for the total hazard index ranging from 1 to 10. The SCAQMD Rule 1401 (g)(3) allows for selection of alternate hazard index levels, not to exceed 10. Rule 1402, which is for existing sources and more pertinent to the evaluation at hand, identifies a significant risk level of 5 for a chronic hazard index. Also, please note that the SCAQMD 1997 Air Quality Management Plan Draft EIR, Chapter 4 - Potential Environmental Impacts and Mitigation Measures, Subchapter 4.4 - Hazard/Human Health Impacts, identifies a threshold of significance of 5 for noncancer effects.

Please see Section 4.24.1, Human Health Risk Assessment, of the Supplement to the Draft EIS/EIR for an evaluation of acute health impacts. Regarding evaluation of acrolein emissions, acrolein emissions for aircraft were estimated from four U.S. Air Force/Battelle reports (Spicer, et al. 1984; Spicer, et al. 1987; Spicer, et al. 1988; Spicer, et al. 1990) that provided speciated total hydrocarbon (THC) emissions from 10 different aircraft. Acrolein THC mass fractions from these reports were averaged for each operating mode (takeoff, climbout, approach, and taxi/idle/queue). The acrolein mass fraction was multiplied by the aircraft THC mass emissions calculated for each mode in each alternative and year analyzed. Acrolein from on-road mobile sources was developed from emission factor data provided to CDM by the California Air Resources Board between November 12, 1999 and December 8, 1999. The acrolein mass fractions for mobile off-road vehicles were obtained from the California Air Toxic Emission Factor database and U.S. EPA memorandums (Cook 1997 and Brodowicz 1996).

Please refer to Response to Comment AL00033-345 for a discussion of evaluation of lead. Regarding impacts due to construction, please refer to Technical Report 4, Air Quality Technical Report, of the Draft EIS/EIR. In addition, please refer to Response to Comment AL00033-346 regarding construction impacts. The air quality modeling included estimation of emissions associated with construction (i.e., construction vehicles, construction activities). Aircraft toxic air pollutant emissions were calculated based on five aircraft operational modes: approach, taxi, queue, idle, takeoff, and climbout. Airport-specific times-in-mode were used in the modeling effort. Regarding impacts to passengers, please refer to Response to Comment AL00033-348.

Please refer to Response to Comment AL00033-349 and Response to Comment SAF00005-10 regarding evaluation of cumulative health impacts. Please refer to Topical Response TR-HRA-4 regarding mitigation strategies. Please refer to Response to Comment AL00033-340 regarding the conservative nature of the human health risk assessment.

SAL00015-284

Comment:

VII.A.1 TAP Emissions Estimates Unsupported

A HHRA, i.e. the assessment of acute and chronic noncancer health risks and cancer health risks, relies on modeled ambient air TAP concentrations due to a project, which are based on an accurate emissions inventory for TAPs. The Supplement, following the Draft EIS/EIR's general approach and methodology, follows the standard approach to estimate emissions of TAPs from mobile and stationary sources, calculated by multiplying the VOC or PM emissions by the percent mass composition of the exhaust gas, called a speciation profile: "[t]he toxic air pollutant emissions will be calculated by multiplying the appropriate criteria pollutant (VOC or particulate matter) emissions by the relative toxic pollutant emission factor." (Supplement, p. 4-616 and Draft EIS/EIR, TR14a, Attachment B, p. 10.)

3. Comments and Responses

The Draft EIS/EIR's Technical Report 14a 34 ("TR14a"), Attachment F, Air Quality Modeling Protocol for Toxic Air Pollutants, asserts that "[a]ll such references will be discussed and emission factors justified. In cases where different emission factors in different reference documents are found for the same emission source, the reference most appropriate for operations in Southern California will be used." (TR14a, Attachment F, p. 2.)

However, beyond disclosure of names of the databases used to determine TAP emission factors, neither the Draft EIS/EIR nor the Supplement or their associated technical reports and attachments contain a summary of those "relative toxic pollutant emission factors" that were selected to estimate TAP emissions from the myriad of stationary and mobile sources at LAX. The Supplement does not disclose which emission factors were chosen from which database for which source nor does it provide a justification for the selected factor.

Without this information it is impossible to verify whether the Draft EIS/EIR or the Supplement selected appropriate emission factors for the various sources. Further, other pertinent information in the Supplement is missing. For example, the associated Technical Report 9a 35 ("TR9a"), Attachment A, Risk Calculations for Maximally Exposed Resident and Child, only contains a header on an otherwise empty page. Thus it impossible to verify the Supplement's calculations of TAP emissions resulting from the Project alternatives, the incremental ambient air TAP concentrations, and in turn their associated health risks.

34 LAX Master Plan Draft Environmental Impact Statement/Environmental Impact Report, Technical Report 14a: Human Health Risk Assessment, January 2001.

35 LAX Master Plan Supplement to the Draft Environmental Impact Statement/Environmental Impact Report, Technical Report 9a: Supplemental Human Health Risk Assessment, June 2003.

Response:

A large number of toxic air pollutants (TAP) emission factor databases were reviewed in developing the TAP emission inventories. The emission factors used for the air quality modeling were selected by focusing on speciation profiles provided by CARB and other California profiles available in the public domain, such as the California Air Toxic Emission Factor (CATEF) database. These emission factors were considered more recent and/or appropriate for the sources at LAX and considered most appropriate for the HHRA analysis. Speciation profiles used to develop TAP emissions for LAX sources included the following:

- CARB PM Profile 422 - Road Dust PM Speciation
- CARB PM Profile 425 - On-Road Traffic Diesel PM Speciation
- CARB PM Profile 117 - On-Road Traffic Gasoline PM Speciation
- CARB VOC Profile 894, 876 - On-Road Traffic Gasoline VOC Speciation
- U.S.EPA Memo, 6/11/1997 (R.Cook to A. Pope) - Nonroad (GSE) VOC & PM Speciation
- CATEF, Turbine Industrial-Cogen, N.G. (1997) - Power/Cogen Turbine VOC Speciation
- CATEF, Turbine Industrial - Aircraft Exhaust PM Speciation
- Spicer, et. al. 1984, 1987, 1988, and 1990 - Aircraft Exhaust VOC speciation (including PAHs)
- CATEF, Reciprocating ICE (Various Types) 1997 - Stationary Source VOC and PM Speciation
- CATEF, Boilers 1997 - Stationary Source VOC and PM Speciation

These speciation profiles provide reasonable estimates of TAP emissions from airport sources. The CARB speciation profile data and reports were provided by CARB (P. Allen and James Yang) to CDM (R. Diaz) in November and December 1999.

Regarding the missing pages of Attachment A of Technical Report S-9a of the Supplement to the Draft EIS/EIR noted by the commentor, the hard copy of the Supplement to the Draft EIS/EIR includes Attachment A in its entirety. The absence of this information from the electronic version of the document was due to a technical error. As indicated in Response to Comment SAL00015-282, the commentor had ready access to the hard copy of the document; the absence of these pages from the electronic version does not negate LAWA and the FAA's legal compliance with regard to the publication and distribution of the Supplement to the Draft EIS/EIR. LAWA's website has been updated to include the contents of Attachment A. A corrected version of the CD-ROM containing Technical Report S-9a of the Supplement to the Draft EIS/EIR has been produced along with the Final EIS/EIR. A copy of this CD-ROM will be forwarded to the commentor.

SAL00015-285

Comment:

VII.A.2 TAP Emission Factors Are Inadequate

It appears that the Supplement relied on the same outdated sources listed in the Draft EIS/EIR for determining the TAP emission factors. The Supplement does not contain any indication that it used updated versions for any of these sources. The reader must therefore assume that the sources for speciation profiles or TAP emission factors are the same as those used in the Draft EIS/EIR. The Draft EIS/EIR's TR14a, Attachment B, Screening Level Human Health Risk Assessment, specifies that "TAP emissions were estimated using VOC and PM emission estimates and combined with speciation data from SPECIATE, FIRE, and XATEF, and USEPA Guidance on Mobile Source HAPs." (Draft EIS/EIR, TR14a, Attachment B, p. 14.)

Inspection of the respective references reveals that the Draft EIS/EIR used the 1993 version of FIRE and SPECIATE, and the 1992 version of XATEF to determine TAP emission factors. (Draft EIS/EIR, TR14a, Attachment B, p. 14.) The XATEF database has long been retired by U.S. EPA and some of its emission factors incorporated in its FIRE database.³⁶ The latest version of FIRE, version 6.23, was released in October, 2000, and, thus, would have been available for the Supplement's HHRA. The U.S. EPA's SPECIATE database has also been updated several times and is currently available as version 3.2. Release notes to the preceding version, released in October 1999 and thus available to both the Draft EIS/EIR and Supplement, state that "SPECIATE v3.0 contains 262 new TOC profiles and 13 new PM profiles."³⁷

While the Draft EIS/EIR claims that "[t]he HHRA used well-accepted methods and best available emission factor data to develop estimates of emissions, and estimates and assumptions are reasonable and appropriate," this is clearly not the case. (Draft EIS/EIR, p. 76.) The HHRA must be revised using the most recent available TAP speciation profiles or emission factors.

³⁶ United States Environmental Protection Agency, Technology Transfer Network, Clearinghouse for Inventories & Emission Factors, Factor Information Retrieval System (FIRE), Frequently Asked Questions, <http://www.epa.gov/ttn/chief/faq/firefaq.html>, accessed November 3, 2003.

³⁷ United States Environmental Protection Agency, Technology Transfer Network, Clearinghouse for Inventories & Emission Factors, SPECIATE Version 3.2; http://www.epa.gov/ttn/chief/software/speciate/spec32_rel_notes.txt, accessed November 3, 2003.

Response:

The content of this comment is essentially the same as comment Response to Comment SAL00015-284; please refer to Response to Comment SAL00015-284.

The emission factors in the XATEF, FIRE, and SPECIATE databases were reviewed but not used in the HHRA analyses. The sources listed in the Response to Comment SAL00015-284 were considered more recent and/or appropriate for the sources at LAX to develop the toxic air pollutant emissions.

SAL00015-286

Comment:

VII.A.3 TAP Emissions Are Underestimated

3. Comments and Responses

The Supplement's TAP emission estimates are based on emissions of VOCs and PM from mobile and stationary sources, calculated by multiplying the VOC or PM emissions by the TAP relative emission factor. As discussed above in the air quality section of this comment letter, the Supplement has substantially underestimated unmitigated VOC and PM emissions from the Project and substantially overestimated the control efficiency of its proposed mitigation program. Consequently, the estimated mitigated emissions from the Project are grossly underestimated and should be revised. Consequently, TAP emissions that are based on these underestimated VOC and PM emissions are also substantially underestimated.

The Supplement concludes that most health risks for Alternative D would be lower in both the interim year and the horizon year 2015 than they would be if no Master Plan improvements were undertaken, i.e. the NA/NP alternative. These conclusions are unsupported. We expect that an HHRA that evaluates TAP impacts from the Project based on current TAP relative emission factors and accurate estimates of air pollutant emissions will be significant for all alternatives including Alternative D. The HHRA must be revised and the Draft EIS/EIR recirculated for public review.

Response:

Please refer to the Response to Comment SAL00015-284.

SAL00015-287

Comment:

VII.B Significance Thresholds

VII.B.1 Chronic Hazard Index

We previously commented on the Draft EIS/EIR's inappropriate and unsupported significance thresholds for the incremental hazard index used in the HHRA to evaluate chronic and acute noncancer health impacts. (2001 Fox Comments, V.A, p. 41). The Draft EIS/EIR used a total incremental hazard index of "greater than 5 for any target organ system at any receptor location" as the significance threshold for both noncancer chronic and acute health impacts. (Draft EIS/EIR, p. 4-1009.)

We commented that the appropriate significance threshold for both the chronic and acute health hazard index is 1. This threshold was established in 1993 CARB guidelines,³⁸ is routinely used in HHRAs conducted for EIRs and by every air district in the State that has established significance thresholds for noncancer health risks for purposes of CEQA. We previously provided excerpts from CEQA guidelines as well as excerpts from EIRs prepared for other projects in the SCAQMD. (2001 Fox Comments, Ex. 2 and 3.)

In response, the Supplement appropriately reduced the significance threshold for the total incremental acute hazard index from 5 to 1 "to conform to SCAQMD policies." However, the Supplement left the significance threshold for the chronic hazard index at 5, citing SCAQMD Rule 1402 as a reference. (Supplement, p. 4-620.) This is inappropriate. While SCAQMD Rule 1402 in fact cites a chronic hazard index of 5, it is not applicable in the instant case, as explained below. Its mere existence, thus, does not provide justification for not using the lower significance threshold of 1, which is routinely used in HHRAs and recommended by most (all?) air districts in their CEQA Guidelines as well as SCAQMD guidance.

Further, SCAQMD Rule 1402 is intended to reduce the health risk associated with "existing facilities" to implement risk reduction plans as required by the Air Toxics Information and Assessment Act, the so-called "Hot Spots Act" of 1987. LAX in its present configuration is an already existing facility and SCAQMD Rule 1402 indeed applies. However, the modernization of LAX as proposed by the Draft EIS/EIR and Supplement is further subject to SCAQMD Rule 1401 39, which applies to new and modified sources. Modifications are defined as "any physical change in, change in method of operation, or addition to an existing permit unit that requires an application for a permit to construct and/or operate." (SCAQMD Rule 1401, c(9).) Clearly, the modernization of LAX classifies as a modification. SCAQMD Rule 1401 specifies a chronic hazard index of 1. Consequently, if LAWA relies on SCAQMD guidance and rules to justify its choice of a hazard index, it must take all applicable regulations into consideration and consequently set the chronic hazard index significance threshold at 1, rather than 5.

Further, the Supplement claims that its CEQA thresholds of significance are "based on recent SCAQMD policies" and are "consistent with the SCAQMD CEQA Handbook for assessing impacts of new developments as well as recent, publicly available correspondence from SCAQMD." The SCAQMD CEQA Guidelines themselves do not contain a significance threshold for the hazard index. However, the guidelines rely on "Rule 1401, with which the project proponent must comply before the project can be constructed and put into operation." Clearly, SCAQMD Rule 1401 would be the applicable rule that the Supplement should have consulted, not SCAQMD Rule 1402.

Although SCAQMD Rule 1401 does not apply to aircraft emissions at LAX because the SCAQMD does not have jurisdiction over mobile source emissions, the choices for significance thresholds in this rule reflect the general state-wide consensus on this issue. As a practical matter, the significance of health impacts does not depend on the source of the emissions - mobile sources versus stationary sources - only on the specific chemicals and their impacts on humans. Thus, jurisdiction is irrelevant for purposes of CEQA.

CARB issued risk management guidelines in 1993 recommending an even lower significance threshold of 0.2 for the non-cancer chronic hazard index. If the index exceeds 0.2, best available control technology for toxics ("TBACT") is required. The Bay Area Air Quality Management District ("BAAQMD") is currently in the process of lowering its recommended threshold for requiring T-BACT to 0.2. 40

Clearly, the choice of a chronic hazard index of 5 flies in the face of every relevant regulatory guidance as well as state-wide standard practice. At a minimum, the Supplement should have chosen a hazard index of 1, if not lower. By selecting the higher significance threshold of 5, the Supplement and Draft EIS/EIR have failed to find significant impacts that should have been mitigated.

38 California Air Resources Control Board, Risk Management Guidelines for New and Modified Sources of Toxic Pollutants, July 1993.

39 South Coast Air Quality Management District, Rule 1401 - New Source Review of Toxic Air Contaminants, amended May 2, 2003.

40 Bay Area Air Quality Management District, Workshop Notice, Re: Proposed Changes To District Air Toxics New Source Review Program, May 2, 2003, <http://www.baaqmd.gov/pln/ruledev/2-5/r0205ws1.htm>, accessed November 2, 2003; and Bay Area Air Quality Management District, Draft Staff Report, Appendix D, CEQA Initial Study, April 2003.

Response:

The content of this comment is essentially the same as comment AL00033-341; please refer to Response to Comment AL00033-341.

SAL00015-288

Comment:

VII.B.2 Cancer Risk

The Supplement, as the previous Draft EIS/EIR, uses a significance threshold of 10 in one million for the incremental cancer risk. The Supplement does not provide a reference for this threshold beyond its claim that its CEQA thresholds of significance are "based on recent SCAQMD policies" and are "consistent with the SCAQMD CEQA Handbook for assessing impacts of new developments as well as recent, publicly available correspondence from SCAQMD." (Supplement, p. 4-620.) The cited recent correspondence is a comment letter from SCAQMD on the El Toro DEIR.⁴¹ This comment letter refers back to the SCAQMD CEQA Guidelines as being the applicable guidance for determining the significance threshold for incremental cancer risk.

The SCAQMD CEQA Guidelines specify the significance threshold for incremental cancer risk as follows:

"Any project involving the emission or threatened emission of a carcinogenic or toxic air contaminant identified in District Rule 1401 that exceeds the maximum individual cancer risk of one in one million or 10 in one million if the project is constructed with best available control technology for toxics (T-BACT) using the procedures in District Rule 1401." [Emphasis added.]

3. Comments and Responses

Considering the substantial emissions of air toxics from the Project and the absence of any proposed T-BACT measures, the HHRA should have used a cancer significance threshold of one in one million.

41 South Coast Air Quality Management District, Comments of the AQMD, Draft Environmental Impact Report No. 573, Civilian Reuse of MCAS El Toro and the Airport System Master Plan for John Wayne Airport and Proposed Orange County International Airport, Letter from Steve Smith, SCAQMD, to Bryan Speegle, County of Orange, Master Development Program, February 22, 2000.

Response:

Please refer to Section 4.24.1, Human Health Risk Assessment (subsection 4.24.1.4), of the Supplement to the Draft EIS/EIR. As described in this section, the most applicable SCAQMD rule for the LAX Master Plan is 1402, which addresses existing facilities. The threshold of 10 in one million is consistent with this rule, and with other EIR (for example, the recent EIR prepared for Oakland International Airport). Further, mitigation measures described in Section 4.24.1, Human Health Risk Assessment (subsection 4.24.1.8), of the Supplement are designed to use all available and implementable means to reduce emissions of TAPs during LAX operations and construction primarily by reducing exhaust emissions from mobile sources and reducing traffic congestion near the airport.

SAL00015-289

Comment:

VIII. MITIGATION OF HEALTH IMPACTS IS INADEQUATE

As we discussed in our previous comments, The Draft EIS/EIR did not impose any mitigation specifically for health impacts, instead relying exclusively on air quality mitigation. (2001 Fox Comments, VI., pp. 46/47.) The Supplement failed to propose any additional mitigation measures that would substantially reduce VOC and PM emissions, the surrogates used for estimating TAP emissions. As discussed above in Comment V, the air quality mitigation program is entirely inadequate for mitigating air quality impacts. This program is likewise inadequate to mitigate health impacts, for the same reasons discussed in Comment V. The air quality mitigation program would only marginally reduce the emissions of VOCs and PM. Thus, TAP emissions, which are based on VOC and PM emissions, would likewise be high.

Further, the proposed mitigation program fails to recognize the differences in approaches that are required to mitigate air quality versus human health impacts. It is not sufficient to rely solely on air quality mitigation to mitigate public health impacts. Other types of mitigation measures should be considered to prevent exposure and thus protect public health. These might include measures such as upgrading the LAX ventilation system, installing efficient charcoal filters on the LAX intake air to remove TAPs, and improving the ventilation systems and treating the intake air of nearby sensitive receptors who would be most affected by TAP emissions from the Project.

[See original letter for Table 1, Unmitigated Operational Emissions Inventories for On-airport Sources (tons/year)]

Response:

The content of this comment is essentially the same as comment AL00033-350; please refer to Response to Comment AL00033-350.

SAL00015-290

Comment:

COMMENTS

Los Angeles World Airports ("LAWA" or "the Applicant"), the operator of the Los Angeles International Airport ("LAX"), has published a Draft Master Plan Addendum, a Supplement to the Draft Environmental Impact Statement/Environmental Impact Report1 ("Supplement"), and Airport Layout Plans Package on the modernization of LAX ("Project"). These documents supplement the Draft Environmental Impact

Statement/Environmental Impact Report2 ("Draft EIS/EIR") and add discussion of Alternative D to the previously discussed Master Plan alternatives.

We previously submitted comments on the Draft EIS/EIR that demonstrated the failure of the Draft EIS/EIR to meet the requirements of CEQA and NEPA. (Comments on Hydrology and Water Quality, LAX Master Plan Draft EIS/EIR (July 13, 2001) by J. Phyllis Fox, Ph.D., Attachment D to September 18, 2001 Comments Submitted on Behalf of the City of El Segundo by Shute, Mihaly & Weinberger ("2001 Fox Comments").)

The Draft EIS/EIR failed to analyze all impacts from the Project and the mitigation measure proposed to mitigate significant hydrology and water quality impacts from Project Alternatives A through C was inadequate. Further shortcomings consisted of a substantial underestimate of pollutant loads due to the use of a flawed methodology, the omission of pollutants, and the use of incorrect datasets and runoff coefficients.

With few exceptions, the Supplement ignored our comments and proceeded to use the same methodology and datasets for its revised runoff estimates and presents a virtually unchanged mitigation measure. Thus, the Supplement is inadequate and does not meet the requirements of CEQA and NEPA. The many areas in which the Draft EIR/EIS and the Supplement are deficient must be addressed, the impacts on hydrology and water quality reassessed, an acceptable mitigation measure(s) must be developed, and the documents must be recirculated for public review.

The following sections provide our comments on the changes made in the Supplement and offers additional commentary on the Project's hydrology and water quality impacts.

1 LAX Master Plan, Supplement to the Draft Environmental Impact Statement/Environmental Impact Report, July 2003.

2 LAX Master Plan, Draft Environmental Impact Statement/Environmental Impact Report, January 2001.

Response:

The commentor's previous comments on the Hydrology and Water Quality section of the Draft EIS/EIR are provided in comment letter AL00033. Responses to these comments are provided in Responses to Comments AL00033-143, AL00033-144, and AL00033-351 through AL00033-373. As discussed in Topical Response TR-HWQ-1, certain revisions were made to the methodology used in the Hydrology and Water Quality analysis in the Supplement to the Draft EIS/EIS in a good faith effort to respond to these comments.

Responses to specific comments on the Hydrology and Water Quality section of the Supplement to the Draft EIS/EIR are provided in Responses to Comments SAL00015-291 through SAL00015-305. Also, please see Topical Response TR-HWQ-1 regarding selection of model constituents and storm water pollutant load estimation method, Topical Response TR-HWQ-2 regarding Master Plan Commitment HWQ-1, and Response to Comment AR00003-63 regarding the mitigation measures.

SAL00015-291

Comment:

I. STORMWATER POLLUTANT LOAD ESTIMATES ARE FLAWED

In our previous comments on the Draft EIS/EIR, we demonstrated that the Project analysis substantially underestimated pollutant loads in stormwater runoff because a flawed methodology and incorrect data sets were used. (2001 Fox Comments, pp. 5-19.) With few exceptions, the Supplement ignored these comments and proceeded to use the same methodology and datasets described in the Draft EIS/EIR Technical Report 6, Hydrology and Water Quality ("TR6"). Consequently, the revised estimates for stormwater pollutant loads presented in the Supplement are also underestimated. Our previous comments on the methodology and data used to analyze stormwater runoff for the various Project alternatives remain applicable and the calculations should be revised accordingly. The following discussion relates to the few changes in the Supplement's methodology or data and provides additional comments regarding the environmental baseline against which Project impacts are evaluated.

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Response:

Please see Topical Response TR-HWQ-1 regarding appropriateness of pollutant load estimation method, land use intensification, selection of model constituents, and event mean concentration source data and Response to Comment AL00033-360 regarding acceptance of the pollutant load estimation method by regulators and the scientific community.

SAL00015-292

Comment:

I.A Pollutants Of Concern Not Properly Selected

In addition to the nine pollutants analyzed in the Draft EIS/EIR, pollutants - total suspended solids ("TSS"), total phosphorus ("TP"), total Kjeldahl nitrogen ("TKN"), 5-day biochemical oxygen demand ("BODs"), chemical oxygen demand ("COD"), oil and grease ("O&G"), and total copper, total lead, total zinc - the Supplement has expanded its list by four additional pollutants, i.e. ammonia, total coliform, fecal coliform, and fecal Enterococcus bacteria, for the estimation of average annual pollutant loads for all alternatives. However, as we previously pointed out in our comments on the Draft EIS/EIR, several other pollutants should have also been included in the analysis including cadmium, chromium, nickel, mercury, and silver as well as polycyclic aromatic hydrocarbons ("PAH"). (2001 Fox Comments, II.D, pp. 9/10.) The Supplement entirely ignored this recommendation and does not provide any additional information on why it chose to exclude these pollutants from its analysis.

Response:

Please see Topical Response TR-HWQ-1 regarding selection of model constituents and event mean concentration source data and Response to Comment AL00033-363 regarding BMPs and pollutant removal.

SAL00015-293

Comment:

I.B Toxicity Was Not Considered

As discussed in our previous comments, the Draft EIS/EIR should have evaluated the fact that stormwater runoff from the vicinity of the project is known to be toxic to marine organisms. Pollutants of concern include pathogens and viruses, dioxins, furans, and other chlorinated organics, polycyclic aromatic hydrocarbons, metals, and pesticides. (2001 Fox Comments, II.E, p. 10-18.) The only mitigation proposed to reduce water quality impacts requires "no net increase in loads of pollutants of concern." (Draft EIS/EIR, p. 4-547.) However, if the pollutants responsible for the observed toxicity are not included in the analysis and hence not subject to control, this mitigation measure would do nothing to mitigate toxicity from increases in stormwater runoff caused by the Project. The Supplement continues to ignore this issue.

Response:

Please see Topical Response TR-HWQ-1 regarding selection of model constituents and storm water toxicity, Topical Response TR-HWQ-2 regarding compliance with regulations, and Response to Comment AL00033-363 regarding BMPs and pollutant removal.

SAL00015-294

Comment:

I.C Event Mean Concentrations Underestimated

The analysis of the Project's water quality impacts is based on an estimate of pollutant loads discharged into Santa Monica Bay caused by changes in stormwater runoff volume as a result of changes in land use due to the Project. Both the Draft EIS/EIR and the Supplement estimated pollutant loads by multiplying the event mean concentrations ("EMCs") for stormwater runoff by the annual volume of stormwater runoff. (Draft EIS/EIR, TR63, pp. 20-25; Supplement, TRS-5 4, p. 2.)

3. Comments and Responses

The Draft EIS/EIR used 1994-1999 stormwater monitoring data reported by the Los Angeles County Department of Public Works ("LACDPW") for all land uses (industrial, commercial, residential, open space, transportation) except airport operations and airport open space. For land uses categorized as airport operations and airport open spaces, the DEIR relied on a joint study by the American Association of Airport Executives ("AAAE") and the Airport Research and Development Foundation ("ARDF"), the "Ostrom Study5", which monitored the quality of stormwater runoff from 65 airports nationwide in preparation for the 1992 stormwater group permit. (Draft EIS/EIR, TR6, p. 21; Supplement, TRS-5, p. 2.) The Draft EIS/EIR used AAAE/ARDF data for total suspended solids ("TSS"), total phosphorus ("TP"), total Kjeldahl nitrogen ("TKN"), oil and grease ("O&G"), 5-day biochemical oxygen demand ("BODs"), and chemical oxygen demand ("COD"). Because the AAAE/ARDF study did not include data for total copper ("Cu"), total lead ("Pb"), and total zinc ("Zn"), the Draft EIS/EIR relied on LACDPW data developed for the transportation sector for these three pollutants. (Draft EIS/EIR, TR6, pp. 20-24.)

In our previous comments, we pointed out that a) the LACDPW EMC dataset used by the Draft EIS/EIR had been superceded and b) the use of the AAAE/ARDF data is inappropriate for characterizing stormwater runoff pollutant loads at LAX. (2001 Fox Comments, II.A, pp. 5/6.) The AAAE/ARDF data represent a nationwide average from airports with dissimilar levels of operational activities, located in varying climate zones with greatly differing precipitation volumes and patterns. These data are entirely unsuitable to characterize runoff from an airport as busy as LAX, located in a desert climate where precipitation during most of the year is non-existing and most runoff occurs during a few major storm events during the rainy season.

The Supplement updated the LACDPW data for the period 1999-2000 as recommended, however it continued to use the same AAAE/ARDF data for land uses categorized as airport operations and airport open spaces for the above listed pollutants. As an explanation, the Supplement offers that "inquiries were made to AAAE and other sources to obtain the original AAAE raw data" and that "[t]he goal of these inquiries was to isolate the EMCs collected from the four airports located in what is referred to in the Ostrom Study as Rainfall Region 5, which includes portions of southwestern Colorado, southern Utah, southern Nevada, western New Mexico, Arizona, and southern California. However, the raw data could not be obtained from AAAE or from other sources to which inquiries were made. Therefore, no new airport EMCs or EMCs specific to LAX are used in this Supplement to the Draft EIS/EIR." (Supplement, TRS-5, p. 2.) Obviously, the Supplement recognized that the use of a nationwide average is inappropriate to characterize EMCs at LAX. However, it declined to provide any reasons why it still chose those inappropriate data when it did not succeed to obtain a regional data subset.

The EMCs based on local LACDPW data for the transportation sector are much higher (up to four times) for all pollutants than the AAAE/ARDF data as shown in the inset table below. (See Supplement, TRS-5, p. 3, Table S1.)

Pollutant	Event Mean Concentration (mg/L)		(LACDPW EMC)/ (AAAE/ARDF EMC)
	LACDPW	AAAE/ARDF	
TSS	78	19.01	410%
TP	0.44	0.24	183%
TKN	1.9	1.07	178%
O&G	3.1	2.29	135%
BOD5	21	6.58	319%
COD	50	45.7	109%

Obviously, the use of AAAE/ARDF data instead of LACDPW data for the transportation sector leads to a substantial underestimate for pollutant loads from stormwater runoff from airport operations and airport open spaces for these pollutants. With few exceptions, the LACDPW's EMCs for most land uses are much higher than those reported by the AAAE/ARDF. (See Supplement, TRS-5 Table S-1, p. 3.)

Consequently, any change in land use to the airport operations/airport open space land use will result in a decrease of total pollutant loads in comparison with the baseline for most of the above mentioned pollutants. Not surprisingly, the Supplement's calculations for Alternatives A, B, and C, which are associated with much more extensive changes in land use than Alternative D, result in substantial decreases in total annual pollutant loads for most pollutants compared to either the baseline or the No Action/No Project ("NA/NP") alternative. Alternative D results in an increase compared to the baseline

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and only a slight decrease for most pollutants compared to the NA/NP alternative. (See Supplement, TRS-5, Tables S6 through S12, pp. 8-11.) It appears that the Supplement used those data that underestimate impacts rather than data that are more appropriate.

3 LAX Master Plan Draft Environmental Impact Statement/Environmental Impact Report, Technical Report, 6. Hydrology and Water Quality January 2001.

4 LAX Master Plan Supplement to the Draft Environmental Impact Statement/Environmental Impact Report, Technical Report, S-5. Hydrology and Water Quality, July 2003.

5 Brenda Ostrom, Predicting Pollutant Loads in Airport Storm Water Runoff - Advanced Spatial Statistics, May 12, 1994.

6 In contrast, Supplement TRS-5, p. 2, specifies that the storm water samples were collected at "over 605 airports." Neither the Draft EIS/EIR nor the Supplement provided a description of the methodology of the Ostrom study. It thus remains unclear how many airports were sampled, for how many years data were collected, how the data were analyzed, and so forth.

Response:

Please see Topical Response TR-HWQ-1 regarding event mean concentration source data. As stated in Topical Response TR-HWQ-1, the transportation EMCs that were generated by the LACDPW were obtained from storm water samples collected from highways and other roadways. The characteristics and type of intensity of use of overall airport-related land uses are substantially different from highway/roadway characteristics. Therefore, the AAAE EMCs are more representative of airport land uses and were used in the calculation of annual pollutant loads except for total copper, total lead, total zinc, ammonia, fecal enterococcus, and total and fecal coliform bacteria, where AAAE data were not available. During preparation of the Supplement to the Draft EIS/EIR, efforts were made to isolate AAAE data from Rainfall Region 5 as a good faith attempt to respond to comments on the Draft EIS/EIR. That this effort was made does not imply that the use of AAAE data is inappropriate to characterize EMCs in runoff from LAX.

With regard to the statement that "the Supplement used those data that underestimate impacts rather than data that are more appropriate.", LAWA has used methodologies and data for its estimation of impacts to hydrology and water quality that are based on sound scientific principles, as documented in the Draft EIS/EIR, the Supplement to the Draft EIS/EIR, and in this and other responses to comments. Also, please see Topical Response TR-HWQ-1 and Response to Comment AL00033-360 regarding the appropriateness of the storm water pollutant load estimation method utilized by LAWA.

SAL00015-295

Comment:

I.D Total Pollutant Loads Underestimated

The use of LACDPW's EMCs for the airport operations/airport open space land uses would have resulted in much less favorable data for the six pollutants for which the Supplement used the AAAE/ARDF EMCs, i.e. TSS, TP, TKN, O&G, BOD5 and COD. We recalculated the total estimated pollutant loads for these six pollutants with LACDPW's EMCs for the airport operations/airport open space land uses for the baseline, the NA/NP Alternative and Alternatives A, B, C, and D for buildout year 2015. Pollutant loads for all other land uses were assumed to be unchanged since the Supplement's calculations for those were based on LACDPW's EMCs. (See Table 1.)

As expected, total pollutant loads (including the baseline and the NA/NP alternative) are substantially higher than those presented in the Supplement for all pollutants. For example, the revised estimate for TSS for Alternative D in 2015 is 822,502 pounds per year ("lb/year") compared to the 434,041 lb/year calculated by the Supplement. (See Table 1 and Supplement, TRS-5, Table 12 through S12, p. 11.)

Further, where previously only five of the 24 values for pollutant loads (four Alternatives/six pollutants) exceeded the NA/NP alternative values, there are now 13 values that exceed these values. Compared to the baseline, previously only eight of the 24 pollutant load values exceeded the baseline values, now there are 16 values.

These much higher total pollutant loads have consequences for the mitigation measure. It must be demonstrated that a combination of source control, structural and treatment control best management practices ("BMPs") can reduce these pollutant loads sufficiently to result in a "no net gain" in discharged pollutant loads.

[See original letter for Table 1, Comparison of Total Estimated Pollutant Loads Using AAAE/ARDF and LACDPW Event Mean Concentrations]

Response:

Please see Topical Response TR-HWQ-1 regarding event mean concentration source data for rationale concerning use of AAAE versus LACDPW emcs for airport land uses.

Regarding the comment that suggests that Master Plan Commitment HWQ-1 may be insufficient to reduce the much higher pollutant loads calculated using the LACDPW EMCs, LAWA will implement structural and non-structural BMPs, as stated in Master Plan Commitment HWQ-1, such that the selected alternative will result in no net increase in pollutant loading to receiving waters. The following example illustrates that this can be accomplished even when using the pollutant loads as calculated by the City of El Segundo that were generated from LACDPW EMCs.

In the table provided below, the baseline and Alternative D pollutant loads for total suspended solids, total phosphorus, total Kjeldhal nitrogen, oil and grease, biochemical oxygen demand, and chemical oxygen demand are listed, as provided by the City of El Segundo. These loads were generated by the City of El Segundo and are based on LACDPW generated EMCs for "transportation" land uses. The difference between the City of El Segundo baseline and City of El Segundo Alternative D loads is also shown, which represents the additional loading above baseline conditions that would result from implementation of Alternative D, based on LACDPW emcs. Using the City of El Segundo generated pollutant loads, the next three columns identify the pollutant load that would be removed by use of a structural BMP of varying efficiency (30 percent, 50 percent, and 70 percent). The assumptions used to calculate the pollutant removal by the BMP are the same as those used previously in another illustrative example that can be found in Section 5.3, Storm Water Best Management Practices (BMPs), of Technical Report S-5 of the Supplement to the Draft EIS/EIR. The assumptions used in this example are as follows: a) a structural BMP such as a detention basin, designed with a water quality outlet structure, is used that receives runoff from approximately 1/3 of the HWQSA; b) the detention basin is designed to treat 85 percent of the capture volume; and c) the basin is capable of removing 30 percent, 50 percent, or 70 percent of the incoming pollutant load.

The table demonstrates that using the City of El Segundo generated pollutant loads, even if the lowest efficiency is assumed (30 percent), a single structural treatment control device can effectively reduce the pollutant load generated from Alternative D to below baseline conditions, with the only exception being that the BMP efficiency necessary for full removal of oil and grease loads would have to be slightly greater than 30 percent. In the selection and design of BMPs, LAWA would ensure that BMPs are sized or designed to function at a higher performance level or consider a combination of BMPs to prevent a net increase in pollutant loading from a selected alternative. Should the No Action/No Project loads rather than baseline loads be used to assess impacts to receiving waters, the same conclusion would be reached since the No Action/No Project loads are greater than baseline conditions, as calculated by the City of El Segundo. Since source controls, such as good housekeeping, and regular maintenance and inspection programs, will also be implemented, the BMPs to be identified in the drainage plan that will be completed as part of Master Plan Commitment HWQ-1 will effectively mitigate the impacts of the selected alternative to a level that is less than significant.

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**Pollutant Load Removal By Structural BMP For Alternative D
Using El Segundo Calculated Pollutant Loads
Based on LACDPW EMCs for Airport Land Uses**

Pollutant	Pollutant Load (lb/year)					
	Comparison of Alternative D versus Baseline Loads			Pollutant Load Removed ²		
	1996 Baseline ¹	Alternative D ¹	Difference	30% Efficiency	50% Efficiency	70% Efficiency
TSS	820,021	822,502	2,481	69,214	115,356	161,498
TP	3,336	3,540	204	298	496	695
TKN	16,000	16,728	728	1,408	2,346	3,285
O&G	21,555	23,665	2,110	1,991	3,319	4,647
BOD5	162,974	173,600	10,626	14,608	24,347	34,086
COD	424,795	441,926	17,131	37,188	61,980	86,772

¹ 1996 Baseline and Alternative D pollutant loads obtained from Table 1, City of El Segundo comment letter (SAL00015) on Section 4.7, Hydrology and Water Quality, of the Supplement to the Draft EIS/EIR.

² Pollutant load removal calculations assume the following: a) a structural BMP, such as a detention basin designed with a water quality outlet structure is used that receives runoff from approximately 1/3 of the HWQSA; b) the basin is designed to treat 85% of the capture volume; and c) that the basin is capable of removing 30%, 50%, and 70% of the incoming pollutant load.

SAL00015-296

Comment:

I.E Stormwater Runoff Coefficient Underestimated

The Supplement used stormwater runoff coefficients determined by a 1987 method advocated by the Federal Highway Administration ("FHWA"), the same method presented in the Draft EIS/EIR. (Supplement, p. 4, Draft EIS/EIR, pp. 24/25.) We had previously pointed out that a more recent method exists that more accurately captures local conditions, which is used by the Los Angeles County Department of Public Works ("LACDPW") and other local agencies. (2001 Fox Comments, II.G, pp. 18/19.) Use of this method results in considerably higher runoff coefficients and hence substantially greater runoff. The Supplement failed to provide an explanation on why it chose the FHWA method over the more applicable LACDPW method.

Response:

Please see Topical Response TR-HWQ-1 regarding model parameters - runoff coefficients.

SAL00015-297

Comment:

I.F Data For 1996 Baseline Year Are Inconsistent

The Supplement continues to use the year 1996 as its baseline for the hydrology and water quality analysis and maintains that hydrology results for baseline conditions remain unchanged from the Draft EIS/EIR, i.e. they are based on year 1996 conditions. (Supplement, TRS-5, p. 5.) Water quality results on the other hand were updated to reflect updated information, e.g., average annual precipitation data now include the time period from 1948 to 2000 and, as discussed above in Comment I.C, LACDPW EMCs were adjusted to include the year 2000. The estimates of average annual pollutant loads for the baseline condition are dependent on the average annual precipitation, the EMCs, and on the various on- and off-airport land uses. According to the Supplement, the off-airport land uses had apparently already been updated for the Draft EIS/EIR to reflect year 2000 conditions. (Supplement, Appx. S-B 7, p. 40.) Presumably, since the Supplement did not comment on it, the on-airport land uses are still characterized for the year 1996.

This treatment of the baseline conditions is inconsistent and unacceptable. To be consistent, factors affecting hydrology, i.e. drainage and flood control structures, as well as on-airport land uses should have also been updated to reflect year 2000 conditions.

Here, as in the other sections, the Supplement should have used the 2000 baseline. Using a 1996 baseline for a project that will be implemented in the year 2004 is entirely inappropriate, especially considering the fact that newer data sets exist.

7 LAX Master Plan Supplement to the Draft Environmental Impact Statement/Environmental Impact Report, Appendix S-B, Existing Baseline Comparison Issues - 1996-2000, July 2003,

Response:

Neither airport land uses, as defined for the hydrology and water quality analysis, nor the drainage and flood control structures have materially changed since 1996. Therefore, the analysis presented in the Supplement to the Draft EIS/EIR used the same on-airport land use and drainage patterns as the Draft EIS/EIR, coupled with the updated off-airport land use data and updated hydrology and water quality data, to correctly represent Year 2000 conditions for modeling. Also, please see Topical Response TR-GEN-1 regarding baseline issues.

SAL00015-298

Comment:

II. MITIGATION MEASURE REMAINS INADEQUATE

The Draft EIS/EIR proposed mitigation measure HWQ-1 to address significant water quality impacts, i.e. an increased load of a pollutant of concern delivered to a receiving water body by surface water runoff. This measure consists of the commitment to develop a drainage plan once an alternative is selected. The purpose of this drainage plan will be to "assess site-specific drainage flows at a design level of detail that provide adequate drainage capacity to prevent flooding." The drainage plan will incorporate BMPs "to minimize the effect of airport operations on surface water quality and to prevent a net increase in pollutant loads to surface water resulting from the selected Master Plan alternative." (Supplement, p. 4-410.) The Supplement made only minor changes to this mitigation measure.

The Supplement merely presents lists of potential methods to reduce peak flow of surface water runoff, potential measures to increase drainage capacity, and potential BMPs that could be employed to infiltrate or treat storm water runoff and dry weather flows, and control peak flow rates. The descriptions of the mitigation measures in the Supplement are too general to assure that they will actually be implemented. These measures do not establish specific targets that must be met, e.g., no net increase in pollutants discharged from the site, and are not enforceable as a practical matter.

Enforceability is normally achieved by including mitigation measures in the requests for bids and resulting construction contracts, posting bonds, drawing up legal agreements, or recording conditions of approval on property titles or in agency permits. None of the proposed mitigation measures include any legally binding commitments or methods to ensure implementation and enforcement.

The mitigation measure also does not specify criteria for selecting from among these various methods, measures, and BMPs. (Supplement, pp. 4-410/411.) The Supplement made no attempt to assess feasibility of any of the measures, or to evaluate their secondary impacts, thus deferring the development of the drainage plan to the future, outside of public view.

Response:

Please see Topical Response TR-HWQ-2 regarding Master Plan Commitment HWQ-1 and performance standards. Details concerning mitigation monitoring will be based on the drainage plan that will be performed as part of Master Plan Commitment HWQ-1. Also, please see Response to Comment AR00003-63 regarding the mitigation monitoring and reporting program.

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SAL00015-299

Comment:

II.A Development Of Mitigation Plan Cannot Be Deferred

Rather than developing a conceptual level design for each of the proposed alternatives, as we suggested in our comments on the Draft EIS/EIR, the Supplement continues to defer the development of the proposed drainage plan until after an alternative is selected and only added the request that the plan be developed "to the satisfaction of the City of Los Angeles Department of Public Works, Bureau of Engineering." (2001 Fox Comments, I., p. 1/2; Supplement, p. 4-410.) The Supplement thus removes the review of the proposed drainage plan from public review. This approach is not permissible under CEQA and NEPA.

While it is not feasible to develop a detailed engineering design of physical facilities before an alternative is selected, it is possible to develop a conceptual level design for each alternative. This would facilitate selecting and evaluating the mitigation measures that could be used to reduce the impacts from Project alternatives.

Further, by deferring the development of the plan into the future until after the alternative is developed, secondary impacts from the mitigation measures cannot be identified, assessed and mitigated, as required. For example, the selection of Alternatives A, B, or C would involve the elimination of the Imperial water quality retention basin and require that an alternative retention and/or water quality treatment BMP be provided. (Supplement, p. 4-456.) Both the elimination of the Imperial water quality retention basin and the establishment of an alternative will result in local changes of the water quality and peak flows. It will also have construction emission impacts that have not been assessed. These secondary (or indirect) impacts of the mitigation measure need to be evaluated to understand the full impact of the selected alternative on hydrology and water quality.

Response:

The Draft EIS/EIR and the Supplement to the Draft EIS/EIR are program-level documents; Master Plan facilities have not been conceptually designed. Therefore, it is premature to design drainage facilities at even a conceptual level. Please see Response to Comment AR00003-63 for an expanded discussion regarding the identification of mitigation measures. Also, please see Topical Response TR-HWQ-2 regarding compliance with regulations and deferral of detailed mitigation measures included under the discussion of Master Plan Commitment HWQ-1.

SAL00015-300

Comment:

II.B All Feasible Mitigation Not Required For Flows And Water Quality

We commented previously that the list of specific mitigation measures, from which a selection would be made for the drainage plan, was limited and incomplete. We recommended that the list be expanded to include the large body of Best Management Practices ("BMPs") developed by federal, state, and local agencies as well as inspection and maintenance programs. We recommended incorporating into the list all feasible measures based on the large number of manuals and guidelines that have been published. (2001 Fox Comments, p. 2.)

Aside from specifying one additional measure, i.e. hydrodynamic devices, the Supplement only added that "Best Management Practices (BMPs) will be incorporated to minimize the effect of airport operations on surface water quality and to prevent a net increase in pollutant loads to surface water resulting from the selected Master Plan alternative" and that "[o]ther structural BMPs may also be selected from the literature and the many federal, state and local guidance documents available." (Supplement, p. 4-410.)

This requirement does not cure the defects previously identified in the previous Draft EIS/EIR version. If the specific measures that would be implemented are not identified in the Draft EIS/EIR, the public is precluded from reviewing them. Further, if the specific measures are not identified, it is not possible to

determine if the impacts have been reduced to a less than significant level. Finally, if specific measures are not identified, it is not possible to identify and assess secondary (indirect) impacts from the mitigation measures themselves. For example, impacts from building new retention basins might include local changes in water quality and peak flows, changes in water quantity of receiving wetlands, habitat changes, and construction air quality impacts.

Response:

Section 4.7, Hydrology and Water Quality (subsection 4.7.5), of the Supplement to the Draft EIS/EIR (and the Draft EIS/EIR) contained a comprehensive list of classes of structural controls that LAWA will use to achieve the commitment of no net impact to receiving waters. In addition, the Supplement to the Draft EIS/EIR stated that "other structural BMPs may also be selected from the literature and the many federal, state and local guidance documents available." Further, the Supplement to the Draft EIS/EIR stated, "[i]n addition to the structural BMP types that will be used, non-structural/source control BMPs will continue to be a part of the LAX program to reduce pollutant loadings." These non-structural BMPs typically include inspection and maintenance programs, as suggested by the commenting agency, as well as good housekeeping and training programs. Moreover, as part of the project-specific Standard Urban Stormwater Mitigation Plan (SUSMP) that will be prepared for the project once specific BMPs are identified, a maintenance plan must be developed and implemented for all new structural BMPs. Thus, Master Plan Commitment HWQ-1 addresses the comments submitted previously by this commenter.

Regarding the comment that mitigation measures listed in the Draft EIS/EIR and Supplement to the Draft EIS/EIR are not sufficiently defined to allow public review, assessment of impacts, and identification of secondary impacts, please see Response to Comment AR00003-63 for an expanded discussion regarding the identification of mitigation measures appropriate for this planning-level document. Also, please see Topical Response TR-HWQ-2 regarding Master Plan Commitment HWQ-1.

SAL00015-301

Comment:

II.C Method To Evaluate Effectiveness Not Stated

We previously commented that the Draft EIS/EIR did not specify any monitoring provisions or methods to determine the effectiveness of the above mentioned future drainage plan. We recommended that the monitoring program be described with sufficient specificity to allow a knowledgeable individual to assess its efficacy. We further recommended to establish a stormwater flow and pollutant load baseline for at least two years prior to the start of construction and to continue monitoring for at least two years beyond buildout. (2001 Fox Comments, I.C, pp. 3/4.)

The Supplement did not address this issue beyond merely adding that "LAWA will prepare a specific Standard Urban Stormwater Mitigation Plan (SUSMP) for the selected alternative," which "addresses water quality and drainage issues by specifying source control, structural, and treatment control BMPs with the objective of reducing the discharge of pollutants from the stormwater conveyance system to the maximum extent practicable." (Supplement, p. 4-411.)

This statement does nothing to address the lack of monitoring provisions, it does not set any goals, nor does it identify how LAWA's Standard Urban Stormwater Mitigation Plan ("SUSMP") would select the BMPs or determine their efficiency.

Response:

Please see Response to Comment AR00003-63 regarding the mitigation monitoring and reporting program and Topical Response TR-HWQ-2 regarding Master Plan Commitment HWQ-1 and performance standards. In addition to specific requirements of the City of Los Angeles, LAWA will follow and be consistent with BMP selection requirements outlined in the City of Los Angeles Stormwater Management Division's "Development Best Management Practices Handbook, Part B, Planning Activities".

3. Comments and Responses

SAL00015-302

Comment:

II.D The BMP Copper Calculation Is Flawed

The Supplement added a brief discussion of storm water BMPs, presumably in an attempt to rationalize the lack of a detailed mitigation plan (Supplement, TRS-5, p. 11/12.) It attempts to "illustrate the potential to achieve no net gain in pollutant loads" by calculating the quantity of a pollutant, exemplary for total copper under Alternative A in 2015, that could potentially be removed through a retention basin - assuming a certain percentage of runoff can be diverted to the retention basin - and comparing this quantity to the estimated increase in pollutant load compared to the baseline. The calculation results in a range of total copper that could potentially be removed by a retention basin, 33 to 77 lb/year. The Supplement's estimate for the average annual copper load increase for this alternative compared to the baseline is 42 lb/year. (Supplement, TRS-5, p. 12.)

The Supplement then, without any further discussion, concludes that "it can be seen that the additional estimated average annual copper load ... resulting from construction of Alternative A could be treated so that estimated annual average baseline copper loads would not be exceeded" and that "[t]his could also be shown for other potential pollutants." (Supplement, TRS-5, p. 12.)

This conclusion is not supported by the Supplement's calculation since the amount of additional estimated average annual copper load is higher than the lower bound of the potential removal efficiency of the retention basin. While it is likely that the removal efficiency is somewhere in between the lower and the upper bound, the Supplement cannot rely on it. In this case, additional mitigation measures would have to be implemented to reduce at least another nine pounds of copper - the difference between the lower bound of the removal estimate and the additional total copper load. However, absent more detailed information on the implementation of other methods and BMPs that would remove copper, it cannot be concluded that a sufficient quantity of the pollutant can be removed to achieve no net increase.

Response:

The example referred to in this comment was included in Section 5.3 of Technical Report S-5 of the Supplement to the Draft EIS/EIR to illustrate the large pollutant removal efficiencies that result from implementation of a single structural BMP. The example shows that with a highly functioning detention basin (70 percent efficient), over 1.5 times the pollutant load generated from Alternative A, can be removed by this BMP. In a low functioning detention basin (30 percent efficient), 78 percent of the pollutant load from Alternative A can be removed. The Supplement to the Draft EIS/EIR did not state or imply that LAWA would rely on a single BMP, or a BMP that is sized or designed to function at the lower end of the performance range, to prevent a net increase in pollutant loading from a selected alternative, as seems to be the conclusion drawn in the comment. As per Master Plan Commitment HWQ-1, LAWA will implement the types and number of BMPs, sized and designed accordingly, necessary to prevent a net increase in pollutant loading and, consequently, to effectively mitigate the impacts of the selected alternative to a level that is less than significant.

SAL00015-303

Comment:

II.E Conclusion Of Non-significance After Mitigation Not Valid

One cannot conclude that a significant impact is less-than-significant after implementation of mitigation without quantifying the impact after mitigation and then comparing the result to a significance threshold, in this case "no net increase in pollutant loads compared to the baseline." The Supplement failed to do this for any pollutant save copper. As discussed in Comment II.D, the copper analysis is flawed and does not demonstrate "no net increase". Thus, the Supplement does not demonstrate that the proposed mitigation measures reduce the impacts to a less than significant level.

Response:

Please see Responses to Comments SAL00015-295 and SAL00015-302 regarding the level of significance of hydrology and water quality impacts after implementation of Master Plan Commitment HWQ-1 and Response to Comment AR00003-63 regarding mitigation measures.

SAL00015-304

Comment:

III. SOME IMPACTS WERE NOT EVALUATED

III.A Dry Weather Flows Were Not Analyzed

We previously commented that the Draft EIS/EIR should have analyzed dry weather flows, i.e. discharge from storm drains during the dry season, but the Supplement does not contain this analysis. (2001 Fox Comments, p. 19.) Elevated total and fecal coliform levels are of particular concern in dry weather flows.

The Draft EIS/EIR describes the many sources of dry water flows but does not contain any quantitative analysis. (Draft EIS/EIR, TR6, pp. 33-34.) This is particularly problematic for Alternatives A, B, or C, which would involve the elimination of the Imperial water quality retention basin and require that an alternative retention and/or water quality treatment BMP be provided. (Supplement, p. 4-456.)

We previously commented on this lack of an analysis and noted that its reliance on existing regulations and procedures cannot be used to avoid performing a proper analysis. (2001 Fox Comment, III.A, pp. 19/20.) The Supplement does not acknowledge these comments nor does it add any additional comment.

The document should be modified to quantitatively evaluate the impacts of dry weather flows and to impose feasible mitigation to reduce the impacts to a less-than-significant level.

Response:

Please see Topical Response TR-HWQ-2 regarding Master Plan Commitment HWQ-1 and compliance with regulations and Response to Comment AL00002-3 regarding removal of the Imperial retention basin under Alternatives A, B, and C. Data are not available to quantitatively analyze the impact of dry weather flows as is done with wet weather runoff where runoff can be estimated as a function of rainfall. However, the BMPs that will be incorporated in both the design and future operations will minimize future dry weather flow through a combination of source control measures described in Master Plan Commitment HWQ-1 and treatment controls. Furthermore, the City of Los Angeles and other municipal storm water permittees are in the process of implementing dry weather flow diversions on all major storm drains discharging to Santa Monica Bay to meet the dry weather bacteria TMDL. This includes a diversion at the Imperial Storm Drain that was completed in December 2002.

SAL00015-305

Comment:

III.B Construction Water Quality Impacts Were Not Evaluated

Neither the Supplement nor the Draft EIS/EIR contains an analysis of the water quality impacts of Project construction. Construction of the Project would occur over an extended period of time and affect a very large area. Construction activities are notorious for creating erosion and generating muddy turbid runoff, i.e. high TSS pollutant loads. The Draft EIS/EIR acknowledges that construction "could create sources of pollution that could potentially affect water quality," yet it contains no analysis of this issue, instead arguing that following the procedures in LAWA's Construction Storm Water Pollution Prevention Plan ("SWPPP") for LAX would assure that these impacts would be less than significant. (Draft EIS/EIR, pp. 4-553, 4-556, 4-559.) However, it is impossible to conclude that site-specific impacts have been fully mitigated without first performing an appropriate analysis. Further, it is impossible to review a document that purports to address the issue when the document is not provided for public review.

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We previously commented on this lack of an analysis and noted that reliance on existing regulations and procedures cannot be used to avoid performing a proper analysis. (2001 Fox Comments, III.A, pp. 19/20.) The Supplement does not acknowledge these comments nor does it add any additional comment.

This lack of a quantitative analysis is unacceptable under CEQA and the document must be modified to quantitatively evaluate the impacts of construction for each alternative and to impose feasible mitigation to reduce the impacts to a less-than-significant level.

Response:

Please see Topical Response TR-HWQ-2 regarding compliance with regulations and Response to Comment AR00003-63 regarding mitigation measures appropriate for program-level evaluation. In accordance with the General Construction Permit and LAWA's Construction Storm Water Pollution Prevention Plan, project-specific Storm Water Pollution Prevention Plans will be prepared for specific construction phases of the project that will include comprehensive BMPs that will be identified, constructed, implemented in accordance with a time schedule, and maintained to reduce or eliminate pollutants in storm water discharges and authorized non-storm water discharges from the construction site during all construction phases. Also, please see Section 4.7, Hydrology and Water Quality (subsection 4.7.5), of the Final EIS/EIR for a list of BMPs that will be considered for use during construction of the selected alternative.

SAL00015-306

Comment:

HAZARDOUS MATERIALS

Los Angeles World Airports ("LAWA" or "the Applicant"), the operator of the Los Angeles International Airport ("LAX"), has published a Draft Master Plan Addendum, a Supplement to the Draft Environmental Impact Statement/Environmental Impact Report¹ ("Supplement"), and Airport Layout Plans Package on the modernization of LAX ("Project"). These documents supplement the Draft Environmental Impact Statement/ Environmental Impact Report² ("Draft EIS/EIR") and add discussion of Alternative D to the previously discussed Master Plan alternatives.

There are a number of contaminated properties in the areas that would be disturbed by construction. (Supplement, Table S4.23-1 and Figs. S4.23-1, S.23-2, S4.23-3, S4.23-4, S4.23-5.) The Draft EIS/EIR and Supplement acknowledge this contamination could result in significant impacts and recommend two Master Plan Commitments, HM-1 and HM-2, to mitigate these impacts. (Draft EIS/EIR, pp. 4-979/980 and Supplement, pp. 4-559/600.) However, the Draft EIS/EIR and Supplement fail to discuss all of the impacts of this contamination. Further, these two mitigation measures are not adequate to mitigate the impacts to a less than significant level.

These comments expand upon some of our previous comments on the Draft EIS/EIR and address new issues raised by the Supplement. (Comments on Hazardous Waste, LAX Master Plan Draft EIS/EIR (July 13, 2001) by J. Phyllis Fox, Ph.D., Attachment F to September 18, 2001 Comments Submitted on Behalf of the City of El Segundo by Shute, Mihaly & Weinberger ("2001 Fox Comments").)

¹ LAX Master Plan Supplement to the Draft Environmental Impact Statement/Environmental Impact Report, July 2003.

² LAX Master Plan Draft Environmental Impact Statement/Environmental Impact Report, January 2001.

Response:

Specific issues are addressed under previous similar comments AL00033-417 through AL00033-437 and are responded to respectively.

SAL00015-307

Comment:

I. IMPACTS NOT EVALUATED

I.A Impacts Of Construction At Contaminated Sites Are Significant And Neither Adequately Analyzed Nor Mitigated

The Draft EIS/EIR and Supplement identify a number of contaminated sites and conclude that additional contamination may be discovered during construction. The Draft EIS/EIR and Supplement also admit that disturbance of contaminated soils and groundwaters during construction" could pose a risk of exposure to construction workers or the environment." (Draft EIS/EIR, pp. 4-989, 4-993, 4-994 and Supplement, p. 4-608.) However, neither the Draft EIS/EIR nor the Supplement evaluates what those impacts would actually be, instead arguing without any analysis that these impacts would be fully mitigated by Master Plan Commitments HM-1 and HM-2 and existing laws and regulations.

However, as discussed in Comment II below, these measures are not adequate to mitigate significant impacts from construction at contaminated sites. Further, compliance with existing laws and regulations will not avoid adverse impacts to workers because they do not address construction at contaminated sites. HM-1 and HM-2 do not ensure that all contamination will be remediated prior to the start of construction, and they provide no means to identify previously undiscovered contamination that comes to light during construction, creating a situation in which construction workers could be adversely exposed to contaminated soils and groundwaters. Thus, significant exposures are possible and unmitigated.

In addition to the comments made on this issue in the Fox 2001 Comments, the failure to thoroughly investigate sites of known soil and groundwater contamination results in a significant impact of construction at contaminated sites.

The failure to complete remediation at construction sites and provide for safety procedures to deal with encounters with previously unidentified contamination before construction begins is amplified by the fact that many known sites within the Master Plan boundaries have yet to be characterized sufficiently for remedial measures to be selected. Table S4.23-1, Soil and Groundwater Contamination and Remediation Status, lists ten sites at which investigation of soil contamination is not completed and that are within the footprint of all four alternatives. An additional five such sites are within the footprint of one or more of the alternatives. The same Table lists four sites at which investigation of groundwater contamination is not completed and that are within the footprint of all four alternatives. An additional three such known groundwater contamination sites are within the footprint of one or more of the alternatives. The presence of known, but uncharacterized soil and groundwater contamination increases the probability of uncontrolled encounters by workers during construction activities.

Response:

Please see Response to Comment AL00033-417. As indicated in Section 4.23, Hazardous Materials, of the Draft EIS/EIR and Supplement to the Draft EIS/EIR, in cases where remediation has not been planned or completed, contaminated soil and groundwater may be encountered during grading and excavation. Disturbance of contaminated soils and groundwater could pose a risk of exposure to construction workers or the environment. In addition, it is possible that, during other construction activities for implementing the Master Plan build alternatives, previously unidentified soil and/or perched groundwater contamination would be encountered. Exposure of construction workers to contaminated materials can be minimized by implementing the measures required by federal, state, and local laws and regulations. In addition, in recognition of the number of construction projects that would be undertaken concurrently, LAWA would implement Master Plan Commitment HM-2, Handling of Contaminated Materials Encountered During Construction, to further reduce the potential adverse effects of excavating contaminated materials.

Master Plan Commitment HM-2 describes LAWA's commitment to identify the nature and extent of contamination in all areas where excavation, grading, and pile-driving activities will be performed and, if warranted, as determined by the regulatory agency with jurisdiction, LAWA will conduct remediation prior to initiation of construction. In addition, LAWA will require all construction contractors to prepare site-specific Health and Safety Plans prior to initiation of grading or excavation which would identify the potential waste types to be encountered, potential hazards of concern, disposal methods, required protective equipment, decontamination procedures, and other information regarding hazardous conditions that may arise during soil moving operations. The Health and Safety Plan will incorporate all available site data including existing soil and groundwater contamination and known hazards. If previously undetected contamination is encountered during earth moving operations, provisions for

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identification, evaluation, and management are included within the Health and Safety Plans. Again, the regulatory agency with jurisdiction will be involved with evaluation of the site hazards and, if warranted, LAWA will conduct remediation prior to initiation of construction. However, with proper mitigation, construction activities can occur on sites undergoing remediation.

Implementation of Master Plan Commitment HM-2 would ensure that contaminated materials encountered during construction are properly identified, remediated, and disposed of in accordance with all applicable regulations, including those governing worker health and safety. As such, potential worker exposure impacts associated with the excavation of contaminated materials would be less than significant.

SAL00015-308

Comment:

I.B Significance Thresholds Not Adequate

In addition to the comments made on this issue in the Fox 2001 Comments, the significance thresholds are not adequate in yet another respect.

The fourth threshold of significance listed in the Supplement, "Contamination of soil or groundwater or prevention of cleanup of sites that are currently undergoing soil or groundwater remediation" is also inadequate. (Supplement, p. 4-599.) Soil or groundwater contamination caused by the Master Plan would be significant if it would potentially frustrate future investigation efforts or foreclose remedial options that future investigation efforts may find would be most effective. The fourth threshold of significance should be reworded to be "Contamination of soil or groundwater, prevention of cleanup of sites that are currently undergoing soil or groundwater remediation, or construction in an area of known soil or groundwater contamination for which investigation and remedy selection are not yet accomplished."

Response:

Please see Responses to Comments AL00033-424, AL00033-425, and AL00033-418. The fourth threshold of significance adequately establishes a reasonable basis for identifying adverse impacts deemed significant from those not deemed significant. The Draft EIS/EIR and Supplement to the Draft EIS/EIR described the potential for interruption of remedial efforts and measures that would be employed to mitigate the impacts of the interruption under each Master Plan alternative and the No Action/No Project Alternative in Section 4.23, Hazardous Materials (subsection 4.23.6). As indicated in Response to Comment AL00033-424, Master Plan Commitment HM-1, as described on pages 4-599 and 4-600 in Section 4.23, Hazardous Materials, of the Supplement to the Draft EIS/EIR, states LAWA's commitment to continue remediation on sites with existing soil and groundwater contamination affected by the proposed construction. The commitment states that if it is determined during the pre-construction evaluation that construction will preclude reinstatement of remediation effort, LAWA will obtain approval to initiate construction from the agency with jurisdiction. LAWA is also committed to implement temporary measures during construction to stop migration of contamination in the event that remedial efforts are interrupted. In addition, Master Plan Commitment HM-1 states that if any threshold of significance listed in Section 4.23, Hazardous Materials (subsection 4.23.4.1), is exceeded, LAWA will take immediate and effective measures to ensure the health and safety of the public and workers, and to protect the environment. The commitment thus states the mechanism to safely move forward with construction on sites where remediation of soil and groundwater contamination is not complete.

SAL00015-309

Comment:

II. MITIGATION MEASURES ARE NOT ADEQUATE

The mitigation measures recommended in the Draft EIS/EIR and Supplement are not adequate to protect construction workers at or near contaminated sites, for the reasons presented in the Fox 2001 Comments. In addition, these mitigation measures are not adequate to ensure thorough remediation of soil and groundwater contamination, particularly where investigations of known contamination are not yet completed.

An environmental site inspector, reporting to the City and oversight agency, had to be present during construction to detect previously undiscovered contamination.

The Draft EIS/EIR's and Supplement's analyses of contaminated properties are plagued with circular reasoning that fails to mitigate significant impacts. The following expands the significance of this circular reasoning.

Draft EIS/EIR and Supplement admit that known contamination poses a risk to construction workers and the environment. As mitigation, they recommend mitigation measure HM-1, which requires that existing soil or groundwater remediation efforts at contaminated sites be remediated prior to the start of construction. This requirement appears to apply only to known contamination sites at which the requisite investigation has occurred to support beginning a soil or groundwater remediation effort in the first place. Where such investigation has not yet occurred, or been completed, HM-1 appears not to apply. Moreover, a careful reading of this measure indicates that remediation need not be completed prior to construction if it is "not possible," which leads back to the original impact, sans mitigation. The Draft EIS/EIR and Supplement neglect to analyze the impacts if remediation is not possible or has not started because the remedial measure has yet to be selected.

Response:

Please see Responses to Comments AL00033-417 through AL00033-423, SAL00015-307, and SAL00015-308. Proper pre-construction planning and precautions during construction, as described in Master Plan Commitments HM-1 and HM-2, would ensure that potential worker exposure impacts associated with construction in areas of contaminated soil would be less than significant.

SAL00015-310

Comment:

II.A. Mitigation Measure HM-1

HM-1 is inadequate in two fundamental areas. First, it is deficient in the way it attempts to protect the continued effectiveness of existing remediation efforts. Second, it does not provide for completion of investigation at sites of known contamination prior to beginning construction. The first of these areas of inadequacy is thoroughly discussed in the Fox 2001 Comments.

The second fundamental deficiency of HM-1 is its failure to require completion of investigations at known contamination sites prior to construction. Because the investigation of known soil and groundwater contamination is incomplete, and in some instances not even begun, remedial alternatives for the most effective remediation may be foreclosed. Soil or groundwater contamination that becomes covered by the Project's runways or buildings may be difficult, and sometimes impossible, to clean up as thoroughly as before construction occurs.

Unfortunately, Master Plan Commitment HM-1 is silent with regard to known contamination for which remedial efforts have yet to be identified because investigation has yet to begin or is incomplete. By its very nature, Master Plan Commitment HM-1 as currently worded could not assure effective remediation after Project construction, unless the investigation of soil and groundwater contamination were completed so as to enable selection the optimal remedial alternative. Construction in areas of known soil or groundwater contamination that have not been fully investigated is a significant impact not acknowledged in the Supplement. HM-1 should be revised to provide for acceleration of environmental investigations at and near construction sites before any construction occurs that could either hinder investigation or install Project facilities that render a preferred remedial alternative less effective.

In sum, investigation and remediation of hazardous waste contaminants is nearly always completed before the start of construction. Master Plan commitment HM-1 should be modified to explicitly require the investigation and remediation of all contaminated properties prior to the start of construction.

Response:

Master Plan Commitment MH-1 includes provisions for addressing contamination unknown at this time or at sites for which remedial activities have not yet been identified or implemented. The purpose of the pre-construction evaluations is to identify remediation planned or underway at the time of construction

3. Comments and Responses

but that which may not be known now. Moreover, Master Plan Commitment HM-2 requires LAWA to identify the nature and extent of contamination prior to construction and, if warranted, to undertake remediation as determined by the agency with jurisdiction. Please also see Responses to Comments AL00033-424 through AL00033-426 and AL00033-429 through AL00033-432.

SAL00015-311

Comment:

II.B. Additional Mitigation Measures

The above comments, and those discussed in Fox 2001 Comments, identify potentially significant impacts that have not been either discussed or mitigated in the Draft EIS/EIR and the Supplement. The Supplement should be revised to include analyses and recommend mitigation measures for these impacts. In addition to the Fox 2001 Comments' commonly required measures that are feasible and should be included, the following mitigation measure should be required:

- Construction should not begin at any site of known soil or groundwater contamination until investigations and remedy selection have been completed and approved by the appropriate regulatory agencies.

Response:

Please see Responses to Comments AL00033-423 through AL00033-437. The commentator's suggestion is essentially included as part of Master Plan Commitment HM-1 which states, "Prior to initiating construction of a Master Plan component, LAWA will conduct a pre-construction evaluation to determine if the proposed construction will interfere with existing soil or groundwater remediation efforts. For sites currently on LAX property, LAWA will work with tenants to ensure that, to the extent possible, remediation is complete prior to the construction. If remediation must be interrupted to allow for Master Plan-related construction, LAWA will notify and obtain approval from the regulatory agency with jurisdiction, as required, and will evaluate whether new or increased monitoring will be necessary. If it is determined that contamination has migrated during construction, temporary measures will be taken to stop the migration. As soon as practicable following completion of construction in the area, remediation will be reinstated, if required by the Regional Water Quality Control Board (RWQCB) or another agency with jurisdiction. In such cases, LAWA will coordinate the design of the Master Plan component and the re-design of the remediation systems to ensure that they are compatible, and to ensure that the proposed remediation system is comparable to the system currently in place. If it is determined during the pre-construction evaluation that construction will preclude reinstatement of the remediation effort, LAWA will obtain approval to initiate construction from the agency with jurisdiction."

SAL00015-312

Comment:

INTRODUCTION

The following comments analyze several elements of the 2003 LAX Master Plan Addendum (Addendum) and Supplement to the DEIS/EIR (Supplement). We have conducted an extensive analysis of the gate capacity of Alternative D, which is summarized in these comments and more fully documented in the attached report, "Capacity Analysis of Aircraft Gate Positions", (Appendix A). The comments below also discuss additional aspects of Alternative D relating to its physical capacity, including airfield configuration and sequencing of the Master Plan. In addition, we have analyzed the proposed alterations to the Runway 25 complex. We have identified numerous uncertainties regarding the proposed changes to this southern runway complex and concluded that additional information must be provided before we can fully evaluate its effects on El Segundo.

1. ALTERNATIVE D CAPACITY ISSUES

The Master Plan Addendum's Alternative D proposes to limit LAX to approximately 78 MAP by limiting the total number and size of gate positions to a figure that is below the other alternatives, and below the current values. This, 78 MAP is a limit on passenger traffic; it does not limit the total number of aircraft operations. According to the Addendum and the Supplement, the total number of aircraft operations

remains about the same for Alternative D as for Alternative C and the No Action/No Project Alternative. The Addendum's stated conclusion that Alternative D will serve no more than 78 MAP, i.e., substantially less than the 89 MAP served by Alternative C, is based on the assumption that by limiting the number and size of gates, it will force airlines to make specific anticipated adjustments to their markets and to shift services around between categories (international, domestic air carrier, commuter, etc.), and between aircraft types, and between airports in the Southern California region, which, according to The Addendum's projections, would result in approximately the target number of passengers served. The published documents provide no discussion on specific actions LAWA or other regional authorities propose to take in order to cause such market-driven adjustments to occur, nor do they provide any meaningful basis for concluding that The Addendum's assumptions are accurate or that the airlines would make the assumed adjustments to types of services offered. This is particularly problematic since the airfield and other elements of the airport under Alternative D have capacities that exceed the target 78 MAP.

The following sections summarize our analysis of capacity issues related to the airfield configuration, terminal and gate positions. Our conclusion, based on this analysis and on our full analysis of the gate capacity of Alternative D (Appendix A to this report), is that the gate positions as currently proposed by Alternative D do not limit future passenger levels to 78 MAP, especially since the airfield and other airport elements can accommodate larger numbers.

Response:

Comment noted.

The passenger activity that would be expected in 2015 with Alternative D was determined based on the design of the Alternative D gate facilities and the projected airline response to the constrained facilities. There is no federal law or regulation that would permit FAA or a local airport sponsor to prohibit the use of a public use airport. It is each airline's responsibility to provide suitable facilities to serve its needs. On the other hand, demand would regulate itself when airside capacity is constrained. Please see Response to Comment SPC00308-27 regarding the airport's ability to serve more passengers.

The anticipated air service changes are reasonable and based on historical trends and likely airline response to constrained facilities. Please see Section 3.3.2, Alternative D - Enhanced Safety and Security Plan, of the Supplement to the Draft EIS/EIR for more information.

Market forces favor and promote the continued use of primary airports such as LAX. The airlines, not government, dictate where air service will be provided and the airlines tend to select airports convenient to their customers. As a result of the Airline Deregulation Act of 1978, the federal government does not have the authority to direct where commercial air transportation will occur. LAX is and, with construction of Alternative D, would remain the primary international airport serving Southern California. Additionally, LAX would likely continue to serve as the regional hub for commuter service in and out of the Los Angeles area. Sufficient aviation infrastructure exists at other airports in the region to handle an increased amount of narrow body domestic air carrier service. With this in mind, it is reasonable to forecast further enhancement of domestic narrow body air carrier flights at other Los Angeles area airports if capacity at LAX is constrained.

The environmental analyses in the Draft EIS/EIR and Supplement to the Draft EIS/EIR, including noise and air quality, have addressed the potential impacts under the most practical and most likely activity level for each alternative including Alternative D. The Draft EIS/EIR and Supplement to the Draft EIS/EIR evaluated a reasonable range of alternatives as required by the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA).

Please see Response to Comment SAL00015-2 regarding the gate capacity analysis presented in Section E1.3, Aircraft Gate Assignments, in Appendix E, Alternative D Airside Analysis, of the Draft LAX Master Plan Addendum.

Alternative D does not increase runway capacity. Please see Response to Comment SPHF00021-3 regarding aircraft runway operations.

3. Comments and Responses

SAL00015-313

Comment:

1.1 Airfield Capacity

The airfield improvements proposed in Alternative D include runway relocation to increase the distance between parallel runways as well as runway length extensions. The increased separation allows the addition of centerline parallel taxiways between each pair of runways (24L/R and 25L/R). While these improvements are aimed primarily at enhancing runway safety by improving the runway crossing and reducing the potential for runway incursions, they will to some extent reduce delays, improve the overall operation and thus have a generally positive impact on runway capacity.

The DEIS/EIR Supplement (see p. ES 1-3) uses the concept of practical capacity as constraining the traffic at the airport, defining it on the basis of flight delays, expressed in minutes of delay per operation. But then the analysis in the Supplement goes on to show that Alternative D will have lower delay rates. This means that Alternative D will provide an increase in practical capacity, using the Master Plan's own definition. Fig. E- 17 of the Addendum, Appendix E, shows this reduction in average delay for Alternative D compared to both the NA/NP alternative and to Alternative C.

The table below lists the improvements to the airfield planned in Alternative D and as shown in Table ES-2 of the Supplement. Comparing the various alternatives, each of these improvements has an effect on capacity, and that effect can be either positive or negative. From the comparison available it is clear that all the airfield improvements in Alternative D enhance capacity over the baseline, leading to the conclusion that the airfield configuration proposed in Alternative D will have a capacity that is greater than, or at least equal to, that of the existing baseline or to the NA/NP alternative

Furthermore, based on The Addendum's analysis Alternative D even appears to have a capacity equivalent to, and possibly even higher than, Alternative C. The airfield analysis shown in Tables E-4 through E-7 of the Addendum, Appendix E, shows Alternative D operating with an all-weather average peak hour throughput of 141 operations as compared to 138 for Alternative C and 140 for the NA/NP alternative.

Based on this comparison, the airfield configuration proposed in Alternative D does not preclude traffic from reaching levels well beyond the baseline volumes, and can accommodate levels that exceed those projected for Alternative C of the Master Plan.

Airfield Improvements and Capacity Comparisons
[see original document]

Response:

Alternative D does not increase runway capacity. The four-runway system in Alternative D delivers the approximately same runway capacity as the No Action/No Project Alternative and Alternative C. Please see Response to Comment SPHF00021-3 regarding aircraft runway operations. Because the activity profiles are derived based on the capacity of the alternative, every alternative has all weather average delays within the pre-defined 10 to 15 minute range in 2015. Alternative D would have slightly lower delay and slightly fewer cancellations than the No Action/No Project Alternative due to the airfield improvements associated with Alternative D. However, this does not equate to increased total airfield capacity because the airfield is not always operating as it does during peak hours. The existing airfield and each of the proposed airfields technically have higher capacity than is being or would be utilized if one were to assume that the airport operated at its maximum operational volume 24 hours per day. However, we accept that demand is reduced from midnight to 6AM resulting in far fewer flights during these hours than the Airport would be able to accommodate.

Alternative D does not have a higher capacity than Alternative C. Delays with Alternative D would be lower than Alternative C because Alternative C would have a heavier fleet mix than Alternative D.

The airfield proposed by Alternative D does not preclude traffic from reaching levels beyond the baseline volume if there is no gate facility limitations. Alternative D would not accommodate levels that

exceed those projected for Alternative C. Alternative C was designed to test the limit of the market to serve passenger and cargo demand within the constraint of a four-runway system at LAX.

SAL00015-314

Comment:

1.2 Terminal and Gate Position Capacity

The LAX Master Plan Addendum proposes a configuration for Alternative D that includes 153 nominal aircraft gate positions, and a distribution of gate sizes that results in about 179 narrow body equivalents (NBEG). However, neither the Addendum nor the Supplement to the DEIS/EIR contains a capacity analysis of the proposed terminal and gate position system. Instead, the Addendum calculates a flow of 78.8 million annual passengers (MAP) on the basis of a series of market assumptions and forecasts.

Our review and analysis of the proposed terminal and gate configuration for Alternative D leads to the conclusion that the capacity of the system exceeds 78 MAP, and is close to 87 MAP. (See Attachment A to this Report, Capacity Analysis of Aircraft Gate Positions.) The analysis on which this capacity estimate is based accepts the majority of the assumptions of the Master Plan and is considered a fairly conservative estimate of the system's ability to handle traffic.

The Addendum's calculation of passenger traffic flow is based on a number of market assumptions. These assumptions do not represent a capacity analysis of the gate positions, but an estimate of what traffic volumes might be under assumed market conditions. We consider these market assumptions to be fairly conservative, and result in an underestimation of possible traffic volume. The traffic volumes used in the Addendum cannot be used as a representation of the capacity of the system.

In the following paragraphs, we list the assumptions used by the Addendum and we provide comments on them, pointing out discrepancies, errors, and inaccuracies. The assumptions of the Addendum that underlie the estimation of traffic are summarized in Table 1 below, which shows the excerpts from Table 3.3-1 of the Master Plan Addendum, comparing the NA/NP alternative with Alternatives C and D. (Table 1 here contains corrections to some numbers that were erroneous in the Addendum)

Table 1. LAX Master plan Assumptions for Alternatives
[see original document]

Response:

An airport's ability to accommodate passenger traffic is partially based on the physical infrastructure available, such as gate positions. However, market conditions weigh heavily on the actual number of passengers that ultimately arrive and depart at a given airport.

As it relates to LAX, Exhibit 3.3-1 of the Draft LAX Master Plan Addendum illustrates Design Day Hourly Operations in a graphical format. Between the hours of midnight and 6:00 a.m. the airport sees fewer than 25 hourly operations. This lack of activity is not due to constrained airport capacity but due to market conditions that make it difficult for airlines to sell seats on flights that depart at this time of the day.

Market factors influence airport activity. The analysis conducted acknowledges this fact and clearly articulates a reasonable market-based activity scenario that is consistent with the Draft LAX Master Plan forecast and design day activity forecasts used to evaluate the impacts of each alternative.

The commentor suggests adjustments to several variables in the Draft LAX Master Plan Addendum activity scenario for Alternative D, but fails to address the changes that would occur to the other interconnected variables.

Attachment A of the commentor's information acknowledges a wide range of activity that could result from changes to various assumptions. While it acknowledges a high of 87 MAP it fails to acknowledge its corresponding low capacity figure of 73 MAP.

3. Comments and Responses

SAL00015-315

Comment:

1. Total Airport Traffic

As seen in Table 1 above, the Addendum indicates that Alternative D is designed to handle about the same total annual and Design Day aircraft operations in 2015 as the No Action/No Project Alternative and Alternative C. Despite this, the Addendum concludes that annual passenger flows will differ dramatically between the alternatives. This is based on assumed distributions of these operations among types of operations, aircraft, and gate position sizes. The basic premise of the Addendum is that airlines will respond to the number and size of gates by downsizing fleets and will thereby end up carrying fewer passengers per operations. The Addendum quantifies these effects by making extensive assumptions regarding airline operation and markets. There is no justification or validation of the vast number of market assumptions used in the Addendum to arrive at the traffic flow numbers presented. A detailed review of some of these assumptions also raises doubt about their viability. For example the Addendum predicts that the number of domestic air carrier passengers will actually drop at LAX between 2000 and 2015 (from 47 MAP to 45 MAP). Some of that drop is taken up by growth in commuter passengers (about 0.7 MAP). The implication is that the rest of the traffic demand will move to other regional airports. There is no reason to believe that this shift will occur, especially in the absence of specific policies that make it happen, and certainly not with the proposed number and configuration of gate positions proposed in Alternative D.

Response:

One of LAWA's stated goals entering the Master Plan process is to maintain LAX's status as Southern California's premier international gateway. Alternative D is designed to allow this status to be maintained and to constrain passenger traffic in and out of LAX. The constraining feature of the Alternative D design is the amount of and design of the passenger gate facilities.

In addition, Alternative D responds directly to the Regional Aviation Policy articulated by SCAG in the 2001 Draft RTP and suggested policy for the Draft 2004 RTP Update. A key foundational assumption of the RTP is to serve local aviation demand as close as possible to where people will live and work in the Southern California region in the future. The SCAG policy goes further to develop policy for the redistribution of aviation activity at other airports in the region other than LAX. Correspondingly, Alternative D assumes that other airports in the Los Angeles region would accommodate some of the traffic LAX would no longer be able to comfortably serve.

In order to achieve these goals Alternative D must be designed to reflect that the most likely air carrier service to be accommodated at other regional airports is domestic narrow body jet service. This is for two reasons. First, International air carrier operations require a specialized airport environment to operate. LAX is the only existing airport in the region that realistically can accommodate growth in international service without major modifications. Customs, immigration facilities, cargo facilities, airfield infrastructure, terminal infrastructure and service equipment would all have to be duplicated at other airports to handle international air service while Burbank, Ontario, Long Beach, Santa Ana and other airports already have the facilities in place to accommodate narrow body domestic air service. Secondly, commuter operations are more likely to remain prevalent at LAX because LAX operates as a hub airport for American Airlines and United Airlines. The commuter operations into LAX feed the American and United hubs and their international alliance and marketing partner flights. Little or no airline hubbing occurs at any other airport in Southern California.

Because of these factors, it is assumed that implementation of Alternative D would result in growth in commuter and international air operations and a reduction in domestic narrow body jet service.

SAL00015-316

Comment:

2. Fleet mix and aircraft sizes

The Addendum makes assumptions about the fleet mix that it considers to be a market response to the limited number and size distribution of gates provided in Alternative D. The Addendum further assumes that each aircraft carries what it refers to as a "typical" number of seats.

There are several assumptions regarding fleet mix used that we believe are questionable. The first concern is with the accuracy of assumed seating for each aircraft considered in the analysis. In the attached capacity report we show that the assumed aircraft seating sizes are not realistic for capacity comparison, and while they might reflect current market conditions, they do not reflect what the practical capacity of gates are, especially given the current developments in the fleet and the types of aircraft that airlines using LAX are ordering.

The second concern deals with some of the aircraft types used, where older versions are retained in the analysis and some of the newer aircraft versions are not taken into account. For example, B-737-800 and B-737-900, are overlooked even though a fair number of those aircraft have been ordered by the major airlines operating at LAX. These types have significantly higher number of seats compared to the earlier versions of the same type. Also, the Master Plan's fleet mix includes some of the older aircraft types that are likely to be phased out of the operations by 2015 (i.e. F-100, ATR-42), either because they are fairly old and not compatible with the noise (and other) standards, or because they have already been out of production for some time (examples include F-100, F-70, ATR-42).

The GA, military, cargo and air carrier fleet mix used in the Alternative D is not clearly described in the Addendum. In many places the Addendum refers to the fleet mix assumptions of LAX Master Plan Draft, but the data and information differ between the two, and there are no explanations of these differences.

Response:

Market conditions in Los Angeles and particularly at LAX suggest that aircraft operating in and out of the airport would typically have fewer seats per enplanement due to the fact that LAX is a high yield airport. Airlines that cater to high yield customers and provide first class service have fewer seats per aircraft than their low fare leisure specialist airline counterparts.

The aircraft that make up the fleet mix in Table F-3, Hourly Design Day Total Operations by Aircraft Type 2015 Alternative D, in the Draft Master Plan Addendum Appendix F are based on a number of factors. The Boeing 737-700, which is the most common of the newest generation of 737 derivatives, is shown in the fleet mix. Additionally, though the 737-300, 400 and 500 are older derivatives, they have Stage 3 engines and are anticipated to continue operating well into the future. The sheer number of second-generation 737 aircraft in operation today, as it's the most popular commercial aircraft in history, suggests it will remain in use for a great deal more time. The most common aircraft type in this table is the Boeing 757, which makes up a very small portion of the overall domestic air carrier fleet. However, it is anticipated that the 757, and its associated seat capacity versus other narrow body aircraft, will remain unusually common at LAX due to the constrained number of aircraft gates. With production of the 757 ending in the near future after a 20 year run, it is probable that some of the 757 operations expected with implementation of Alternative D would be replaced with Boeing 737-800, 737-900 or Airbus A321 operations. However, the 757 has more seat capacity than any of these aircraft therefore adjusting the schedule to reflect this would result in a lower expected activity level associated with Alternative D.

Similarly the ATR-42 and F100 may be replaced by more modern aircraft but with similar seating capacity. This would not change the passenger volume assumptions contained in the Draft Master Plan Addendum or Supplement to the Draft EIS/EIR.

As acknowledged by the commentor, the Master Plan analysis is based on the actual way aircraft are configured and used in revenue service in the LAX market. Airplanes are not configured to serve one constrained airport but rather the seat capacity and marketing principles of the air carrier. These configurations rarely change and when they do they are normally to remove seats for comfort and related marketing purposes.

3. Comments and Responses

SAL00015-317

Comment:

3. Traffic Operations by Type of Service

The Addendum assumes a mix of total design day operations by carrier type: domestic, international, Hawaiian, and commuter. These operations split assumptions are shown in Table 3.3-1 of the Addendum. The Addendum bases these assumptions on the following market analysis as stated (Addendum Section 3.3.3 Air Service Changes):

- "Commuter operations would likely be reduced from 1996 levels, consistent with the forecasts for No Action/No Project and Alternative C, in order to maximize the number of passengers that could be served with a limited number of operations. It is also projected that some of the forecast commuter O&D demand would be served by domestic air carrier flights.

- Domestic air carrier connecting passengers would decrease from 2015 forecast levels to reflect the projected loss of connecting passengers from commuter flights."

According to these assumptions, one would expect the number of commuter operations not to be as high as it is projected in Alternative D. So while all three alternatives (NA/NP, Alternative C and Alternative D) are projected to show a drop in commuter operations from the 1996 level of 644 during the design day, Alternative D seems to have dropped the least. In fact, Alternative D forecasts that the commuter traffic will actually grow from today's level. In Table 3.3-1 of LAX Master Plan Addendum we see that there were 644 commuter operations in 1996, then 474 commuter operations in 2000. Alternative D assumes that these operations will grow to 532 in 2015, which does not agree with the Master Plan assumptions. The table below shows the Addendum's questionable assumption that commuter operations in Alt D will exceed the NA/NP alternative.

Commuter Operations, Design Day and Annual Passengers
[see original document]

Response:

Airlines serving LAX extract higher yields per commuter enplanement and further compound these yields on international and long haul connections. With a constrained facility, as is proposed in Alternative D, airlines would be likely to focus on the highest yielding markets. Commuter operations at LAX almost exclusively feed international and long haul flights.

The commentor focuses only on the number of operations in the market segment while ignoring the corresponding fleet changes and associated passenger levels. In the case of commuter activity, there was a significant decrease in the number of operations between 1996 and 2000. The commentor fails to acknowledge that during the same time period commuter passengers increased from 2.76 million in 1996 to 2.92 million in 2000. This change resulted from the abandonment of the LAX market by 19 seat aircraft.

Lastly, the commentor correctly states two of eight clearly articulated assumptions in the same section of the Draft Master Plan Addendum. All eight market assumptions are stated here to provide clarity and consistency on the subject.

1. High priority would be given by the airlines to accommodating O&D passengers. However, it would still be important to maintain a minimum level of connecting passengers to maintain LAX's role as a hub and international gateway. Accommodating O&D passengers would be maximized to the extent possible within these guidelines; resulting in 87 percent of the 2015 unconstrained O&D demand forecast being accommodated in Alternative D. The projected number of Alternative D O&D passengers as a percent of total passengers would be similar to the forecast for Alternative C.

2. Commuter operations would likely be reduced from 1996 levels, consistent with the forecasts for No Action/No Project Alternative and Alternative C, in order to maximize the number of passenger that could be served with a limited number of operations. It is also projected that some of the forecast commuter

O&D demand would be served by domestic air carrier flights. Note: Aircraft considered to be commuter operations are defined in Table F-3 in Appendix F of the Draft Master Plan Addendum.

3. Domestic air carrier connecting passengers would decrease from 2015 forecast levels to reflect the projected loss of connecting passengers from commuter flights.

4. The domestic air carrier hourly profile would be de-peaked and service would be reduced from 2015 unconstrained forecast levels in the Central, Eastern and Asia-Pacific regions to reflect the projected response from the airlines to the airfield constraints. The airlines would adjust their schedules to allow for more profitable and less flexible international operations to be scheduled at peak periods. Time zone and airport operating restrictions at international destinations in both Asia and Europe place limitations on the arrival and departure times for flights to these world regions.

5. The percentage of domestic and international air carrier O&D passengers would increase as the airlines attempt to serve the unconstrained forecast O&D demand with fewer operations. As a result the projected percentage of connecting passengers would decrease.

6. The average aircraft size would increase from existing levels without significantly exceeding the unconstrained forecast seats per departure for each air service component. This is reflective of the already large fleet size serving LAX.

7. Cargo operations would be equivalent to those forecast in the 2015 No Action/No Project Alternative.

8. Total general aviation activity would remain at 1996 and 2000 levels and operation would move out of peak hours to avoid excessive arrival and departure delays.

SAL00015-318

Comment:

4. Seasonal patterns

Another of the Master Plan assumptions that we believe is flawed is the adopted Annual Conversion Factor of 300. (Annual Conversion Factor = Annual Passengers/Design Day Passengers). The LAX Draft Master Plan correctly assumes that as traffic grows in the face of limited facility expansion, de-peaking of both operations and passengers will occur. This should result in a rise rather than a decline of the Annual Conversion Factor. Table 2 below shows the actual operations and Annual Conversion Factors for 1996 and 2000, and the Addendum's forecasted values for 2015. We can see that even in year 2000 when the number of operations declined, the Annual Conversion Factor was 312. In 1996 it was 310. If alternative D involves de-peaking due to the capacity constraint then we should expect these factors to increase and not to decrease to the 300 level assumed in the Master plan.

Table 2. Annual Conversion Factors
[see original document]

It is also curious that the same conversion factor of 300 is used for all alternative A through D and the NA/NP alternative. If there were a basis for changing the factor depending on market response to the different alternatives, then one would have expected it to vary among such vastly differing alternative as A and D. But it does not. Nor do the annual factors used to convert design daily operations, which appear to be the same for all alternatives, and the same for the base years of 1996 and 2000 as well as 2015. The Addendum's estimate of annual passenger flows as based on these conversion factors is therefore considered questionable and not a sound basis for estimating system capacity, not in the terminal, and not in the airfield for that matter.

Response:

The commentor incorrectly focuses on the output figure of annual to design day passengers throughout their review of the Alternative D analysis. The correct input parameter to the analysis, when annualizing design day activity, should be annual to design day operations factors by market segment. This is the factor that is forecasted and correctly reflects the hourly airfield and gate constraints addressed in the Master Plan.

3. Comments and Responses

Design day aircraft operations are the only parameter that is assumed to be de-peaked. In the case of design day and peak hour passengers, the number increases even with fewer operations due to the combined effects of larger aircraft (higher seat capacity) being used in the peak hour and higher peak hour load factors representing high passenger demand for these key travel periods during the day.

Design day to annual operations factors are a reflection of the seasonal characteristics of the LAX market. This seasonality profile does not change over time and is, therefore, a highly predictive factor that is commonly used for aviation forecasting.

The Master Plan focuses on the key operations constraints facing LAX in the future as a result of the four-runway limitation. The Alternative D analysis also focuses on the key limiting effect of aircraft gates on an hourly basis throughout the design day. Based on the combination of seat capacity (variable surrogate for fleet mix) and load factor (forecast constant) passenger volumes in the design day, and on an annualized basis, are derived.

SAL00015-319

Comment:

5. Mix of Gates and Computation of Narrow-Body Equivalent (NBEG's)

The Addendum uses the concept of narrow-body equivalents (NBEG's) to characterize the size of different gate types. This is a sound concept in principle, but needs to be used with caution when analyzing the capacity of a gate position system. The reason is that for the same wingspan, or gate position size, aircraft come in a fairly wide variety of seating configurations. A one narrow-body equivalent gate, for example, can accommodate aircraft with seating configurations as low as 100 and as high as 200. Furthermore, the capacity can be altered significantly by converting smaller gates into larger ones, losing numbers of gates, but gaining seating capacities and passenger flows.

It is therefore important from the capacity control perspective to ensure that a gate mix proposed and approved in the Master Plan not be altered, even if the total number of NBEG's remains unchanged. We note that there are some mistakes in the computation of the number of NBEG's as presented in the Addendum. These are described and corrected in the attached capacity analysis report.

Response:

Ramp charts are provided for Alternative D in Appendix E, Alternative D Airside Analysis, Figures E-5 and E-6 in the Draft Master Plan Addendum.

Larger aircraft and long haul flights have considerably longer gate times than smaller aircraft serving short haul markets. This gate time is a direct reflection of the amount of time required to service (particularly fuel and load) larger aircraft. It is not uncommon to have significantly higher seats/NBEG/day from narrow body aircraft than any mix of wide body, long haul aircraft. All assumptions and results of the LAX Master Plan analysis for Alternative D have been disclosed in the Draft Master Plan Addendum.

It is also critically important to this discussion to articulate a thoughtful, reasonable and internally consistent forecast of activity as reflected by a complete discussion of the assumptions in the forecast analysis. With regard to the mistake referred to by the commentor in his report: As described in the Draft Master Plan Addendum in Section 2.2.7, which is adjacent to the tables referenced by the commentor, the number of existing gates was reduced from 165 (Table 2.2-1 Existing 1996) to 163 (Table 2.2-2 Existing 2002) due to the consolidation of four narrowbody domestic gates into two Group V international gates. However, if any calculations were found to be in error in the Draft master Plan Addendum or Supplement to the Draft EIS/EIR, a full accounting of the error and its effects would be disclosed.

SAL00015-320

Comment:

1.3 Terminal Building Square Footage

There are discrepancies in the total available square footage ASF of the terminal building in Alternative D as presented in various locations in the Addendum and the Supplement. Figures of 6.55 million available square feet appear commonly, but so do other figures such as 6.8 million in Table S3-2 and 7.24 million in the Land Use analysis. THE ADDENDUM needs to clarify the actual figures envisaged in the Master Plan.

In any case, assuming here that the smallest of the figures that appear, 6.55 million sq. ft. is the correct one, there remains the question as to why this figure is needed. This figure is significantly higher than that of the NP/NA alternative, which has 3.99 million sq. ft. and they are both presumably serving presumably the same traffic volume. While some of that difference can be explained by the increased security requirements that are accommodated in Alternative D, the total figure remains unexplained. The same is true of the available square footage for gate lounge areas, which also exceed the figures for the base NP/NA alternative. The available square footage in the terminal system in total, and related to annual passenger volumes is compared in the table below for the three alternative, NP/NA, C, and D.

Comparison of Terminal Space Available in the Various Alternatives
[see original document]

This comparison raises the question as to why Alt D enjoys such a significantly higher level of service than the others. The increased terminal size would be consistent with an airport serving more than 78 MAP. A reduction in terminal square footage from the proposed major increase should be considered as a secondary means of ensuring that passenger levels under Alt D do not exceed the asserted goal of 78 MAP.

Response:

There are no discrepancies in the terminal square footage calculations in the Draft Master Plan Addendum and Supplement to the Draft EIS/EIR. The figure of 6.55 million square feet of terminal building space to which the commentor refers is from Table S3-2 in the Supplement to the Draft EIS/EIR and does not include the 250,000 square feet of terminal square footage contained in the GTC and ITC. The 6.8 million square foot total is figured in the same table in the row titled Total Square Feet of Terminal Building Space. Table 2.2-1 in the Draft Master Plan Addendum does not include figures for the GTC and ITC. The Land Use Analysis includes area not enclosed within terminal facilities.

Alternative D would include more square footage of terminal space to accommodate, as the commentor suspects, security features and an improved level of passenger service. As would reasonably be expected, the greatest difference in terminal space is between the No Action/No Project Alternative, which provides no additional terminal space, and Alternative D, which was designed later than the other three Alternatives and takes into account the overwhelming demands of airport security presented with the events of September 11, 2001. Accommodating the highest level of security at LAX while simultaneously maintaining efficient passenger processing facilities has created a need for more square footage of terminal space than planned for in Alternatives A, B, and C.

The constraining feature of LAX Master Plan Alternative D remains the number of and arrangement of aircraft gates for passenger loading and unloading.

SAL00015-321

Comment:

1.4 Airport parking

It is unclear why Alternative D provides a public parking capacity similar to Alternative C, when the latter is planned for a much higher level of traffic. The Addendum shows Alt. D with 35,002 stalls compared to 35,636 for Alt. C and 33,926 for the NA/NP alternative. If Alternative D has a capacity of 78 MAP, then the amount of parking provided should be less than that required for Alternative C, which is designed to serve 89 MAP. An airport whose capacity is limited to 78 MAP would generate less congestion and landside traffic, so that the amount of parking should also be reduced.

Response:

Please see Response to Comment SAL00015-174.

3. Comments and Responses

SAL00015-322

Comment:

1.5 Additional Concerns Related to Capacity and Traffic Assumptions

Discrepancies in Air Traffic Assumptions Used in Noise Analysis:

Table S7 of S-C1. Supplemental Aircraft Noise Technical Report shows the 2015 Average Annual Day Operations and Fleet Mix for the Alternative D. The fleet mix used in this table differs from that used in the Master Plan Addendum Fleet Mix. There are several aircraft in the Table S7 that are not used in the Design Day schedule of the Master Plan Addendum: Boeing 717, British Aerospace 146, Challenger 601, Learjet 35, Fairchild SA227. There needs to be an explanation as why these aircraft types are used here and whether they represent others used in the rest of the Addendum as equivalent noise generators. Moreover, it is said that the SIMMOD outputs are used to build the input for the noise model. Presumably these SIMMOD outputs were also used to load the airfield and the gate positions, so there needs to be a clarification of these variations in fleet mix and of any necessary adjustments to the noise analysis that may result.

Another inconsistency is about the total number of the operations considered in the Average Annual Day. The total number of operations is stated as 2121, but it is actually 2123. Even so, if this is the Average Annual Day, then if we multiply this number by the number of the days in the year we should get the number of Annual Operations. In both cases (of 2121 and 2123 operations) the yearly number obtained is lower than the number of Annual Operations of the Alternative D for the year 2015, which is shown in the Table below.

Comparison of 2015 Annual Operations Used in Master Plan Addendum and Noise Analysis
[see original document]

Response:

Comment noted. The Boeing 717, British Aerospace 146, Challenger 601, Learjet 35 and SA227 in Table S7 are identified in the future design day activity tables as MD-95, C70, GAJ, GAJ and SWM. Please see Response to Comment SAL00015-30 regarding inconsistencies in the Average Annual Day.

SAL00015-323

Comment:

2. The Sequencing of the Master Plan

The Addendum describes a phasing scheme for the development of Alternative D. The scheme is far too lumpy and does not illustrate the evolution of provision of airport elements in sufficient detail to ascertain capacity and other operational impacts at the intermediate stages to 2015. The proposed phasing does not guarantee that at some transitional phase during build-out of this plan, e.g. between phases II and III, the availability of gate positions and terminal facilities will not exceed the amount that limit the capacity to 78 MAP. For example, the phasing plan should ensure that opening of the West Terminal, in Phase III should not proceed before the decommissioning of the North Terminal elements.

The current phasing shown in the Addendum (sect. 2-10 of the Addendum) shows the construction of the West Satellite Concourse as occurring during phase II. The demolition of part of TBIT building and the conversion of the north terminals to a linear facility occur in phase III. Should there be a period between the completion of phase II and the start of Phase III, such a period would entail a system with a much higher capacity than intended.

This is especially true since there is no mention in the sequencing plan of the point in time at which the remote gate positions will be eliminated. If the conditions that permit capacity to exceed 78 MAP are to never arise, then a clear time plan of when the remote gate positions will be decommissioned and eliminated.

Addendum should therefore be modified to provide a very specific step-by-step phasing that would ensure that such a violation does not become possible.

Response:

Figure S3-15 of the Supplement to the Draft EIS/EIR illustrates a conceptual summary schedule for the completion of various components of LAX Master Plan Alternative D. Once approved, it is in the interest of LAWA to complete construction of each component of the Master Plan in an efficient and timely manner so as to fully realize the safety and security and passenger convenience features of Alternative D.

The demolition of Terminals 1, 2, and 3 would not occur before completion of the West Satellite Concourse so as to maintain sufficient number of contact gates at LAX. It is also unlikely that Terminals 1, 2, and 3 would be demolished at the same time. Instead, each of the existing terminals would probably be demolished individually and replaced by a portion of the proposed north linear concourse prior to demolition of another existing terminal and subsequent construction of another segment of the north linear concourse. This will minimize, to the greatest extent possible, dramatic changes in airport gate facilities at any one time. The precise date and details of construction phasing would be determined during the advanced planning stages after approval of the Master Plan.

The west remote parking positions would not be demolished under Alternative D though the jet bridges would probably be removed, as they would no longer be used for passenger loading and unloading. Their removal would not constitute demolition, which explains why there is no scheduled demolition work on this portion of the airfield. Once work begins on reconstructing TBIT in Phase III to add additional aircraft gates to the west side, the gates at the west remote pad would cease functioning. This is because passengers boarding aircraft at the west remote pad must be shuttled to and from TBIT via busses that travel on the airfield. The buses pick up departing passengers and drop off arriving passengers along the existing west side of TBIT. Once construction on TBIT modifications begins, the existing bus loading and unloading positions would no longer exist rendering them useless.

The Supplement to the Draft EIS/EIR is a program level document. Detailed construction plans and phasing would be determined during project planning.

SAL00015-324

Comment:

3. The Runway 25 Complex

According to the text in the Addendum the proposed modifications to the runway 25L/R complex entail the relocation of runway 25L "approximately 50 ft. south of the existing runway centerline" and the insertion of a 11,096 ft. taxiway centered between the two runways 25L and 25R. No other modifications of this runway system are described in the available documents, although the plans and drawings show additional modifications such as the introduction of high-speed exit taxiways to connect the inserted center taxiway to the two runways. Although it is not described in the text, some of the drawings show that the southern taxiway (Taxiway A) will also be shifted south, presumably in order to maintain its current 500 ft. separation to runway 25L. The following comments discuss the gaps in the THE ADDENDUM'S analysis and the need for additional information and clarity regarding the proposed reconfiguration of the southern runway complex.

Response:

Taxiway A would remain at its current location if Alternative D were constructed. The proposed high-speed exit taxiways linking the center taxiway and the two runways in Alternative D would eliminate the existing high-speed taxiway exits directly linking parallel runways at LAX to reduce the risk of runway incursions. The existing airfield requires landing aircraft to exit the outboard runways onto high-speed taxiways that provide an unimpeded route to a neighboring parallel runway on which simultaneous departures are occurring.

3. Comments and Responses

SAL00015-325

Comment:

- Presumably the (approximate) 50 ft shift is 55.42 ft., which is the shift needed to provide space for 400 ft. separation between the center taxiway and the two runways 25L And 25R. The EIS/EIR should be corrected to include the correct number of feet of intended shift of runway 25L.

Response:

The figure of 50 feet used in the Supplement to the Draft EIS/EIR is approximate and for planning purposes only. Further analysis has determined that the relocation of Runway 25L-7R would be closer to 55 feet.

SAL00015-326

Comment:

- There is no reason why taxiway A needs to move south in order to maintain its 500 ft. distance from runway 25L, since the remaining 444 ft. separation is adequate and exceeds the 400ft. separation used for the center taxiway. THE ADDENDUM needs to clarify this and to confirm that taxiway A will not be moved.

Response:

The commentor correctly stated the runway to taxiway centerline separation for Group V aircraft based on FAA design standards. According to FAA design standards for Group V aircraft the runway to taxiway centerline separation is 400 feet. Taxiway A is not proposed to be relocated according to LAX Master Plan - Alternative D as described in the Draft Master Plan Addendum. Please see Response to Comment SAL00015-324 regarding location of Taxiway A in Alternative D.

SAL00015-327

Comment:

- There is no clear description in the Addendum of any further modifications to taxiways, especially any possible extensions to Taxiway A. The Addendum needs to clarify that under Alternative D the need for an end-round taxiway is eliminated and that no further westward extension of Taxiway A will be made. In the same vein, there should be no need for the taxiway bypass to connect between A and B Taxiways.

Response:

End around taxiways, extension of Taxiway A and a bypass taxiway linking Taxiways A and B are not proposed as part of LAX Master Plan Alternative D.

SAL00015-328

Comment:

- The documents do not provide adequate analysis comparing the "centerline taxiway" alternative proposed for this runway complex and the alternative of continuing the use of left exits from runway 25L with an end-round taxiway back to the terminal area. Such a comparison, especially from the point of view of noise impacts, is critical to provide a meaningful evaluation of the noise impacts of the reconfiguration on the City of El Segundo and its residents. A published study by NASA Ames [CITE] investigates air traffic control procedures necessary to reduce runway incursions with and without the southward shifting of runway 25L but does not address the issue of noise impacts.

Response:

Alternative D would move Runway 7R/25L south approximately 55 feet to gain enough separation for constructing a Group V center taxiway between the two parallel runways in the south airfield complex. The noise impacts are addressed in Section 4.1, Noise, and Section 4.2, Land Use, of the Supplement

to the Draft EIS/EIR. Supporting technical data and analyses are provided in Appendix S-C1 and Technical Report S-1 of the Supplement to the Draft EIS/EIR.

As mentioned by the commentor, LAWA, in cooperation with NASA Ames Research Center, conducted a study comparing the costs and benefits of a center parallel taxiway and an end-around taxiway on the south airfield complex. The study concluded that the end-around taxiway greatly increased taxi time and delays for arriving aircraft and thereby increased the operational costs of this option and did not give any increased safety margin. Air traffic controllers also found the center parallel taxiway increased their flexibility while controlling arriving aircraft on the south airfield complex. In a separate LAWA study of these two optional taxiway improvements, the "end-around" taxiway was found to increase noise impacts on El Segundo residential land uses from taxiing aircraft.

SAL00015-329

Comment:

- While the insertion of a center taxiway between the two runways 25L and 25R may be a desirable action from the point of view of airfield operations and safety, it must be evaluated in the context of a comparative noise analysis analyzing this option and the end-around option, along with the development of the appropriate noise mitigation measures specifically designed to deal with the impact of the shifting of the runway southward on the communities immediately to the South of the airport.

Response:

Of the two potential taxiway improvements mentioned by the commentor, the end-around taxiway was found to increase noise impacts on El Segundo residential land uses from taxiing aircraft.

Please see Response to Comment SPHF00038-3 regarding the potential noise impacts of moving Runway 7R-25L 55 feet south and discussion of a separate LAWA study addressing noise impacts from the center taxiway and the end-around taxiway.

SAL00015-330

Comment:

- With the proposed modification in Alternative D the need to use Taxiway A for exits of aircraft landing on Runway 25L will be reduced greatly, especially after the removal of the remote gate pads in the Northwestern portion of the airfield. LAWA should adapt the taxiway system loading accordingly to ensure minimal use of this taxiway, in order to minimize its noise impact on the surrounding communities.

Response:

LAWA works with the FAA Air Traffic Controllers, pilots and airline representatives to develop aircraft noise mitigation strategies that aim to minimize noise impacts on the surrounding communities while maintaining the highest level of safety and efficiency. However, LAWA does not directly control the use of specific taxiways on the airfield. Taxiway A will continue to be the primary access route for aircraft traveling to and from facilities south of the Taxiway. Construction of a new center parallel taxiway in the south airfield may result in fewer total operations on Taxiway A. Ultimately, air traffic control determines the safest routes for aircraft on the Air Operations Area.

SAL00015-331

Comment:

- Temporary use during the first phase of the plan by new large aircraft (NLA) runway 25L and the left exit into taxiway A should be restricted in order to minimize the noise impact to the south of the airport.

Response:

An operational plan for Group VI aircraft would be developed in conjunction with the FAA Air Traffic Controllers, pilots, and airline representatives to ensure safe and efficient movement of these aircraft on the ground throughout the implementation of Alternative D. The goal would be to minimize airfield

3. Comments and Responses

disruption while providing safe taxiway paths for NLA. One proposed approach for Group VI (or NLA) movement on the redesigned south airfield would be to cross arriving NLA aircraft north to Taxiway C. This movement plan would reduce the impacts on local communities created by aircraft operations on Taxiway A. However, the possibility of aircraft operations on Taxiway A would remain and LAWA would not restrict or prohibit FAA air traffic control from directing aircraft to use the safest or most efficient routes available to them.

Additionally, NLA may not be the loudest aircraft operating at LAX as they will have the most state of the art engine technology which typically results in quieter aircraft engines. Given this fact, restriction of NLA from operating on Taxiway A could mean that other potentially louder aircraft be directed to Taxiway A because NLA operating closer to the congested core of LAX would potentially require that other aircraft be redirected out from the core in order to safely accommodate NLA.

SAL00015-332

Comment:

Conclusion regarding the Runway 25R/L Complex

Based on the publicly available documents, there is not a sufficient basis for favoring the centerline taxiway configuration of the southern runway complex, especially from the perspective of the communities south of the airport. Additional detailed analysis of the noise impacts, the operational characteristics, and the engineering requirements, is needed. Of particular importance is the articulation of specific mitigation measures that are necessary to compensate for the noise impacts.

Response:

Of the two potential taxiway improvements mentioned by the commentor, the end-around taxiway was found to increase noise impacts on El Segundo residential land uses from taxiing aircraft.

Please see Response to Comment SPHF00038-3 regarding the potential noise impacts of moving Runway 7R-25L 55 feet south and discussion of a separate LAWA study addressing noise impacts from the center taxiway and the end-around taxiway.

SAL00015-333

Comment:

1. INTRODUCTION

The following is an analysis of the annual passenger capacity of the aircraft gate position system as proposed in Alternative D of the Los Angeles International Airport Master Plan Addendum of July 2003. The analysis is limited to a study of the capacity of the gate configuration to serve passengers, and does not, for purposes of this analysis, dispute the market-based forecasts and assumptions of the LAX Master Plan Addendum (Addendum).

Alternative D as presented in the LAX Master Plan Addendum has a stated goal of limiting the annual capacity at LAX to about 78 million passengers. It proposes to accomplish that by limiting the number and size distribution of aircraft gate positions to 153 gate positions and a corresponding 178.9 narrow body-equivalents (NBEG's). The Addendum does not include a capacity analysis of the gate configuration proposed, showing how it can limit the traffic volume to about 78 MAP. Instead it contains a market analysis based on a set of assumptions regarding how airlines might adjust to the proposed gate positions provided by shifting traffic among categories (international, domestic air carrier, commuter, etc.), by shifting the fleet mix, and by diverting traffic to other regional airports. The analysis presented here calculates the annual passenger capacity of the proposed gate positions. It shows that the capacity significantly exceeds 78 MAP.

2. REVIEW OF THE ADDENDUM'S DESIGN AND MARKET ASSUMPTIONS

The LAX Master Plan Addendum calculates a flow of 78.8 million annual passengers (MAP) on the basis of a series of market assumptions and forecasts. Most of these assumptions are used in the capacity analysis conducted here in order to ascertain the capacity of the system, as designed and

3. Comments and Responses

envisaged in the Master Plan Addendum. This does not mean acceptance of these assumptions. The assumptions and how they are treated in this capacity analysis are listed below:

1. Annual & Design Day Aircraft Operations: The Addendum assumes that Alt. D will handle approximately the same number of annual passenger operations and the same number of design day passenger operations as Alternative C and the No Action/No Project Alternative. These forecast numbers are not modified by this capacity analysis. They are shown in Table 1 below.

2. Fleet Mix and Aircraft Sizes: The Addendum makes assumptions about the fleet mix that are considered to be the airlines' response to the number and size distribution of gates provided in Alternative D. In addition each aircraft is assumed to carry a "typical" number of seats. The Master Plan's fleet mix assumption is shown in Table F-9 of LAX Master Plan Addendum. The aircraft size ranges assumed in the Master Plan are shown in Table IV-2.3 of LAX Draft Master Plan.

The fleet mix forecast is not modified in this capacity analysis. However, the aircraft seating capacities are revised on the basis of a review of actual seating configurations used by airlines using LAX, seating capacity ranges as offered by the manufacturers, and seating configurations of aircraft currently on order by airlines using LAX. This is described in more detail further on.

3. Operations By Type of Service: The Addendum assumes a mix of the total Design Day Operations by service type: air carrier, international, Hawaiian, and commuter. The operations split assumptions in the Master Plan are shown in Table 3.3-1 of the LAX Master Plan Addendum. The Addendum forecasts a drop in air carrier operations and an increase in commuter operations between the base year and 2015. Although questionable, these market forecast assumptions are retained in the capacity analysis. They are discussed again in the next section.

4. Load Factors: The Addendum projects the load factors by carrier type and uses them to convert design day operations and aircraft sizes to passengers. Forecasted load factors for year 2015 are shown in Table IV-2.8'. Projections are made by type of operation (air carrier, international, Hawaiian, commuter), and a presumably weighted average of all commercial operations is also used. The load factor assumptions and calculations found in the Addendum are not questioned and are used in this capacity analysis. A sensitivity analysis is made to show the range of capacities that result from the range of load factors used in the Addendum.

5. Seasonal Patterns: The conversion of the Design Day Operations and passenger flow to annual figures is based on the assumed annual conversion factors that are intended to reflect seasonal variations in traffic demand. Annual Conversion Factor of 300 is inferred from Table 3.3-1 of the LAX Master Plan Addendum. This factor is used to calculate the Annual Passengers by multiplying the Design Day Passengers with the Annual Conversion Factor. Design day flows are considered the average weekday of the peak month. Wednesday in August is used by the Master plan. The Addendum uses a conversion factor of 300 to convert the Design Day Passengers to Annual. It uses a factor of 346 to convert Design Day Operations to Annual Operations. These same factors are used for all the alternatives of the Master Plan: NA/NP, A, B, C, and D. They differ from the historic and current factors at LAX in one important way, and that is the current and recent historic figures for passenger ratios at LAX have been consistently around 310. The implication of the Addendum's assumption that the capacity constraint will cause traffic peaks to spread rather than accentuate is that these factors should rise and not decline. Therefore the conversion factor of 300 for passengers is considered wrong and is replaced by the more correct value of 310 for this capacity analysis. A sensitivity analysis is used to show the implication of the de-peaking assumed in the Addendum by considering a range from 300 up to 320. The current, histories, and assumed values of these conversion factors, for both passengers and operations are summarized in the next section.

6. Mix of Gates: The Master Plan Addendum's gate mix for Alternative D is shown in the Table E-2. This mix results in a ratio of 1.16 between gates and narrow body equivalent gates NBEG's. (153 gates = 178.9 NBEG's). The capacity is estimated for the gate mix as given in the Addendum.

7. Flight Schedules and Gate Position Loading: The flight schedule is shown in Table F-9 of the Addendum. This assignment represents a certain gate position loading and implies a certain level of gate utilization. The capacity analysis presented here uses this assumed loading and schedule and does not question whether the gate utilization level achieved from the assignments can be increased, which would increase the capacity. By using the schedule used in the Addendum this analysis also implicitly accepts the daily peaking patterns assumed in the Master Plan.

3. Comments and Responses

2.1 Summary of the Master Plan Assumptions

Table 1 below shows excerpts from Table 3.3-1 from the Addendum, comparing the NP/NA, with Alternatives C and D. This table contains corrected numbers of NBEG's as obtained from Table V-3.3 (Lax Draft Master Plan) and Table 2.2-3.2

Table 1. LAX Master Plan Assumptions for Different Alternatives
[see original document]

It should be noted, again, that as seen in Table 1, the LAX Master Plan Addendum assumed that Alternative D is designed to handle about the same total Annual aircraft Operations and Design Day Operations in 2015 as alternatives NA/NP and C. The difference in the annual passenger flow between these alternatives is attributed to the assumed distributions of these operations among types of operations, aircraft, and gate position sizes. Again, the basic assumption is that by limiting the number and size of gates, airlines will respond by downsizing fleets and will thereby end up carrying fewer passengers per operation.

Design-Day to Annual Conversion Factors: As mentioned earlier, the number of annual passengers in Alternative D is also brought to 78 million by using an Annual Conversion Factor (ratio of annual number to design-day number) of 300, which is lower than the numbers observed at LAX today. Table 2 shows the actual 1996, 2000 and the forecasted values.

Table 2. Annual Conversion Factors
[see original document]

One of the assumptions in the Master Plan is that the de-peaking of both operations and passengers will occur, which should result in a rise rather than a decline of the Annual Conversion Factor. We can see that even in year 2000 when the number of operations went down, the Annual Conversion Factor was 312. In 1996 it was 310. If Alternative D involves de-peaking due to the capacity constraint then we should expect these factors to increase.

3. CAPACITY ANALYSIS

Two methods are used to calculate the capacity of the gate position system as proposed for Alternative D. The first is an aggregate method based on the Addendum's projection of operations by service type and using the Addendum's fleet assumptions of the service type. The second more detailed analysis is based on the Addendum's projected flight schedule and gate assignment on an aircraft by aircraft basis. In both cases the Addendum's assumptions and forecasts are treated as described above. Aircraft seating sizes and Annual Conversion Factors are adjusted as described before, and load factors are assumed as in the Master Plan. Both of these methods yield similar results, and also corroborate the flow numbers estimated in the Addendum under the Addendum's assumptions.

3.1 PRELIMINARY CAPACITY ANALYSIS

A preliminary capacity analysis is shown in Tables 3 and 4. In this method, the Design Day Operations by service category, as obtained from Table 3.3-1 of the Addendum are used and assigned to the assumed typical aircraft for each service category. These typical aircraft are shown in Table 3. Two seating configurations (also shown in Table 3) are used to calculate total design day seats. First are the typical seating sizes as declared by the manufacturers for the assumed aircraft types (shown later in Table 8), and second are the typical seats for the aircraft group as assumed by the Master Plan and can be found in the LAX Draft Master Plan Table IV-4.7.

Table 3. Assumed Aircraft Types, Seats and Load Factors.
[see original document]

* Load factors have been taken from the Draft LAX Master Plan, Table IV-2.8 LAX Draft Master Plan: Design Day forecasted load factors for year 2015.

1 Weighted average seats, for 12 class I and 20 class II commuter aircraft.

The seats are multiplied by load factors as assumed for each service category in the LAX Draft Master Plan. These numbers are also shown in Table 5 here. The Design Day Passengers are then obtained

by multiplying number of operations by number of seats and the load factors. The Annual Passengers are obtained by multiplying the Design Day Passengers by the Annual Conversion Factor of 300.

The results of this analysis, using the Addendum's annual conversion factor of 300 are shown in Tables 4 and 5. Table 4, with the Addendum's assumed aircraft sizes and the annual conversion of 300 represents the passenger flows that result from the unmodified Addendum assumptions.

Table 4. Design Day & Annual Passengers, "Typical Seats" Assumed in Master Plan
[see original document]

* AC: Air Carrier, C: Commuter, H: Hawaii, I: International operations.

Next in Table 5 we see the effect of adjusting aircraft seating capacities by using manufacturer specified figures for the aircraft categories assumed for each service type. The annual passenger flows are now higher. Such higher numbers reflect the capacity of the gates in the various categories, while the low numbers in Table 4 represent flows based on market assumptions of what airlines are assumed to use. In both cases these tables do not represent annual capacity since they are based on the Addendum's assumed conversion factor between design day and annual of 300, which is incorrect.

Table 5. Design Day Passengers, Manufacturer Seats Assumed
[see original document]

* AC: Air Carrier, C: Commuter, H: Hawaii, I: International operations.

The figures shown in Table 4, completely reflecting the unmodified Master Plan assumptions corroborate the Addendum's estimation of the flow rates for the various alternatives. Under these assumptions all three alternatives C, D, and NA/NP have the same number of Design Day Operations, 2058, but as seen in Tables 4 and 5 these alternatives differ in the operations split. In the Alternative D projections, we can see that air carrier operations are significantly lower compared to Alternative C and to the NA/NP alternative assumptions. We can also see that the number of commuter operations is assumed to be the highest in Alternative D.

A Note on Addendum Assumptions of Operations By Service Type: These traffic assumptions seem to contradict the Master Plan's own market assumptions as stated in the Addendum (3.3.3 Air Service Changes) namely:

- "Commuter operations would likely be reduced from 1996 levels, consistent with the forecasts for No Action/No Project and Alternative C, in order to maximize the number of passengers that could be served with a limited number of operations. It is also projected that some of the forecast commuter O&D demand would be served by domestic air carrier flights.

- Domestic air carrier connecting passengers would decrease from 2015 forecast levels to reflect the projected loss of connecting passengers from commuter flights. "

According to these assumptions, one would assume the number of commuter operations not to be as high as it is projected in Alternative D. So while all three alternatives are projected to have a drop in commuter operations from the 1996 level of 644 during the design day, Alternative D seems to have dropped the least. Instead we see the Design Day air carrier operations dropping measurably from 1096 in NA/NP and 1120 in Alternative C. to 975 in Alternative D.

Before subjecting the numbers obtained in tables 4 and 5 to sensitivity analysis a more detailed analysis of Design Day flows is conducted using the Master Plan Addendum's projected hourly operations by aircraft type. Given the importance of fleet mix and aircraft size assumptions, a detailed look at the assumed flights, aircraft type by aircraft type is more accurate than the numbers assumed on the basis of service category.

3.2 DETAILED PASSENGER CAPACITY AND SENSITIVITY ANALYSIS

Passenger capacity analysis involves calculation of passenger flow following the Master Plan assumptions of the fleet mix. The Design Day aircraft fleet mix was obtained from Table F-9 in the LAX Master Plan Addendum. This fleet mix contains all the flights in the Design Day: commercial, cargo, GA and military. In order to obtain the fleet mix for commercial passenger operations, cargo, general aviation and military flights are taken out according to the forecast in Tables IV-2.4 and IV-2.5 of the Draft LAX Master Plan. In the Draft Master Plan forecasted cargo, and GA operations are higher than

3. Comments and Responses

the ones for Alternative D (i.e. 157 compared to 117 for cargo). Therefore, to obtain the cargo fleet mix for the Alternative D a pro-rated reduction of total operations is made using the percentage of each aircraft type in the projected cargo and GA fleets. The numbers are also adjusted to retain the projected distribution among service categories in the commercial operations flow'. These numbers are shown in Table 6.

Table 6. Cargo Fleet Mix.
[see original document]

The GA and military operations are shown in Table 7. By taking these out of the total in Table F-9, we obtain the Design Day fleet mix for passenger operations.

Table 7. GA and Military Fleet Mix.
[see original document]

Having obtained the hourly Design Day commercial operations by aircraft type the next step is to perform a sensitivity analysis on aircraft seating capacities. For this sensitivity analysis two different seating analyses are made. In the first analysis, resulting in Lower Range Seats we use lower end of seats as shown in Table IV-2.3 (3 of 3) of LAX Draft Master Plan. The second analysis, resulting in Higher Range Seats, takes into account the number of seats for each aircraft type based on a combination of three sources:

1. Aircraft manufacturer specification.
2. Current fleet seating by the major US carriers serving LAX. (Obtained from major airlines' websites.)
3. Aircraft orders and options by the major US Carriers (As obtained from Aviation Week and Space Technology 2003 Aerospace Source Book seating (Order/Options column)

Conservatively, we use the mid-range values rather than the high ends of the ranges shown from each source. All these numbers, the Master Plan's range, the manufacturer's range as well as the numbers used in the sensitivity analysis are shown in Table 8.

For each seating case the number of operations of each aircraft type, as projected in the Master Plan Addendum, is multiplied by its seats yielding the number of the Design Day seats. Table 9 shows the number of Design Day Offered Seats for Lower and Higher seat ranges respectively. The total Design Day Seats are shown in bold letters at the bottom of each table.

Table 8. Aircraft Type Seating Assumptions
[see original document]

*Production ended or terminated.

** Orders/Options for AAL, AWE, COA, DAL, USA, UAL, NWA, SWA, JetBlue. Number in brackets represents the number of aircraft on order/options for mentioned airlines.

Table 9. Design Day Seats Offered, Lower and Higher Range Seating
[see original document]

Having the number of the Design Day Seats for both seating ranges, a sensitivity analysis is next conducted on Annual Passengers, using different load factors and Annual Conversion Factors. The load factor of 0.7346 is the forecasted total commercial load factor, as obtained from Table IV-2.8 of the Draft Master Plan. Annual Passenger sensitivity analysis is presented in Tables 10 and 11, for lower and higher seat ranges, along with the design day passengers and design day passengers per operation. Bolded numbers are those exceeding 78.5 MAP.

Table 10. Annual Passenger Sensitivity Analysis, Lower Range Seats
[see original document]

Table 11. Annual Passenger Sensitivity Analysis, Higher Range Seats
[see original document]

Figures 1 and 2 show the numbers presented in Tables 10 and 11 in graphical form. Values that exceed 78.5 MAP are shown in gray, and the ones under are shown in white, thus making it easier to see influence of each assumption (load factor and annual conversion factor).

Figure 1. MAP Sensitivity Analysis, Lower Seat Range
[see original document]

Figure 2. MAP Sensitivity Analysis, Higher Seat Range
[see original document]

3.3 Capacity of Alternative D

To conclude regarding the capacity of the 153 gates as configured in Alternative D into 178.9 NBEG's we adopt the Master Plan's assumed average load factors of 73.46%. We also adopt LAX's prevailing Annual Conversion Factor of 310, and conservatively do not increase it to reflect possible spreading of the peak as traffic grows in face of capacity constraints. We also adopt the higher range seating of aircraft as described in the previous section as a better representation of the capacity of the gate positions, noting that it too is conservatively kept within the range of possible seating configurations rather than its top values. With that the capacity is estimated to be 87.24 MAP, as shown by the italicized number in Table 11.

3.4 Capacity Analysis for a Range of Gate Positions

The next step is to perform the capacity analysis for a range of gate positions in order to ascertain the number that would limit the capacity to 78 million. As shown in the results below, a significant reduction in gates or NBEG's would be needed to limit the capacity to 78 MAP. This question is addressed in this section.

To do this analysis, first the Gate Passenger Flow Rate is computed. This rate is the number of the Design Day Passengers divided by the number of NBEG's. Since it is the size as well as the number of gates that determines capacity, passenger flow per NBEG is used to calculate the capacity and then map it back on to the number of gates using the Master Plan Addendum's conversion assumptions, or gate mix. Table 12 shows Passenger Gate Flows for both Lower and Higher range seats and for each load factor used.

Table 12. Gate Passenger Flow: Design Day Passengers per NBEG
[see original document]

We assume that Gate Passenger Flow is NBEG capacity in each load factor case. We also assume that the gate mix will not change. Right now the ratio between the nominal gates and NBEG's is 1.169. Sensitivity analysis can now be used to determine the change in capacity as the number of gates varies. Design Day Passengers are obtained by multiplying the average flow figures in Table 12 with the number of NBEG's. Annual capacity is then obtained by applying the conversion factor. The following tables (13-22) and figures (3-12) show the Annual Passengers served, for each load factor and number of NBEG's. We also show the number of nominal gates involved, following Alternative D ratio between nominal gates and NBEG's. As shown in Table 18 the figure of 87.24 MAP appears again as the capacity estimate.

Table 13. Annual Passenger Capacity: Lower Seat Range Annual Conversion Factor = 300
[see original document]

Table 14. Annual Passengers Capacity: Higher Seat Range Annual Conversion Factor = 300
[see original document]

Figure 3. Lower Seat Range, Annual Conversion Factor 300
[see original document]

Figure 4. Higher Seat Range, Annual Conversion Factor 300
[see original document]

Table 15. Annual) Passengers Capacity: Lower Seat Range Annual Conversion Factor = 305.
[see original document]

Table 16. Annual Passengers Capacity: Higher Seat Range Annual Conversion Factor = 305.
[see original document]

3. Comments and Responses

Figure 5. Lower Seat Range, Annual Conversion Factor 305
[see original document]

Figure 6. Higher Seat Range, Annual Conversion Factor 305
[see original document]

Table 17. Annual Passengers Capacity: Lower Seat Range Annual Conversion Factor = 310.
[see original document]

Table 18. Annual Passengers Capacity: Higher Seat Range Annual Conversion Factor = 310.
[see original document]

Figure 7. Lower Seat Range, Annual Conversion Factor 310
[see original document]

Figure 8. Higher Seat Range, Annual Conversion Factor 310
[see original document]

Table 19. Annual Passengers Capacity: Lower Seat Range Annual Conversion Factor = 315.
[see original document]

Table 20. Annual Passengers Capacity: Higher Seat Range
[see original document]

Figure 9. Lower Seat Range, Annual Conversion Factor 315
[see original document]

Figure 10. Higher Seat Range, Annual Conversion Factor 315
[see original document]

Table 21. Annual Passengers Capacity: Lower Seat Range Annual Conversion Factor = 320.
[see original document]

Table 22. Annual Passengers Capacity: Higher Seat Range
[see original document]

Figure 11. Lower Seat Range, Annual Conversion Factor 320
[see original document]

Figure 12. Higher Seat Range, Annual Conversion Factor 320
[see original document]

3.5 Gate Capacity Analysis

The previous analysis showed the capacity of the current plan to be about 87 MAP. It also showed the relation between capacity and the number of gates or NBEG's, while maintaining the gate mix as it is presently proposed in Alternative D, and hence the same ratio between gates and NBEG's. In this section we calculate the capacity on the basis of the mix of gates proposed in Alternative D using the parameters defined in the Addendum for each gate design group. This permits the evaluation of the impact on capacity of reduction in gates of different size groups rather than simply number of gates and NBEG's as would be obtained from the previous section.

The gate mix proposed in the Addendum is found in Table E-2 of the Addendum. From the Table E-2 we see the gate mix and the gate assignment to airline operators. This information is used in the analysis, which is described in the following text.

Table 23 shows the range of load factors used in the sensitivity analysis. Bold-faced load factors are the Master Plan forecasted load factors for the 2015 Design Day, which can be found in the Table IV-2.8, LAX Draft Master Plan. Only the first row of bold face load factors has different values for different operations. The other bold-faced load factors are the LAX Master Plan's average load factors for all operation types. Hawaiian operations are not separated from the Air Carrier Operations, since from the

Table E-2 and the airline definitions it was not possible to discern which gates would be used for Hawaiian operations.

Table 23. Range of Load Factors Used

[see original document]

* The Master Plan's load factors by carrier group

The number of Design Day Operations for each gate design group is obtained by dividing the number of operations in each group by the number of gates in that group. The aircraft are grouped by gate size according to the Addendum's Table IV-4.7, and the number of gates in each design (or size) group is taken from the Addendum's Table E-2. The Design Day number of Operations for each gate size group is obtained from the Design Day fleet mix as shown in Table 9. The aircraft types are grouped according to the wing span range for each Aircraft Wing Span Group. The results are shown in Table 24. As before, the Design Day Passengers are calculated by multiplying for each gate in the gate size group the typical seats for that group by the corresponding load factor, and then multiplying that number by Design Day Operations per Gate.

Table 24. Operations per Gate for Proposed Gate Sizes and Fleet Mix

[see original document]

* Weighted average of typical seats for commuter I and II gates.

By considering the load factors discussed in the Master Plan we convert these operations into Design Day passenger flows, as shown in Table 25. The table shows the flows in passengers per NBEG as well, in order to facilitate sensitivity analysis.

Table 25. Design Day Passengers and Gate Passenger Flow.

[see original document]

The Master Plan's load factors by carrier group

Table 26 shows the sensitivity analysis of load factor and NBEG number changes, with the Annual Conversion Factor of 300. Table 27 shows the same sensitivity analysis for the Annual Conversion Factor of 310. In both tables besides the NBEG number we show the number of physical gates. The number of nominal gates is calculated assuming that the current Alternative D gate mix. By using the data in Tables 24 and 25 it is possible to study the effect of gate reductions in various mixes of gate design groups on capacity.

The results shown in Table 27 suggest that if the gate, or fleet group mix is not altered, and if the Master Plan's Design Day load factors are used then a reduction of about 10 gates would be necessary to limit the capacity to the 78.9 MAP. Different, higher or lower degrees of reduction can be also used if these reductions are articulated by specific design groups. Clearly a reduction by one NLA group VI gate would reduce the capacity considerably more than a reduction by one commuter Class I or II gate.

Table 26. Annual Passengers Sensitivity Analysis: Annual Conversion Factor = 300.

[see original document]

Table 27. Annual Passengers Sensitivity Analysis: Annual Conversion Factor = 310.

[see original document]

These numbers are shown graphically in Figures 13 and 14.

Figure 13. Gate Capacity, Annual Conversion Factor 300

[see original document]

Figure 14. Gate Capacity, Annual Conversion Factor 310

[see original document]

4. GENERAL CONCLUSIONS

We conclude that the capacity of the gate position system proposed in Alternative D and described in the Addendum: the 153 gates, or 178.9 NBEG's, will have a capacity conservatively estimated at 87 MAP. This capacity analysis is performed on the basis of most of the planning and forecast assumptions made in the Addendum. It is a conservative estimate because it does not allow for possible spreading of the peaks either daily or seasonally. The analysis uses the Master Plan's

3. Comments and Responses

assumed hourly traffic patterns. It uses LAX's current seasonal traffic patterns. Adjusting either of these assumptions to reflect any possible de-peaking would result in a higher capacity estimate. The analysis uses the same aircraft fleet mix and gate size mix proposed in the Master Plan Addendum. However, it uses higher aircraft seating capacities that are considered more realistic and reflective of the capacity of the system. The Master Plan Addendum's figures appear to be based on market considerations rather than on the actual capacity possibilities.

A number of strategies are possible to limit the capacity to about 78 MAP as is the intended aim of Alternative D. All of these would entail a reduction in the number of gates provided. The actual number of gates to be reduced depends on how they are allocated among the different design groups. The analysis provided in this report permits exploring alternative ways of accomplishing the goal of limiting the capacity to about 78 MAP.

1 According to the LAX Master Plan Addendum, the load factors and aircraft size assumptions were taken from Chapter V of Master Plan, but that information is not available in Chapter V, so we assume that the information from Chapter IV is used.

2 There are several mistakes concerning the number of NBEG's in the original report:

- The number of NBEG for existing gates in 2000 from Table 2.2-1 of LAX Master Plan Addendum is not calculated properly. The number of existing gates is 165 and according to the gate mix (Table 2.2-3 of LAX Master Plan Addendum) and the conversion table (Table IV-4.3 of the LAX Draft Master Plan) it is not 184.6, it is 190.9.

- Also, in Table V-3.3 of LAX Draft Master Plan, the number of NBEG for the NA/NP Alternative is stated to be 203.4, which is not the case if the gate distribution is the one shown in the Table 2.2-3 of Lax Master Plan Addendum. The correct number should be 188.20 instead.

3 Operations by aircraft type in Alt. D are chosen to be lower than if we round the numbers we have from column 4. The reason is that simply rounding the numbers, will leave too many operations with larger aircraft (B737 to B747-400), thereby distorting the Addendum's assumed operations by commuter.

Response:

LAX Master Plan Alternative D presents a scenario for the future of LAX that would, if implemented, result in a safer, more secure airport, with the supporting aviation infrastructure to accommodate 78.9 MAP which is a constrained level of aviation activity relative to the unconstrained forecast for aviation demand at LAX in 2015.

The commentator states that his analysis calculates the capacity of the 153-gate airport, as proposed in Alternative D, to be about 87 MAP. The commentator's analysis actually identifies a range of capacities based on several variables that range from a low of 73 MAP to the consistently stated high of 87 MAP.

LAX Master Plan Alternative D has a stated constrained activity level of 78.9 MAP which is within the range the commentator's analysis finds to be probable with the proposed 153-gate airport.

The commentator admits to using most (but not all?) of the master plan's assumptions for analysis but states that the assumptions are not necessarily accepted. The commentator also fails to state which assumptions were rejected. If the assumptions were not accepted it would not make sense to use them for the commentator's analysis.

Manufacturer and airline internet sites, though reasonable sources of data, are not as accurate as OAG data which was used to determine the seat capacity of each aircraft serving the LAX market in the Alternative D analysis. This is especially true given the fact that it is in the interest of an aircraft manufacturer to overstate the reasonable seat capacity of an aircraft thus inflating the plane's apparent revenue generating capability for the airlines while failing to recognize real world passenger comfort and convenience.

The content of the portion of this comment regarding seasonal patterns is similar to comment SAL00015-318; please see Response to Comment SAL00015-318.

The content of the portion of this comment regarding total aircraft operations is similar to comment SAL00015-315; please see Response to Comment SAL00015-315.

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The content of the portion of this comment regarding annual conversion factors is similar to comment SAL00015-318; please see Response to Comment SAL00015-318.

The commentor's capacity analysis section does not reflect the methodologies used in the analysis prepared for the Draft Master Plan Addendum and are, therefore, not predictive when the assumptions are incomplete.

As mentioned previously in this response to comment, the commentor uses alternative and questionable data sources to determine seat capacity for each aircraft. The results are inconsistent with the OAG seating configuration of aircraft used in the LAX market and therefore unacceptable for use in analysis.

The commentor's methodology for annualizing is incorrect. Please see Response to Comment SAL00015-318 regarding annualization.

The commentor's Tables 4 and 5 contain inaccurate information as described above. Incorrect seat capacities for the LAX market are contained in data presented in Tables 4 and 5.

The content of the portion of this comment regarding the Draft Master Plan Addendum assumptions is similar to comment SAL00015-317; please see Response to Comment SAL00015-317.

The portion of the comment related to a sensitivity analysis on aircraft seating capacities does not use OAG data and is, therefore, inconsistent with the Master Plan analysis.

No reason is given for the use of mid-range values rather than the high ends of the ranges in relation to the sensitivity analysis. Without explaining the commentor's methodology, the result cannot be seriously entertained.

Each table or figure illustrated in the commentor's report identifies a range of possible outcomes. The constrained activity level of 78.9 MAP forecast for Alternative D in 2015 is within the range of each table presented by the commentor which would appear to validate that this is a reasonable constrained activity level for the 153-gate LAX Alternative D.

Section 3.3 of the commentor's text, Capacity of Alternative D makes several peculiar statements. For example, the commentor accepts the 73.46 percent load factor presented in the Alternative D analysis but rejects the annualization factor of 300 and instead uses 310. As stated above, please see Response to Comment SAL00015-318 regarding annualization.

The commentor presents a series of charts and tables in which the constrained activity level of 78.9 MAP forecast for Alternative D in 2015 remains within the illustrated, and therefore possible, range.

It appears that the conclusions drawn by the commentor are arbitrary. Many, if not all, appear based on select portions of data presented in the Draft Master Plan Addendum. However, in each case the commentor's results conclude that a possible outcome is the same as presented in the Draft Master Plan Addendum.

The upper limit of potential passenger activity is consistently highlighted without acknowledging the commentor's complete results which illustrate a range of possible outcomes - including those presented in the Draft Master Plan Addendum. Furthermore, the commentor's results appear to illustrate the potential for activity levels even lower than those forecast in the Draft Master Plan Addendum.

The data presented by the commentor validates the constrained forecast passenger activity level of 78.9 MAP for LAX Master Plan Alternative D's 153-gate airport presented in the Draft Master Plan Addendum and Supplement to the Draft EIS/EIR.

Any calculation found to be in error in the Draft master Plan Addendum or Supplement to the Draft EIS/EIR would result in complete accounting of the error and disclosure of its effects. Please see Response to Comment SAL00015-319.

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SAL00016

Dorn, Roosevelt

City of Inglewood

11/4/2003

SAL00016-1

Comment:

The following constitute the comments of the City of Inglewood ("Inglewood") concerning the Draft ("DEIR") and Supplemental Draft Environmental Impact Report/Environmental Impact Statement ("SEIR") for the Los Angeles International Airport ("LAX") Master Plan ("Master Plan") and Master Plan Addendum ("Addendum") (together "Project"), submitted pursuant to the requirements of the California Environmental Quality Act, Public Resources Code (§ 21000, et seq., ("CEQA"), its implementing Guidelines, 14 Cal.Code Regs. § 15000, et seq. ("CEQA Guidelines") and the National Environmental Policy Act, 42 U.S.C. § 4321, et seq., ("NEPA").

It should be noted at the outset that the body of this letter emphasizes evaluation of new Alternative D as set forth in the SEIR. However, LAX has chosen a format that purports to integrate the analysis of Alternative D into the platform of the original DEIR which is predicated on analysis of Alternatives A-C. While Inglewood believes this format is not optimal in achieving the goal of informing the public and decision makers of the Project's potential impacts, as set forth below, it has attached comments specific to the analyses of Alternatives A through C, as contained in the DEIR, to the extent they remain applicable, as Attachment 1 to this letter. It should be further noted that issues raised in Attachment 1 with regard to the analytic adequacy of the DEIR with respect to Alternatives A through C may impact the adequacy of the SEIR's analysis of Alternative D. With that caveat, the issues raised with respect to Alternative D fall generally into six categories:

(I) The SEIR's Project definition is improperly attenuated in that: (a) its baseline for analysis is 1996, almost 10 years before scheduled commencement of Project construction. While arguably reflective of physical environmental conditions in the vicinity of the Project when the Notice of Preparation ("NOP") for the DEIR was published in 1997, a 1996 baseline cannot faithfully represent environmental conditions 10 years later; and (b) the SEIR's purported 15 year term, from the year 2000 to the year 2015, does not take into account the four to five year delay in Project implementation from 2001 to at least 2005-6, and, thus, leaves the final five (5) years of the 15-year term of Project implementation, from 2015 to 2020, and the environmental impacts that may arise during those years, unanalyzed;

(II) Alternative D does not represent a meaningful constraint on capacity because it does not consider the capacity enhancing capability of new large aircraft or the Project's airfield reconfiguration designed to accommodate them;

(III) As a result, the SEIR's noise analysis fails to fully reveal the Project's aircraft and traffic noise impacts on homes and schools, the vast bulk of which fall on Inglewood, or to provide adequate measures to mitigate those impacts;

(IV) The SEIR's air quality methodology and resulting analysis does not adequately portray the emissions impacts of construction vehicles, aircraft and ancillary Ground Support Equipment ("GSE") or truck traffic associated with the Project;

(V) The SEIR's traffic analysis understates the Project's traffic impacts;

(VI) The SEIR's proforma discussion of environmental justice does not fully address the skewed distribution of the Project's impacts which fall almost entirely upon the minority/low income citizens of Inglewood, or offer adequate measures to avoid, minimize or mitigate the maldistribution of Project impacts.

Response:

Please see Responses to Comments SAL00016-2 through SAL00016-153 below.

SAL00016-2

Comment:

I. THE SEIR'S PROJECT DEFINITION IS INCOMPLETE.

The SEIR's Project definition is improperly circumscribed by: (1) the utilization of the vehicle of a "supplemental" EIR, where a complete new EIR, encompassing Alternatives A through D would have been appropriate; (2) the utilization of a 1996 baseline, dating back seven years from the publication of the SEIR, where data indicates that the correct baseline would have been the full year 2001; and (3) the utilization of the years 2000 to 2015 as the 15-year term of the Project, even though the Project, under the most optimistic circumstances, is not scheduled to begin until 2005 and, thus, a fifteen year Project term will end in the year 2020, leaving the environmental impacts of the Project arising during the last five years of the Project term, from 2015 to 2020, unanalyzed.

Response:

Please see Responses to Comments SAL00016-3 through SAL00016-5 below.

SAL00016-3

Comment:

A. The SEIR Improperly Attenuates Analysis of the "Whole" Project.

A "project" for CEQA purposes, "means the whole of an action, which has the potential for resulting in either a direct physical change to the environment, or a reasonably foreseeable indirect physical change in the environment..." CEQA Guidelines § 15378(a). "Project" is "given a broad interpretation so as to maximize protection of the environment." See, e.g., *McQueen v. Board of Directors of the Midpeninsula Regional Open Space District*, 202 Cal.App.3d 1136, 1143 (1988). "In general, the lead agency must fully analyze each "project" in a single environmental review document." Remy, Michael, *Guide to the California Environmental Quality Act*, 10th Ed.1999, p. 75. "Thus, in performing its analysis, the agency should not split a project into two or more segments", *Id.*, thus insuring "that environmental considerations do not become submerged by chopping a large project into many little ones..." *Burbank-Glendale-Pasadena Airport Authority v. Hensler*, 233 Cal.App.3d 577, 592 (1991).

That dissection of a large project into several smaller ones is, however, precisely what seems to have happened here. Although the SEIR purports to relate Alternative D to DEIR Alternatives A through C, in reality the two documents are not directly comparable. The principal goal of the DEIR is capacity expansion and elimination of delay. ["... [I]f LAX does not increase capacity to accommodate some of the projected increase in demand for air travel services, the demand will be met by other airports in the region or elsewhere in the Western United States." The principal goals of Alternative D are, however, very different, i.e., (1) to enhance the safety and security at LAX for users and to protect the airport infrastructure; (2) to encourage the development and use of regional airports to serve local demand by constraining the facility capacity to approximately the same aviation activity levels identified in the no action/no project alternative; (3) to maintain LAX as the international gateway to Southern California; and (4) to mitigate the environmental impacts of LAX's continued operations, SEIR, Section 2, pp. 2-1, 2.

Even though the SEIR maintains that "purpose and need for the LAX Master Plan has not changed since the publication of the DEIR", Executive Summary, p. ES-1, it is clear that adequate analysis of the two sets of alternatives involves different data, methodology and assumptions. As a consequence of the failure to incorporate the analyses of all alternatives into a single document, structured by the same goals, assumptions and methodologies, the conclusions concerning Alternative D's relationship to the other alternatives, as well as to the environment, are suspect at the outset.

Moreover, the SEIR exceeds the proper scope of a supplement as set forth in the CEQA Guidelines. A supplement only "augments a previously certified EIR", CEQA Guidelines) § 15163, Discussion, and only where "minor additions or changes would be necessary to make the previous EIR adequately apply to the project in the changed situation." CEQA Guidelines § 15163(a)(2). Neither of these conditions exists here. The DEIR was never certified. Further, the changes to the Master Plan contained in the

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SEIR are far from minor. In fact, they constitute a new "preferred alternative", supported by new goals, objectives, methodological approaches, and data, as well as resulting comparisons and ultimate conclusions.

The legislature and the public resources agency charged with CEQA's implementation have taken the position that, prior to ultimate certification, a single project must be analyzed in a single comprehensive document. The rationale for this position becomes clear with reference to the SEIR. The isolation of a single alternative, Alternative D, and the consequent welter of cross-references to the previous DEIR, a two year old document, its technical reports and appendices, as well as to the SEIR, its technical reports and appendices, is a nearly insurmountable challenge to the public and to decision makers, even if the analytic framework of the DEIR and SEIR were comparable, thus defeating CEQA's principal goals of "informed decision-making and informed public participation." *Save Our Peninsula Committee v. Monterey County Board of Supervisors*, 87 Cal.App.4th 99, 118 (2001).

Response:

Comment noted. As described in the introduction to Chapter 4 of the Supplement to the Draft EIS/EIR, the analysis methodology, approach, and assumptions used in the evaluation of Alternative D were the same as used in the Draft EIS/EIR analysis of the No Action/No Project Alternative and Alternatives A, B, and C, unless otherwise noted. In situations where there were notable changes in the methodology, approach, or assumptions used in the analysis of Alternative D, such as in the case of single-event noise, a reevaluation of the No Action/No Project Alternative and Alternatives A, B, and C was also conducted, and was presented in the Supplement to the Draft EIS/EIR. Additionally, the structure and format of the information presented in the Supplement to the Draft EIS/EIR paralleled that of the Draft EIS/EIR, thereby enabling the reader to easily compare the information and analysis contained within the Supplement to the Draft EIS/EIR to the information and analysis contained in the Draft EIS/EIR. As such, both the technical analysis and the presentation of information occurred equally and evenly for all five alternatives.

As was stated in Chapter 2, Purpose and Need for the Proposed Action, of the Supplement to the Draft EIS/EIR, the purpose and need statement presented in the Draft EIS/EIR and applied to Alternatives A, B, and C remains unchanged and is also applicable to Alternative D. As with the other build alternatives, Alternative D provides for extensive improvements to the airside and landside facilities at LAX, which will substantially improve the efficiency of, and quality of service at, LAX in 2015. These improvements complement and enhance the operation, safety, and security of LAX, helping to protect and strengthen the level of investment that the City has made in LAX over the past several decades. The fact that Alternative D includes a design emphasis on enhancing existing safety and security at LAX does not redefine or conflict with the existing purpose and need statement for the LAX Master Plan. Each of the four build alternatives respond to the project's purpose and need differently, which will be taken into account by decision-makers during project deliberations.

Please see Response to Comment SAL00013-31 regarding the fact that the preparation and processing of the Supplement to the Draft EIS/EIR is appropriate under the provisions of NEPA and CEQA.

SAL00016-4

Comment:

B. The Use of the Years 1996 and 2015 as the Project's Temporal Parameters is, in Practical Terms, Inappropriate.

Despite the distinct justification and framework of analysis for Alternative D, the SEIR links Alternative D to the DEIR through the use of the same 1996 environmental baseline and 2015 Project end date. While the 1997 date for publication of the NOP (or 1996, the last full year of data before publication) theoretically constitutes the correct environmental baseline, CEQA Guidelines § 15125(a),¹ it does not in this case, for at least two reasons. First, the 1996 baseline used in the DEIR does not accurately reflect the physical conditions in the vicinity of the Project even at the time of the publication of the NOP in July 1997 (see Attachment 1, pp. 3-6). Second, even if 1996 did accurately reflect conditions applicable to the DEIR, it does not do so where, as here, a complete new comprehensive EIR containing equivalent analyses of all alternatives is required. The new EIR would have required publication of an NOP sometime after the year 2001, when the DEIR was originally circulated. Thus the

years 2001 or 2002, the likely last full years of data before the publication of the new EIR, would have been the appropriate base years for the analysis contained in the SEIR.

Nevertheless, the SEIR avoids the use of 2001/2002 by introducing a year 2000 baseline "for informational purposes only", predicated on "the most recent normal year for which a complete data set is available." SEIR, § 3, p. 3-5. The rationale behind the choice of the year 2000 was apparently that, due to the terrorist attacks of September, 2001, "2001 is an anomalous year that would be inappropriate to use for a comparison to the Draft EIS/EIR's baseline year." SEIR § 3.2.1, p. 3-5, and "similarly, aviation activity in 2002 is also considered to be an anomalous year due to the effects of September 11, 2001." SEIR, § 3.2.1, p. 3-5.

Neither the SEIR's conclusions nor its rationale are convincing. SEIR, App. S-B acknowledges that, with respect to the year 2001 "the typical month for the design day schedule (August) would be unaffected by September 11, 2001." App. S-B, p. 1 [emphasis added]. Nevertheless, the SEIR further opines "the ratio of peak month activity to annual activity is exceptionally high, due to the overwhelming fourth quarter decline in activity," App. S-B, p. 2, although the SEIR contains no data to support that contention. However, review of OPSNET statistics for the years 1996 through 2002 reveals that operations for the full year 2001 at LAX declined by only 50,000, to 738,679 from the seven year high of 783,684 reached in 2000. The data also demonstrates natural annual fluctuations of almost 20,000 operations between 1996 (approximately 763,000 operations) and 2000 (approximately 783,000 operations). Thus, use of 2001, with requisite caveats, would have constituted at least as accurate a picture of the environmental circumstances in the vicinity of the Project as did the year 1996, seven years in advance of the publication of the SEIR.

The practical impact of utilizing the year 2001, rather than 1996, as a base year, is manifest. As there were fewer operations in 2001, and, thus, potentially fewer environmental impacts from them, a comparison with the Project years would have resulted in greater apparent impacts from the Project, than when compared to 1996, with a larger number of operations and concomitant impacts.

1 CEQA Guidelines § 15125 states, in pertinent part: "An EIR must include a description of the physical and environmental conditions in the vicinity of the project, as they exist at the time the notice of preparation is published, or if no notice of preparation is published, at the time environmental analysis is commenced, from both a local and regional perspective. This environmental setting will normally constitute the baseline physical conditions by which a lead agency determines whether an impact is significant." CEQA Guidelines § 15125(a).

Response:

Please see Topical Response TR-GEN-1 regarding baseline issues. Responses to the comments contained in Attachment 1, pp. 3-6, of the commentator's letter are provided in Responses to Comments SAL00016-73 through SAL00016-78. Please see Response to Comment SAL00013-31 regarding the fact that the preparation and processing of the Supplement to the Draft EIS/EIR is appropriate under the provisions of NEPA and CEQA. As indicated in that response, a complete new comprehensive EIR was not required to be prepared in order to analyze the impacts of Alternative D. Moreover, the Draft EIS/EIR and the Supplement to the Draft EIS/EIR together provide an equivalent analysis of all five alternatives.

The Supplement to the Draft EIS/EIR includes a description of the most current environmental conditions that are meaningful and relevant to the analysis of the LAX Master Plan. As indicated in Topical Response TR-GEN-1, the Supplement to the Draft EIS/EIR included a discussion of Year 2000 conditions for comparison purposes only. Both the Draft EIS/EIR and the Supplement to the Draft EIS/EIR continued to rely on 1996 as the baseline for determining the significance of impacts.

Regarding the difference between OPSNET statistics and data reported in Appendix S-B of the Supplement to the Draft EIS/EIR, LAX reports "FAA Aircraft Movements" on its Traffic Comparison report. In the year 2000, LAWA reported 783,433 FAA Aircraft Movements. This traffic figure includes all air traffic worked by the LAX Tower personnel regardless if the traffic was destined for LAX or not. This number includes approximately 15,960 "overflights" counted as part of the FAA number. The commentator's source (OPSNET) is one that is reproducing FAA Tower logs and therefore includes the overflights worked by tower controllers that did not land at LAX. The rationale for using Year 2000 for a

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comparison of baseline conditions is provided in Appendix S-B, Existing Baseline Comparison Issues - 1996 to 2000.

SAL00016-5

Comment:

Finally, the use of the year 2015 as the end point of the Project is confounding at best. The SEIR's purpose and need statement includes the need to "respond to local and regional demand for air transportation during the period 2000 to 2015". SEIR, p. ES-1. From that statement, it can be reasonably deduced that LAX looks to a 15 year Project period. The problem is that the Project will not now commence construction, let alone full implementation, until in or after 2005. This would bring the end point of the Project period to the year 2020. 2020 is, however, outside the DEIR's, as well as the SEIR's, scope of analysis. In other words, the SEIR appears to leave the environmental impacts which may arise during the last five years of the Project's implementation entirely unevaluated.

Response:

The Draft Master Plan and Draft Master Plan Addendum use the 2015 planning horizon year as the point in the future when the improvements proposed under each of the five alternatives would be completed, and would occur in light of the regional aviation demands projected for 2015. The year 2015 was selected in 1995 at the initiation of the planning analysis for the LAX Master Plan to provide for a 20-year planning horizon. It should be noted that neither NEPA or CEQA require any certain fixed planning horizon timeframe to be used for the planning and/or analysis of a proposed project. The Draft EIS/EIR and the Supplement to the Draft EIS/EIR use the 2015 planning horizon year to evaluate environmental impacts and future considerations projected to occur at buildout of the Master Plan. Based on each of the four build alternatives being projected to be complete by 2015, it is most meaningful and appropriate to evaluate the project's buildout impacts in 2015. Using 2020 as the analysis year would not accurately and meaningfully present the impacts of the proposed project, since buildout of the project would have occurred in 2015 and changes in environmental conditions between 2015 and 2020 may be for reasons independent of the Master Plan. As such, the Supplement to the Draft EIS/EIR should not, and does not, evaluate project buildout impacts for any year other than 2015.

SAL00016-6

Comment:

II. ALTERNATIVE D DOES NOT REPRESENT A MEANINGFUL CONSTRAINT ON CAPACITY, AND, THUS, WILL CAUSE IMPACTS IN EXCESS OF THOSE ANTICIPATED FROM THE "NO PROJECT" ALTERNATIVE.

One of the SEIR's stated goals is to "encourage the development and use of regional airports to serve local demand by constraining the facility capacity at LAX to approximately the same aviation activity levels identified in the no action/no project alternative." In support of that goal, the SEIR proposes a purported reduction in the available number of loading gates and spaces from 163 to 153; reduction in the linear feet of terminal frontage; and maintenance of cargo warehouse space at 3.1 million square feet. Despite these changes, the SEIR does not meet its goal of constrained capacity.

Response:

Comment noted. Facilities that comprise Alternative D are designed to serve approximately 78.9 million annual passengers and 3.1 million annual tons of air cargo activity. Please see Response to Comment SAL00013-26 regarding the number of gates and gate frontage in Alternative D.

Please see Response to Comment SPHF00007-3 regarding air cargo activity for Alternative D at LAX.

SAL00016-7

Comment:

A. The New Runway Configuration Encourages Access for New Large Aircraft.

First, the reduction in available gates will not meaningfully constrain capacity because of the evolution toward higher utilization of New Large Aircraft ("NLA"), including the A380. With increasing use of NLAs, the airport will be able to accomplish more throughput with fewer gates, although of a larger size. The close to doubling in terminal capacity as between the 1996 baseline and Alternative D (from 3,997,000 square feet to 6,550,000 square feet) will also serve to accommodate the apparent projected increase in passengers resulting from introduction of NLA's.

NLAs are not however included in the projected fleet mix for the Project (SEIR, App. SC-1, Table S7), although it is apparent that the real aim of the Project is to accommodate them. The reconstruction and separation of Runways 7R/25L and 7L/25R in the south complex, and the addition of parallel taxiways (SEIR, Section 3, p. 3-48), as well as the ultimate extension of Runway 6R/24L to 1,280 feet to the east, to a total length of 11,700 feet and the extension of Runway 6L/24R 1,495 feet to the west, for a total length of 10,420 feet (SEIR, Section 3, p. 3-41) confirm that conclusion.

Response:

The purpose of relocating runways as proposed in Alternative D is to gain sufficient separation for a center taxiway between the closely spaced parallel runways. The purpose of the center taxiway is to enhance safe aircraft operations and reduce the potential for runway incursions. Airfield improvements proposed in Alternative D are designed to safely accommodate the largest commercial aircraft expected to be in service in 2015.

The increase in terminal facility square footage proposed in Alternative D would allow for the integration of security features into the passenger processing facilities while simultaneously improving passenger processing efficiency.

NLA were denoted as 74X in the projected fleet mix. Please see Table IV-4.3, Narrowbody Equivalent Gate (NBEG) Index, in Section 4.2, Aircraft Gates, in Chapter IV of the Draft LAX Master Plan.

SAL00016-8

Comment:

B. The Separation of Runways and Additional Taxiways Will Encourage Increased Capacity for Conventional Aircraft.

Second, even without NLAs, capacity would increase. Staggered runway ends (SEIR, Figure S3-8), permits simultaneous arrivals and departures in Visual Flight Rule (clear) weather, as do increased runway separations. The construction of two parallel taxiways between existing sets of runways will also allow an increase in the number of operations the airport can accommodate. Aircraft will be able to land with minimal separation and will be able to hold on taxiways between arrival and departure runways. Aircraft will then be able to land on one parallel runway and depart on the other without interruption. Multiple aircraft can be held between runways crossed to the terminal when there is no departure demand. This changed configuration is a striking contrast to today's situation where there is not room to hold multiple smaller aircraft between the runways. If an aircraft is holding at a runway exit, the landing aircraft must now proceed to another exit. This requires increased separation between arrivals as there is not sufficient room to hold the aircraft exiting the runways.

Finally, the proposed limitation on increase in cargo handling facilities to 3.1 million square feet, as a means to control capacity, is entirely beside the point. Many cargo carriers at LAX are in the business of "same day" delivery, requiring fast turn around, but no warehousing. Where warehousing is required, off-site warehousing is available.

Response:

The runway thresholds proposed in Alternative D are not staggered. Simultaneous approaches to the closely spaced runways on the existing north airfield or on the south airfield would likely be conducted in VFR conditions in the No Action/No Project Alternative as well as in Alternative D. Please see Response to Comment SPHF00021-3 regarding existing runway operations.

Alternative D does not increase runway capacity relative to the No Action/No Project Alternative.

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Cargo carriers require sorting and warehousing facilities. A discussion on utilization rates for air mail, express cargo, domestic cargo and international cargo can be found in the Cargo Activity section, Page 3-30, of Chapter 3 of the Supplement to the Draft EIS/EIR.

SAL00016-9

Comment:

C. Alternative D Does Not Appear to Materially Further the Twin Goals of "Safety and Security".

In stark contrast to the SEIR's unstated goal of capacity increase, its stated goals of increased safety and security are elusive. With respect to the alleged Project safety goal of remedying runway incursions, obviously the proposed runway taxiway configuration will help. In the last analysis, however, six billion dollars is a steep price to pay, where significant improvements could be achieved by better airport signage, increased controller and pilot education, and strict enforcement of regulations and relevant provisions of operations handbooks.

Response:

Comment noted. Please see Response to Comment SPHF00021-3 regarding runway capacity of Alternative D. The proposed runway and taxiway configuration in Alternative D would enhance safe aircraft operations and reduce the potential for runway incursions. Airport surface radar technology and airport infrastructure implementation at key airports like LAX are some of the strategies identified by FAA to help solve the problem. LAWA has already implemented improvements to airfield lighting, taxiway marking, runway signage, and has sponsored on-going seminars on airfield familiarization with airport users. Taxiway system configuration is one of the key infrastructure methods to solve the problem. Every runway incursion has the potential to cause enormous loss of life and property. The geometry of the existing airfield must be changed to enhance the potential for keeping the number of runway incursions low, or preferably, their total elimination. Please see Topical Response TR-SAF-1 regarding aviation safety.

SAL00016-10

Comment:

With respect to security, Alternative D is an anachronism. By the time it is completed in 2015 or after, the world situation and/or technological progress will likely have rendered the security rationale for restructuring whole terminals and parking structures as well as freeway access to make them even more remote from aircraft and difficult for passengers to access, obsolete. While the goal is noble, Alternative D vastly exceeds current security requirements, developed and administered by the Transportation Security Agency, which the SEIR acknowledges are currently being met at LAX. On the other hand, the SEIR fails to address security issues such as: (1) the potential threat directly posed by airport employees and vendors who cannot, by virtue of their jobs, be funneled through the GTC; (2) the near term additional Federal security requirements such as the requirement for screening of cargo; and (3) the potential for attack on the GTC itself, where thousands of passengers will be concentrated, instead of disbursed, as they are now, through a number of terminals.

Response:

Please see Response to Comment SPC00288-2 which discusses dispersion of people at the GTC.

SAL00016-11

Comment:

In summary, the final goal of Alternative D, to make LAX an international hub, is the dominant one, although somewhat inconsistent with Alternative D's other goals, because it can only be accomplished through the significant increases in capacity brought about by the reconfiguration of the airfield to allow the introduction of NLA capable of carrying large numbers of passengers long distances. Capacity increases are inevitably accompanied by increases in air quality, noise and related impacts. Therefore, the theme that flows throughout the SEIR, that the characteristics and impacts of Alternative D are more

or less the same as those of the "No Project" alternative is, at minimum, an overly optimistic assessment.

Response:

The content of this comment is similar to Comment SAL00025-4. Please see Response to Comment SAL00025-4.

SAL00016-12

Comment:

III. ALTERNATIVE D'S NOISE IMPACTS ARE, AT BEST, UNVERIFIABLE AND, AT WORST, UNDERSTATED.

Alternative D's noise impacts in general, and on Inglewood specifically, appear significantly understated. As a consequence, the mitigation measures set forth in both SEIR, Sections 4.1, Noise, and 4.2, Land Use, are inadequate to compensate for its impacts.

Response:

Comment noted. It is unclear by the commentor as to what noise impacts on the City of Inglewood are specifically understated in the Supplement to the Draft EIS/EIR. The noise analysis was done in complete compliance with appropriate FAA and scientific principles including FAA Order 1050.1D and Order 5050.4A. Whereas, single event levels were addressed in order to meet requirements set forth for CEQA evaluations by the California Court of Appeal. The Supplement to the Draft EIS/EIR specifically addresses noise impacts associated with Alternative D in Section 4.1, Noise, and Section 4.2, Land Use. Supporting technical data and analyses are provided in Appendix S-C and Technical Report S-1 of the Supplement to the Draft EIS/EIR. In addition to the Mitigation Measures identified in Section 4.1.8 of Section 4.1, Noise and Section 4.2.8 of Section 4.2, Land Use to address noise impacts a Memorandum of Understanding (MOU) was agreed to by the City of Inglewood and LAWA to study and mitigate the possible environmental impacts on Inglewood of existing and potential future operations and improvements at LAX. For additional information on the Memorandum of Understanding please see Section 2.2.2.2, of Technical Report S-1 of the Supplement to the Draft EIS/EIR. Additionally, please see Topical Response TR-N-1, regarding the noise modeling approach.

SAL00016-13

Comment:

A. The SEIR Appears Methodologically Flawed.

One of the most notable issues from a methodological perspective is, as set forth above, the absence of the NLA, the A380 aircraft, from the fleet mix from which the noise analysis was derived (see SEIR, App. SC-1, Table S7). If, as set forth above, the NLAs are the principal beneficiaries of Alternative D's proposed reconfiguration of the airfield, their operation should be anticipated from a noise perspective. As it stands, however, Inglewood, and other affected communities, remain in the dark regarding the potential noise impacts of the larger, heavier, and potentially noisier aircraft. And, as Inglewood is the principal recipient of arrival noise, the size and shape of the contour over Inglewood may be materially affected by the omission of the A380 and other NLAs from the Project fleet mix.

Response:

Please see Response to Comment SPC00236-32 regarding NLA operations.

SAL00016-14

Comment:

The second issue arises out of the bifurcation of the analyses of DEIR Alternatives A through C, from SEIR Alternative D. SEIR App. S-C1 states that the DEIR was prepared with the INM 6.0 model, and the SEIR with the INM 6.0c model. As the two model versions use slightly different databases, it is not

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possible to ascertain whether the comparisons contained in the SEIR between alternatives are, in fact, accurate.

Response:

Please see Response to Comment SAL00015-134 regarding use of the INM 6.0 and 6.0c models.

SAL00016-15

Comment:

Similarly the flight track assumptions in the DEIR and SEIR diverge. SEIR, App. SC-1, Exh. S2, contains what purports to be existing flight tracks to the west for the noise analysis of Alternatives A through C, showing multiple turns originating immediately at the ends of the runways. SEIR, App. SC-1, Exhibit S4, however, reveals accurate flight tracks which do not begin to diverge until at or about the shoreline. The use of flight tracks that diverge immediately after takeoff, and prior to the shoreline, results in noise contours artificially expanded to the north and south along departure routes in areas west of the airport. Had the actual flight tracks represented in SEIR, App. SC-1, Table S4 for Alternative D, been used in the DEIR noise analysis of Alternatives A through C, the noise contours to the north and south depicted in the DEIR for Alternatives A through C would have been nearly identical to those in the SEIR for the analysis of Alternative D. As a result, the purported beneficial change to communities north and southwest of the airport from implementation of Alternative D may not exist if the correct baseline for noise analysis is used. Absent defensible inputs, it is not possible to ascertain with any certainty the integrity of the comparative results of the noise modeling.

Response:

Comment noted. The commenter is incorrect in identifying that Figure S2, Existing Flight Tracks, of Appendix S-C1, Supplemental Aircraft Noise Technical Report of the Supplement to the Draft EIS/EIR shows flight tracks associated with noise analysis for Alternatives A-D. The flight tracks identified in Figure S2, are based on the flight tracks used in modeling noise exposure patterns for the 1996 baseline and Year 2000 conditions. However, Figure S4, Alternative D Flight Tracks, of Appendix S-C1, Supplemental Aircraft Noise Technical Report of the Supplement to the Draft EIS/EIR is based on future operations. Actual flight tracks cannot be used since those operations have not yet occurred. Appendix D, Aircraft Noise Technical Report of the Draft EIS/EIR does identify Assumed Flight Tracks for Alternatives A-C. Please see Figure 7, Assumed Flight Tracks - Alternative A, Figure 9, Assumed Flight Tracks - Alternative B, and Figure 11, Assumed Flight Tracks - Alternative C. Additionally, please see Topical Response TR-N-1 Noise Modeling Approach.

SAL00016-16

Comment:

Further, the apparent contradictory information set forth in SEIR, App. SC-1 ["Reserve runway 6L/24R for arrival traffic only, during normal operating conditions..." See, e.g., § 3, p. 3-42, and Tables S-2 and S-8, which appear to demonstrate the use of both outboard runways for both arrivals and departures at all times of the day (see also Section 3, p. 3-42 ["occasional departures would continue off the outboard runway 6L/24R during peak departing period..."]), obscures both Alternative D's capacity enhancing and consequent noise enhancing potential. Departures over Inglewood on Runway 6L/24R at night could substantially change the noise contours in ways not already analyzed or disclosed in the SEIR. In addition, SEIR, App. SC-1, Project 2.1.4, states that a 3 degree glideslope has been assumed for all approaches. While this is the normal default option, the SEIR does not: (1) validate the assumption with use of actual data from LAX operations; or (2) disclose the noise impacts of the 3 degree glideslope, when combined with the extension of Runway 6L/24R over 1,000 feet to the east. A preliminary calculation reveals that the combination may result in aircraft between 125 and 250 feet lower in altitude over Inglewood, with concomitantly higher noise impacts on arrival not disclosed in the SEIR.

Response:

The commenter misinterprets the Supplement to the Draft EIS/EIR by stating that Runway 6L/24R would be reserved for arrival traffic only, during normal operating conditions. As stated on page 3-42, in Chapter 3, Alternatives (including proposed action), of the Supplement to the Draft EIS/EIR, the primary use of the runways is assumed to be arrival operations on the outboard runways 6L/24R and 7R/25L

and departure operations on the inboard runways 6R/24L and 7L/24R. There is nothing in the Draft EIS/EIR or Supplement to the Draft EIS/EIR that limits runway 6L/24R to arrival operations only. Table S2 Year 2000 Conditions Runway Utilization Percentages of Appendix S-C1, Supplemental Aircraft Noise Technical Report of the Supplement to the Draft EIS/EIR and Table S8, 2015 Runway Utilization Percentages - Alternative D Conditions Runway Utilization Percentages of Appendix S-C1, Supplemental Aircraft Noise Technical Report of the Supplement to the Draft EIS/EIR both show arrival and departure operations on the outboard runways for Year 2000 and forecasted 2015 conditions. Nighttime departures to the east and related noise impacts are addressed in Section 4.1, Noise, and Section 4.2, Land Use, of the Draft EIS/EIR and Supplement to the Draft EIS/EIR. Supporting technical data and analyses are provided in Appendix D and Technical Report 1 of the Draft EIS/EIR and Appendix S-C and Technical Report S-1 of the Supplement to the Draft EIS/EIR. The airport's present noise abatement measures, which express a preference for over ocean procedures between midnight and 6:30 a.m., are reflected in the frequent use of runway 6R for arrival operations during the night hours. The dominant operating configuration during the period when over ocean procedures are in effect consists of approaches to the north inboard runway (Runway 6R) and departures from the south inboard runway (Runway 25R). Also reflected in the nighttime usage is the airport's policy that, to the extent practical, operations between 10:00 p.m. and 7:00 a.m. will be made to and from the inboard runways. Please see Response to Comment SAL00015-137 regarding modeling of 3-degree glideslope.

SAL00016-17

Comment:

The same lack of validation impacts flight track and operations data in several ways. First, SEIR, App. S-C1, Section 2.1, states that the LAX software automatically assigns an aircraft to a flight track and to an INM aircraft type. However, the SEIR is not clear as to whether there any radar tracking data to verify the INM assigned flight tracks, nor is it clear that the aircraft types are being assigned properly (e.g., "light" vs. "heavy" aircraft). Second, SEIR, App. S-C1, Section 2.1.5 states that the average number of aircraft operations by aircraft type and time of day were estimated on proportional basis, using the 85% of operations that were actually monitored by the LAX software. The Appendix does not reveal, however, whether this approach yields data that is consistent with actual operations at the airport. Third, SEIR App. SC-1, Table S-15, which purports to identify the anticipated L-MAX noise levels generated by aircraft operations provides no comparison with the results from noise monitoring stations surrounding LAX to determine the accuracy of the INM model in predicting L-MAX levels.

Response:

Comment noted. Please see Response to Comment SAL00015-136 regarding determination of flight tracks, Response to Comment SAL00015-138 regarding LAX modeling software, and Response to Comment SAL00015-144 regarding Lmax noise levels.

SAL00016-18

Comment:

Fourth, SEIR App. SC-1, Table S14, portrays the aircraft noise analysis results in terms of DNL not CNEL. As DNL is a less stringent measure which omits additional weighting to noise events that occur in the evening hours from 7:00 to 10:00 p.m., a conversion factor must be applied to DNL results in order to accurately portray CNEL impacts. As a consequence, the CNEL impacts identified in SEIR, App. SC-1, Table S20, cannot be corroborated.

Response:

Comment noted. Please see Response to Comment SAL00015-143 regarding use of the DNL and CNEL metric.

3. Comments and Responses

SAL00016-19

Comment:

Last, and potentially most crucial, SEIR App. SC-1, Section 2.1.7 states that the INM underpredicts the CNEL by 0-3 dB based on noise monitoring around LAX. As the INM model uses SEL values to calculate Leq and CNEL, it may be reasonably concluded that the SEL and Leq analyses for Alternative D are also underpredicted by the same 0-3dB. Although a deviation of 3 dB CNEL is significant, as alluded to in the SEIR significance criteria used for assessing airport noise impacts, the SEIR contains no attempt to investigate the accuracy of the input data for the INM model for the purpose of calibrating the model to actual measurements at LAX, or verifying the results of the noise analysis.

Response:

Comment noted. Please see Response to Comment SAL00015-117 regarding modeling versus measurement differences.

SAL00016-20

Comment:

B. Alternative D Does Not Fully Assess the Noise Impact on Inglewood Schools.

It is above dispute that, in general, the potential impacts of airport noise on children, and particularly children in a learning environment, are of critical importance, not only to the children and their families, but to society as a whole. Of particular importance to Inglewood, however, is that, as set forth in SEIR, App. SC-1, Alternative D will result in 12 additional schools in Inglewood exposed to single event noise levels sufficient to disrupt classes, as compared to noise levels in 1996. Nevertheless, the SEIR disaffirms significant impact from the increased exposure. SEIR Section 4.1.2.1.2, Project 4-11. ["no reliable statistical relationship between the amount of aircraft noise exposure present and the degree of learning difficulty experienced by children at affected schools" has been established.]

The treatment of the noise methodology used to evaluate noise impacts on schools reflects this conclusion. For example, SEIR Section 4.1.2.1.2, states that the peak hour of airport operations during school hours was used to assess the impact of aircraft noise on the schools. While this would be the proper approach (based on the threshold of significance established for the Project), SEIR, App. S-C 1 reveals that instead of the peak hour, an average of 8 school hours was used in the analysis.

Moreover, the Leq metric used in SEIR, App. SC-1, Table S33 appears incorrectly calculated. The average Leq for the 8 hour school day in Table S33 is obtained by adding $10 \log(3)$ to the 24 hour Leq calculated by the INM model. The basis for this calculation appears to be that the 8 hour school day is 1/3 of the 24 hour day. However, this methodology is not correct since flights are not evenly distributed throughout the day. The result of the analysis is an average Leq that is too low because most flights at LAX occur during the daytime. It should be further noted that, as set forth above, the model is acknowledged to underpredict Leq values by 0 to 3 dB in any event. This underprediction, as well as the diminution in Leq values caused by averaging were apparently not considered in the analysis or assessment of impact which should have been based on the peak, not average, hour, as acknowledged in SEIR Chapter 4.1.

Response:

Comment noted. However, it is unclear where the commentor identifies that 12 Inglewood Schools will be newly exposed to single event levels sufficient to disrupt classes. Table S4.2-28 Alternative D 2015 Listing of Schools Newly Exposed to High Single Event Levels of Section 4.2, Land Use, of the Supplement to the Draft EIS/EIR identifies that seven private schools would be newly exposed to high single event levels. The commentor misinterprets the data identified in Table S33, Hourly Equivalent Noise Level at LAX Schools with Exceedance of ANSI Leq(h) Thresholds During the Average School Day (8:00 a.m.-4:00 p.m.) of Appendix S-C1, Supplemental Aircraft Noise Technical Report of the Supplement to the Draft EIS/EIR is correct. The commentor would be correct if those 8 hours were divided part of a 24-hour Leq day. The noise level was consistently high due to the number of operations for the entire 8-hour period so the Leq was adjusted by 4.8 Leq during the remaining 16 hours in order to make the Leq consistent for a 24-hour day. The Supplement to the Draft EIS/EIR does

not disaffirm significant impact from noise exposure noise effects. Noise impacts were addressed in Section 4.1, Noise, and Section 4.2, Land Use, of the Supplement to the Draft EIS/EIR. Supporting technical data and analyses are provided in Appendix S-C and Technical Report S-1 of the Supplement to the Draft EIS/EIR. Additionally, please see Subtopical Response TR-N-1.4 regarding modeled vs. measured baseline year noise levels. Please see Topical Response TR-LU-5 regarding noise mitigation, in particular Subtopical Response TR-LU-5.8 regarding mitigation of noise on schools.

SAL00016-21

Comment:

Finally, while Section 4.1.2.1.2 also states that the "time above" was used as a threshold to evaluate noise impacts on schools, "time above" was not identified as a significance criterion in SEIR, App. S-CI. In fact, as set forth in SEIR Section 4.4.1.1, it is not clear whether the "time above" criterion is cumulative for a school day or for the peak hour, or whether it applies to each individual aircraft event. If it is cumulative, it can take many aircraft disruptions to achieve the 3 second "time above" criterion level used in the SEIR to establish disruption, thus creating an unrealistically high hurdle to the establishment of noise impacts on school populations.

Response:

Time above analysis is identified in Table S32 Average Daily Minutes Above Threshold of 65 dBA Interior Speech Communication Levels During the Average School Day (8:00a.m-4:00p.m.) of Appendix S-C1, Supplemental Aircraft Noise Technical Report, of the Supplement to the Draft EIS/EIR. This table indicates that Time Above represents the total number of minutes per school day that exceed 94 decibels at indicated school. At 65 percent of the locations where occurrences of noise above the 65 decibel interior threshold (94 decibels exterior) the total time of exposure during the school day is less than 10 seconds.

SAL00016-22

Comment:

C. Because of the Under Calculation of Noise Impacts, Measures Offered to Mitigate Noise Impacts on Schools are Inadequate.

Just as the analysis of noise impacts on schools is incomplete, so are the mitigation measures to remedy those impacts. Mitigation measures applicable to noise impacts on schools are limited to MM-LU-3 ["conduct study of the relationship between aircraft noise levels and the ability of children to learn", SEIR Section 5, Project 5-21], and MM-LU-4 ["provide additional sound insulation for schools shown by MM-LU-3 to be significantly impacted by aircraft noise", SEIR Section 5, Project 5-21 [emphasis added]]. The former involves the conduct of a study to determine if any measurable relationship exists between aircraft noise levels and the ability to learn. The latter is contingent upon the outcome of the former. The proposed measures are both legally and practicably inadequate.

First, it does not take a "comprehensive study", or a mathematical relationship, to establish what is, at minimum, intuitively obvious - that an increase in airport noise of the type and magnitude portrayed in the SEIR will not be beneficial to learning. Second, it is improper for lead agencies to "defer formulation of possible mitigation programs by simply requiring future studies to see if mitigation may be feasible." *Fairview Neighbors v. County of Ventura*, 70 Cal.App.4th 238, 244 (1999). Indeed, it is only where "after a thorough investigation, a lead agency finds that a particular impact is too speculative for evaluation, [that] the agency should note its conclusion and terminate discussion of the impact." *Los Angeles Unified School District v. City of Los Angeles*, 58 Cal.App.4th 1019, 1026 (1997).

In *Los Angeles Unified School District*, a case only five years old, and involving the City of Los Angeles, proprietor of LAX, the court found that noise impacts on several schools from the proposed Warner Center Development in the San Fernando Valley were not too speculative for determination as claimed in the EIR, where "the authors of the EIR took precise measurements of existing traffic noise around Canoga Park High School and then used a Federal Highway Administration computer model to predict noise levels under alternative versions of the plan." *Id.* On that ground, as well as a second ground, that sufficient reliable data had been developed to permit development of noise mitigation measures for

3. Comments and Responses

residences in the area, *Id.* at 1028, the Court found that Los Angeles had failed to establish the reason why the same could not be done for the schools.

The same situation exists here. The SEIR contains what its authors, the lead agency, consider to be appropriate significance criteria based on several existing studies of classroom disruption, and analyzed in the INM, a Federal Aviation Administration model. Moreover, the SEIR contains what purports to be a definitive evaluation of noise impacts on residences, which is accompanied by a number of mitigation measures, some of which are to be applied immediately upon Project implementation, and based on the determinations contained in the SEIR. There is, therefore, no cognizable reason, and the SEIR provides none, why reasonable, feasible mitigation measures to allay the impact of airport noise on children in 12 Inglewood schools should not be set forth in the SEIR.²

² To further complicate the issue, SEIR, Section 6.2.3, based eligibility for school noise mitigation on CNEL levels, a much higher, cumulative hurdle than the SEL criteria used to assess noise impacts on schools in SEIR Section 6.2. The SEIR should be revised to apply the relevant SEL criteria consistently to both the determination of noise impacts on schools and the eligibility for mitigation of those noise impacts.

Response:

As stated on page 4-33 of the Supplement to the Draft EIS/EIR, "there is currently no conclusive data to establish a proven statistical relationship between single overflight event noise and the ability of children to learn in the classroom." Nevertheless, for the purpose of assessing the significance of single event noise impacts relative to school disruption, LAWA developed two thresholds that were applied in the CEQA evaluation of all five Master Plan alternatives (i.e., No Action/No Project Alternative and Alternatives A through D). The two standards were developed based on information from the Federal Interagency Committee on Noise (FICON) and the American National Standards Institute (ANSI). Unlike the situation in the case of *Los Angeles Unified School District v. City of Los Angeles* (58 Cal.App.4th 1019) where the EIR did not estimate and assess future noise levels because they were felt to be too speculative, the LAX Master Plan Supplement to the Draft EIS/EIR provides extensive noise modeling results regarding noise levels at public and private schools in communities around LAX, including in Inglewood. Section 4.1, Noise, of the Supplement to the Draft EIS/EIR provided a comprehensive discussion of future noise levels estimated at schools in the local area, with additional details and supporting documentation provided in Appendix S-C1, Supplemental Aircraft Noise Technical Report. The detailed information provided in that Appendix includes, but is not limited, the calculation of future noise levels specific to dozens of individual public and private schools in a variety of metrics that are presented in Tables S31 through S34.

As indicated on page ES-26 of the Supplement to the Draft EIS/EIR, LAWA has an established agreement with most public and a few private schools in the airport environs related to the amount of cumulative noise that may be generated from airport operations over each facility. Where those cumulative noise levels are exceeded (measured in decibels of CNEL), addition of the facility to the list of sound insulation eligibility may be warranted. In addition to this existing provision for mitigating aircraft noise on schools, the Supplement to the Draft EIS/EIR proposes as new mitigation that prior to the determination of sound treatment eligibility, a new study of the relationship between specific aircraft noise levels and childhood learning abilities would be undertaken by LAWA as part of the continuing environmental monitoring process obligated under CEQA. When that study is complete, the potential for additions to the sound insulation program for schools would be revisited as part of LAWA's Aircraft Noise Mitigation Program. These new measures are intended to address, as possible, existing uncertainties regarding the statistical relationship between aircraft overflight noise and the ability of children to learn in the classroom, and lead to the formulation and refinement of noise attenuation/mitigation measures that are tailored to the identified problem(s).

SAL00016-23

Comment:

D. The SEIR's Analysis of Newly Awakened Population is Unclear and Potentially Inaccurate.

The SEIR reveals that the vast bulk of the population newly exposed by Alternative D to noise sufficient to awaken it on a regular basis, i.e., 17,030 persons,³ lives in Inglewood, while all other affected jurisdictions, including the City of Los Angeles, Los Angeles County and El Segundo will experience a

net decrease of up to 19,000 residents in population exposed to SEL levels sufficient to awaken. SEIR, Table 4.2-29. For that reason alone, Inglewood has a deep concern that the analysis of Alternative D's sleep impacts be accurate, understandable, and that proposed mitigation measures be adequate to mitigate those impacts. Thorough review of the SEIR and its Appendices fails to disclose relevant answers.

3 When the population removed from the noise affected area by change in airfield configuration and resultant shift in the noise contour is considered, the net population in Inglewood exposed to regular awakening is 12,800 persons.

Response:

Comment noted. The Supplement to the Draft EIS/EIR addresses single event nighttime noise impacts in Section 4.1, Noise, and Section 4.2, Land Use. Supporting technical data and analyses are provided in Appendix S-C and Technical Report S-1 of the Supplement to the Draft EIS/EIR in a comprehensible manner in order to meet requirements set forth for CEQA evaluations by the California Court of Appeal.

Initially, the commentor misinterprets the data by comparing population impacts for noise levels from two different tables. Table S4.2-27, Alternative D 2015 94 dBA SEL Noise Contour Residential Uses Newly Exposed (Compared to 1996 94 dBA SEL) (17,030 persons) and Table S4.2-29, Alternative D 2015 Residential and Noise-Sensitive Uses - Noise Exposure Effects by Jurisdiction (Compared to 1996, Year 2000 Conditions and No Action/No Project Alternative) (-19,000 residents).

However, for the 1996 Baseline the commentor is accurate in identifying that the 94 dBA SEL population exposed in the City of Inglewood will be 12,000 persons as shown in Table S4.2-29, Alternative D 2015 Residential and Noise-Sensitive Uses - Noise Exposure Effects by Jurisdiction (Compared to 1996, Year 2000 Conditions and No Action/No Project Alternative). In addition to the Mitigation Measures identified in Section 4.1.8 of Section 4.1, Noise and Section 4.2.8 of Section 4.2, Land Use to address noise impacts a Memorandum of Understanding (MOU) was agreed to by the City of Inglewood and LAWA to study and mitigate the possible environmental impacts on Inglewood of existing and potential future operations and improvements at LAX. For additional information on the Memorandum of Understanding please see Section 2.2.2.2, of Technical Report S-1 of the Supplement to the Draft EIS/EIR. Additionally, please see Topical Response TR-LU-5, regarding land use/noise mitigation.

SAL00016-24

Comment:

1. The Methodology Employed to Analyze Sleep Impacts of Aircraft Noise is Unclear and Leads to a Potentially Inaccurate Conclusions.

The SEIR uses a 94 dB SEL "noise contour" as a metric to measure aircraft noise sufficient to awaken. SEIR § 6.1.2 contains a description of the methodology used to calculate the location of the 94 dB SEL noise contour. That description is, however, unclear. The 94dB level represented in SEIR Section 6.1.2 is based on a study that states that 10% of the population exposed to this level of noise will be awakened no more than once every 10 days. To establish a noise contour for operations that would occur once every 10 days, it appears that the methodology only considered aircraft operations that occur at least 0.1 times per day (or once every 10 days). If this is a correct understanding of the methodology, then the methodology is in error. If the methodology includes only aircraft that have at least 0.1 operations per day, then some operations have been excluded from the analysis. This could mean for example, that infrequent takeoffs to the east under Santa Ana conditions were not considered in the analysis. This omission would, of course, have a significant effect on Inglewood.

In effect, what is plotted in the SEIR is the 94 dB SEL contour (i.e., the contour for 10% awakenings) for a subset of the total operations occurring at the airport. Therefore, the resulting analysis will be incorrect for two reasons: (1) It underpredicts the contour because it does not include all the flight operations at the airport; and (2) As the SEIR acknowledges that the model underpredicts SEL values by 0 to 3 dB, the resulting 94 dB SEL contour may also be underestimated by that amount. Finally, it is unclear from SEIR Section 6.1.2 whether the analysis of nighttime awakenings only included aircraft operations or also included ground runup operations which, in some instances, can be extremely noisy.

3. Comments and Responses

Response:

The commenter misinterprets the methodology of SEL Noise Contours as Stated in Section 6.1.2 of Appendix S-C1, Supplemental Aircraft Noise Report of the Supplement to the Draft EIS/EIR. The analysis was of all nighttime operations in the INM program input files (that include run-ups) and did not include any daytime activity. For each case investigated, a contour line was prepared to represent the area exposed to at least 1/10 of an operation on the average annual day that exceeded the 94 or 96 decibels of SEL. This equates to a probability of 1 percent that a person living on the contour line would be awakened on any given night and that people within the line would be exposed to a higher probability depending on the numbers of loud flights to which they are exposed. This is the same as saying 10 percent of the people living on the line would be awakened, on average, once every 10 days. Projected flight conditions and use of flight tracks in the nighttime awakenings analysis are described in Section 6.1.2.2, Projected Future Conditions of S-C1 Supplemental Aircraft Noise Technical Report of the Supplement to the Draft EIS/EIR. SIMMOD modeling was used to develop the projected operating conditions and more takeoffs are assumed to the east at night during the future alternatives than for the current cases (based on actual observations). The ultimate result of this effect is that the projected areas affected by SEL contours of 94 dBA under future conditions may be over estimated, but the degree of any overestimation cannot be known until the events actually occur. The continuing environmental monitoring program will address this issue. Please see Topical Response TR-N-1.1 regarding INM calculated noise levels compared to noise levels measured in the field.

SAL00016-25

Comment:

2. The Measures Proposed to Mitigate Awakenings are Incomplete and, Thus, At Least Partially Ineffective.

As a threshold matter, Inglewood appreciates the intent expressed in mitigation measure MM-LU-2, SEIR, Section 5, Project 5-20, to "incorporate residential dwelling units exposed to single event awakenings threshold into aircraft noise mitigation program." However, SEIR Section 5 clouds that commitment by predicating the calculation of affected units on a comparison with "1992 65 CNEL contour". Inglewood's problem with that approach is twofold. First, the relevant baseline comparison throughout the SEIR for CEQA purposes is 1996. To suddenly employ 1992 contours as a baseline for comparison, without further explanation, renders the conclusion derived from that comparison suspect.

Inglewood is aware that the rationale for use of the 1992 contour is that, according to explanations offered in other forums, the 1992 contour represent the noisiest recent year due to the level of operations and the relative preponderance in the fleet of Stage 2 aircraft at that time. Nevertheless, neither the 1992 contour, nor data from 1992, are presented anywhere in the SEIR or relied upon in other sections. Therefore, further analysis of 1992 operations, noise levels, and resulting contours, as compared to those for 1996 and 2000, the designated baselines for analysis in the SEIR, is required to justify use of 1992 contours in this isolated instance.

Moreover, the results of the comparison of Alternative D with 1992 contours is inconsistent with the results derived from comparison with the designated 1996 baseline. While the comparison with 1992 purports to result in 4,140 dwelling units and 13,170 residents of Inglewood newly exposed to nighttime awakenings, the comparison with 1996 results in 6,010 dwelling units and 17,930 residents newly exposed. Clearly, a measure that excludes 1,870 units and 4,760 residents will only incompletely mitigate Alternative D's noise impacts.

Response:

Comment noted. 1996 is the environmental baseline year and Year 2000 conditions have been provided for updated comparative purposes. However, at LAX, the ANMP boundary, which establishes eligibility for participation in mitigation programs, is based on the adjusted noise exposure pattern present in 1992. The ANMP contour is included to show potential changes in the ANMP that may occur with the implementation of mitigation measures for the various build alternatives. ANMP data tables and contours are included Section 4.2, Land Use and Technical Report S-1 of the Supplement to the Draft EIS/EIR.

MM-LU-2 indicates that in addition to any restrictive measures that may be implemented resulting from completion of Mitigation Measure MM-N-5, Conduct Part 161 Study to Make Over-Ocean Procedures Mandatory, the boundaries of the ANMP will be expanded to include residential uses newly exposed to single event exterior nighttime noise levels of 94 dBA SEL, based on the Master Plan Alternative that is ultimately approved. Although the area significantly impacted by noise has been reduced since 1992, and a number of parcels within the contour are no longer exposed to noise levels of 65 CNEL and higher, all incompatible residential, school, church, and hospital parcels within the 1992 fourth quarter contour are eligible for mitigation under the ANMP. Please see Subtopical Response TR-N-1.2 regarding modeled vs. measured baseline year noise levels and Subtopical Response TR-N-1.3, regarding use of 1996 baseline noise Levels from which to measure increases associated with proposed alternatives. The comparative numbers that the commentor references are from Table S4.2-27 Alternative D 2015 94 dBA SEL Noise Contour Residential Uses Newly Exposed (Compared to 1996 94 dBA SEL) of Alternative D and Table S4.2 34 Alternative D 2015 94 dBA SEL Noise Contour Residential Uses Newly Exposed (Compared to 1992 65 CNEL Noise Contour of Section 4.2 Land Use of the Supplement to the Draft EIS/EIR and are not on an apples to apples match. There is a discrepancy between the two tables due to some of the Inglewood residents identified in Table 4.2-34 who are already included in the ANMP program.

SAL00016-26

Comment:

Second, while Inglewood appreciates the time and effort devoted to an application to the FAA for enforceable noise restrictions under 14 C.F.R. Part 161, that measure will also result in only incomplete mitigation. As SEIR, App. S-C1, Section 3.1.6 indicates, the Part 161 application will only eliminate gratuitous use of nighttime takeoffs to the east. For safety reasons, takeoffs to the east will still occur during Santa Ana conditions or when coastal fog limits visibility. As acknowledged in SEIR, App. S-C1, Section 3.1.6, these safety reasons account for the great majority of takeoffs to the east. Therefore, the mitigation measure that is the subject of a Part 161 application will be only intermittently applicable, and, thus, may provide little relief to the residents of Inglewood. Finally, SEIR, App. S-C1, Section 6.1.3 states that the Part 161 application will only apply to eastbound takeoffs between midnight and 6:30 a.m. However, SEIR, App. S-C1, Section 6.1 states that the analysis of nighttime awakenings applies to the hours between 10:00 p.m. and 7:00 a.m. Therefore, the proposed mitigation measure will not cover a period of two and one-half hours each night.

In the last analysis, the gravamen of the mitigation for nighttime awakenings is the sound insulation program identified in SEIR, App. S-C1, Section 6.1.3. However, without further clarification concerning the extent of the units and population that will be covered by the sound insulation program, the program appears inadequate to mitigate the full noise impacts of Alternative D.

Response:

The commentor is correct in his assessment of the Part 161 Study and that only non-safety related aircraft operations during over-ocean procedures (Midnight to 6:30 a.m.) will be affected as a result of the Part 161 restriction. However, in addition to any restrictive measures that may be implemented resulting from completion of Mitigation Measure MM-N-5, Conduct Part 161 Study to Make Over-Ocean Procedures Mandatory, MM-LU-2, Incorporate Residential Dwelling Units Exposed to Single Event Awakenings Threshold into Aircraft Noise Mitigation Program (Alternatives A, B, C and D) indicates that the boundaries of the ANMP will be expanded to include residential uses newly exposed to single event exterior nighttime noise levels of 94 dBA SEL, based on the Master Plan Alternative that is ultimately approved. Please see Section 4.2.8, Mitigation Measures of Section 4.2, Land Use, of the Supplement to the Draft EIS/EIR for a description of nighttime awakenings newly exposed units and population that will be eligible for mitigation in the ANMP. Additionally, please see Response to Comment SAL00016-25 regarding measures proposed to mitigate awakenings.

SAL00016-27

Comment:

E. The Expansion of the ANMP Contemplated in Mitigation Measure MM-LU-1 May Provide Only Limited Relief to Inglewood Residents Newly Exposed to Noise in Excess of 65 dB CNEL.

3. Comments and Responses

The SEIR makes painfully clear that the vast bulk of the population newly exposed by Alternative D to noise in excess of 65 dB CNEL will be in Inglewood. Specifically, Alternative D is projected to increase the number of Inglewood residents impacted by noise in excess of 65 dB CNEL by 4,190, when compared to the 1996 baseline (as opposed to zero in El Segundo, 790 in the City of Los Angeles, and 380 in Los Angeles County). Nevertheless, the scope of MM-LU-1's applicability to these newly affected populations is not clearly defined.

For example, while MM-LU-1 proposes to expand the existing ANMP to "mitigate land uses that would be rendered incompatible by noise impacts associated with implementation of the LAX Master Plan", SEIR, 5-19, it also imposes criteria for inclusion in the ANMP that require the existing ANMP to be completed before expansion to newly impacted residences. As the current ANMP already involves thousands of units in Inglewood alone, not to speak of other communities; and as the process of sound insulation construction can be a lengthy and complex one, the almost 5,000 newly impacted residents of Inglewood may have to wait in line behind other residents of Inglewood and other communities for up to 10 years, all the while suffering the debilitating impacts on sleep, learning and living in general caused by Alternative D.

Moreover, as an alternative to insulation, MM-LU-1 proposes "acquisition of properties within the highest CNEL measurement zone" as well as those with "high concentrations of residents and other noise sensitive occupants..." SEIR, Project 5-19, 20. MM-LU-1, however, fails to identify the manner in which the housing needs of newly exposed residents will be accommodated after their properties are acquired. In fact, the SEIR, Section 4.4.3, rejects the necessity of acquisition, and consequently ignores the need for attendant relocation. ["Under Alternative D, there would be a substantial reduction in property acquisition compared to the other build alternatives. No residential acquisition is proposed..." SEIR, p. 4-333] Nor is there any discussion of the way in which, in the tight and expensive L.A. housing market, decent affordable housing will be provided, or made available through new construction.

In light of the size of the potentially affected population, most of which are in Inglewood, and its heavily low income and minority characteristics, MM-LU-1 is sorely inadequate to mitigate the impacts of any of the proposed alternatives.

Response:

Noise impacts on the City of Inglewood are presented in Sections 4.1, Noise and 4.2, Land Use of the Draft EIS/EIR and Supplement to the Draft EIS/EIR.

Mitigation measure MM-LU-1 would accelerate the fulfillment of existing commitments to owners within the current ANMP boundaries prior to proceeding with newly eligible properties. As also stated in mitigation measure MM-LU-1, LAWA would also accelerate the current rate of noise mitigation through: increasing annual funding; reevaluating the requirement for granting of avigation easements with sound insulation; providing additional technical assistance to local jurisdictions to improve their land use mitigation programs; and reducing, to the extent feasible, structural and building code compliance constraints to mitigation of sub-standard housing. Mitigation measure MM-LU-2 would incorporate residential dwellings newly exposed to single event noise levels that result in nighttime awakenings into the ANMP, and mitigation measures MM-LU-3 and MM-LU-4 would establish thresholds of significance for classroom disruption and incorporate eligible schools into the ANMP. As acknowledged in Section 4.2.9 of the Supplement to the Draft EIS/EIR, interim impacts would occur prior to the completion of sound insulation or recycling of incompatible land uses. Please see Topical Response TR-LU-3 for a description of the ANMP. As described on page 4-88 in Section 4.2, Land Use, of the Supplement to the Draft EIS/EIR, as of June 2002, it is estimated that of the 33,099 residential units within the current ANMP boundaries, 6,685 previously incompatible dwelling units are now compatible. This total includes 2,168 compatible dwelling units within the City of Inglewood's ANMP boundaries.

Sound insulation is the preferred method by LAWA to achieve noise mitigation. In addition, as indicated in the 1998 ANMP, within the program's boundaries sound insulation is proposed for 92 percent of the impacted dwelling units. The remaining 8 percent are proposed for land use recycling. The decision to pursue noise insulation or acquisition within the City of Inglewood is a policy decision that would be made by the City of Inglewood not LAWA.

If residential properties are acquired and relocated under the ANMP, rather than sound insulated, comparable housing would be provided under the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (codified as amended at 42 USC 4601-4655), its implementing

regulations (49 CFR Part 24), FAA Order 5100.37A, and Acquisition and Relocation Assistance for Airport Projects (April 4, 1994, P.L. 91-646), collectively referred to as the Uniform Act in the Draft EIS/EIR and Supplement to the Draft EIS/EIR. As an example of an existing program, LAWA is currently proceeding with a voluntary acquisition and relocation program for the Manchester Square and Belford area. Although LAWA's preferred method of noise mitigation is through sound insulation, this program was initiated due to a high level of interest from residents and property owners who requested that LAWA purchase their property in lieu of soundproofing. See Topical Response TR-RBR-1 for a discussion of how relocation would occur and how comparable housing would be identified pursuant to legal requirements. See TR-MP-3 for a discussion of residential acquisition within Manchester Square. Note that noise-sensitive uses newly exposed to 65 CNEL noise levels in the City of Los Angeles are not expected to be acquired but would be soundproofed pursuant to City policy. In the event that the City of Inglewood elects to pursue acquisition of residential properties in lieu of soundproofing, this is independent of what is being proposed by LAWA and is not a component of Alternative D. No acquisition of residential uses is proposed under Alternative D.

SAL00016-28

Comment:

F. The Data and Metrics Used in the SEIR's Analysis of Alternative D's Traffic Noise Impacts Are Inconsistent With Those Used in the Evaluation of its Aircraft Noise Impacts.

The methodology used in the SEIR's analysis of Alternative D's traffic noise impacts is unclear as to the data used in the evaluation of peak hour traffic noise, as well as inconsistent as between the metrics used to assess traffic and aircraft noise. These inconsistencies may render the SEIR's conclusions regarding Alternative D's cumulative noise impacts questionable.

The SEIR states that peak noise hour data, i.e., data for the noisiest one hour period of the day, were used in the analysis of traffic noise. SEIR § 4.1.2.1.3. However, based on review of SEIR, App. SC-2, Roadway Noise Data, it appears that, in fact, either peak a.m. or p.m. traffic data were used. These are not typically the noisiest hours of the day since traffic slows due to congestion. Thus, the SEIR's traffic noise analysis may not have captured the true extent of the Project's traffic noise impacts.⁴

⁴ It appears, although it is by no means certain, that the data in SEIR, App. SC-2 takes this into account by reducing traffic speeds for future years. However, a more accurate way of dealing with the problem would be to start with the correct data in the first instance.

Response:

Please see Response to Comment SAL00016-29 and Response to Comment SAL00015-125.

SAL00016-29

Comment:

Further, the metrics used to measure aircraft and traffic noise are inconsistent. The SEIR's aircraft noise analysis depends on the cumulative CNEL metric.⁵ The SEIR's significance criterion for traffic noise, however, is the 24 hour Leq metric which is a predicate to, but not identical with, the CNEL significance criterion. Where the SEIR purports "for information purposes", to combine aircraft and traffic noise to estimate the total experienced noise, Section 4.1.2.1.3, p. 4-12, it does so by converting both traffic and aircraft noise to a 24 hour Leq metric, rather than converting traffic noise to a CNEL metric. The result is a comparison of "apples and oranges", that deprives the public of the simplicity of a consistent metric. If using the Leq metric would result in a more accurate characterization of the Project's noise impacts, its use would be acceptable. However, the SEIR does not claim that this is so.

In short, while the SEIR states that the computation of the combined noise impacts of traffic and aircraft are for "information purposes" only, the reality is that noise in the vicinity of the project will have multiple components, two of which are aircraft and traffic, and another, construction noise as set forth below. The SEIR has an affirmative responsibility to fully and accurately depict the cumulative impacts of all three.

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5 The exceptions to the use of the CNEL metric is to assess noise impacts on schools and awakenings.

Response:

Comment noted. The commentor is correct. Aircraft noise and traffic noise each have their own designated noise measurement metric for measuring cumulative noise levels. For the State of California and the FAA, CNEL or DNL is the metric of choice for aircraft noise measurement and the FHWA requires that a 24-hour Leq metric as the metric of choice for roadway noise measurement. For informational purposes the CNEL metric was converted to Leq in order to provide an apples to apples comparison. Please see 4.1.2.1, Aircraft Noise Methodology, and Section 4.1.2.1.3, Road Traffic Noise Methodology of Section 4.1, Noise, of the Supplement to the Draft EIS/EIR that describes each metric in detail with its differences and similarities. Cumulative noise impacts were addressed in Section 4.1.7 of Section 4.1, Noise, of the Supplement to the Draft EIS/EIR.

SAL00016-30

Comment:

G. The Impact of Construction Noise From the Proposed GTC on Residents of Inglewood Has Not Been Adequately Evaluated.

SEIR Section 4.1.6.4.3 states, in pertinent part, that: (1) as the closest noise sensitive uses to the GTC are more than 1,000 feet to the east across La Cienega Boulevard and the I-405 in the City of Inglewood; (2) because construction equipment noise of 86 dBA Leq would dissipate to approximately 66 dBA Leq at that distance; and (3) because the road traffic and other noise would mask any construction noise, the impact of construction noise on homes in Inglewood would be less than significant. In reaching that conclusion, the SEIR relies on a theory conclusively rejected by the court in Los Angeles Unified School District, *supra*, 58 Cal.App.4th at 1025.

In its EIR in that case, as in the SEIR here, Los Angeles reasoned that "the noise level around the schools is already beyond the maximum level permitted under Department of Health Guidelines so even though traffic noise from the new development will make things worse, the impact is insignificant." *Id.* After characterizing Los Angeles' position, the court rejected it, relying on Kings County Farm Bureau v. City of Hanford, 221 Cal.App.3d 692, 720 (1990).

"This ratio theory, the court explained, 'trivialized the project's impact' by focusing on individual inputs, not their collective significance... [T]he relevant issue to be addressed in the EIR on the plan is not the relative amount of traffic noise resulting from the project when compared to existing traffic noise, but whether any additional amount of traffic noise should be considered significant in light of the serious nature of the traffic noise problem already existing around the schools." *Id.* quoting Kings County Farm Bureau, *supra*.

The SEIR's analysis of the construction noise impacts of Alternative D is predicated upon precisely the same impermissible "ratio theory" as that rejected in Los Angeles Unified School District. The SEIR opines both that construction equipment noise would dissipate to a less than discernable level at a distance of 1,000 feet from Inglewood and that road traffic noise would mask any construction noise. While some analysis exists in the SEIR to support the former, none whatsoever exists with respect to the latter. In other words, it is yet to be determined whether traffic noise, when calculated using peak noise hour data, as well as peak traffic data, will sufficiently exceed the level of construction noise, the peak hours of which may be entirely different, to mask or obliterate its impacts on residents less than a fifth of a mile away. As the court held in Los Angeles Unified School District, "we do not know the answer to this question but, more important, neither does the City". *Id.* at 1026. Without those answers respecting the Project's cumulative traffic, aircraft and construction noise impacts, the SEIR is potentially inadequate.

Response:

As indicated in Section 4.1.4.3.1, CEQA Thresholds of Significance, of the Supplement to the Draft EIS/EIR, construction-related noise would be considered to be a significant noise impact, under the most stringent criterion, if it exceeds existing ambient exterior noise levels by 5 dBA or more at a noise-sensitive use. As such, the ambient noise level at the closest noise sensitive receptor located approximately 1,000 feet east of the GTC would need to be 61 dBA or less in order for the project-

related construction noise level of 66 dBA to be considered a significant impact. Noise measurements conducted on October 5, 2000 in conjunction with the detailed evaluation of the LAX Expressway proposed for Alternatives A, B, and C indicated an ambient noise level of 74 dBA at Ashwood Park, which is located just east of I-405, northeast of the GTC (see Table 4.6-2 of Appendix K of the Draft EIS/EIR). This measured noise level is generally representative of ambient noise levels at properties located in close proximity to I-405 with open exposure to freeway traffic noise. Although there are properties near the freeway that have lower ambient noise levels due to intervening noise barriers including structures, dense vegetation, and intervening topography, such barriers would also reduce noise exposure levels associated with construction activities at the GTC located west of I-405. As such, the construction-related noise levels at the nearest noise-sensitive use in Inglewood would be less than the preliminary estimate 66 dBA, and would be well below the 79 dBA threshold considered to be applicable to the subject area (i.e., representing a 5 dBA increase in the 74 dBA measured noise level typical of unobstructed ambient noise levels near I-405). Based on the information provided in the Draft EIS/EIR and the Supplement to the Draft EIS/EIR, it is reasonable and not speculative to conclude that construction activities at the GTC would not result in significant construction noise impacts at the nearest noise-sensitive use in Inglewood.

SAL00016-31

Comment:

IV. THE SEIR DOES NOT FULLY DISCLOSE THE PROJECT'S AIR QUALITY IMPACTS.

The SEIR's air quality analysis is of questionable accuracy where: (1) the methodology employed in the analysis understates baseline emission concentrations, thus leaving substantial headroom within which to make the finding that the Project increases emissions without violating ambient air quality standards ("AAQS"); (2) understates emissions from aircraft; (3) overstates emissions benefits from electrification of aircraft ground support equipment and the use of gate-based power, and understates emissions impacts from construction equipment; (4) omits heavy duty construction and transport truck emissions from the analysis; and (5) improperly defers the conformity analysis required for all Federally funded projects pursuant to the conformity provisions of the Clean Air Act, 42 U.S.C. § 7506, et seq.

Response:

Please see Responses to Comments SAL00016-32 through SAL00016-44.

SAL00016-32

Comment:

A. The Methodology Used in the Calculation of Background Pollutant Concentrations Leads to Understatement of Impacts.

To varying degrees, the determination of the Project's environmental impacts is dependent upon the background environment with which the Project impacts are compared. With respect to a determination of air quality impacts, the accurate calculation of background concentrations is particularly crucial, because it is upon that base that the compliance of Project specific emissions with regional air quality standards is determined. If that base is underestimated, the overall effect of airport improvements on AAQS compliance will be similarly understated. Here, it appears that the baseline concentrations upon which Alternative D's compliance is predicated are calculated through a methodology that artificially lowers background emissions levels so as to allow room for Project emissions to fall below maximum applicable AAQS.

The SEIR employs a methodology whereby future year background concentrations, excluding PM10s, are determined by adjusting base year concentrations by the ratio of future south coast regional emissions to current south coast regional emissions. For PM10, the process is similar but is based on the ratio of estimated future year PM10 concentrations to current PM10 concentrations in central Los Angeles. Both methods seem likely to produce optimistic (too low) background concentrations for LAX.

First, both methods assume that regional reductions affect all areas of the region equally. However, background concentrations, as well as future emission reduction influences are constrained by geography around LAX. Since the prevailing wind is from southwest to northeast, the Pacific Ocean

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represents a physical constraint and it is unlikely that background pollutant concentrations coming into LAX will be reduced in proportion to emission reduction occurring downwind. In addition, the emissions based approach assumes that fully 100% of the background can be reduced, i.e., if emissions go to zero, ambient concentrations go to zero. While this may be true in an idealized situation, transport and biogenic emissions represent a floor below which air quality cannot be locally reduced. For example, emissions associated with shipping may represent a floor for background NO₂ and SO₂ at LAX. The SEIR does not provide enough data from which to make that determination.

The SEIR does, however, provide additional evidence to support the conclusion that the Project's baseline concentrations are artificially reduced. For example, the SEIR's methodology assumes that emissions from LAX are already included in background concentrations, and, thus, they must represent conservative background pollutant concentration baselines for air quality analysis, as LAX emissions will be added on top of a background that already includes those same LAX emissions. This assumption is based on data concerning baseline short-term (sub-annual) background concentrations measured at an on-site monitoring station located just east of the southern runway configuration, and annual concentrations based on data collected at a SCAQMD monitoring facility in Hawthorne, located near, but southeast of LAX. Because, as set forth above, the prevailing wind direction for LAX area is southwest to northeast, the bulk of airport activity, including all terminal and motor vehicle operations, occur under the influence of a prevailing wind plume that is further north than the onsite monitoring station. While certain aircraft takeoff and queuing emissions are undoubtedly accounted for in the on-site baseline concentrations, these represent only a small fraction of overall airport emissions.

National Weather Service data for 1984 through 1992 at LAX demonstrates the likelihood that these monitoring data are not significantly impacted by LAX emissions. Winds are out of the west or southwest 48 +/- 6% (or approximately 1/2) of all hours in that period. To get a better idea of the significance of this distribution, if a circle were centered at LAX and split into 16 equal "slices", the wind would be blowing off the ocean through only two of those 16 slices for fully 1/2 of all hours. Moreover, these winds would be blowing in a direction such that LAX emissions would have no influence on the off-site monitoring station and little, if any, influence on the on-site measurement. Perhaps most tellingly, winds moved in a prevailing south to north direction (from the bottom half of the circle to the top half) 82 +/- 3% of all hours between 1984 and 1992. Thus, only during 9 +/- 2% of all hours did wind move from the northwest quadrant of the circle toward the southeastern quadrant (i.e., in the direction necessary to influence either the on-site or off-site monitors). Therefore, whatever influence LAX has on either site is clearly modest since the off-site station is located south of LAX and the on-site station is on the southeastern corner of the airport. Consequently, there is little influence from LAX on the off-site concentrations used as background, and only a slight influence on the on-site based background concentrations.

In summary, as a result of employing the specified methodology, 2015 background concentrations are potentially reduced by 50% for NO₂, 60% for CO, and 30-80% for PM₁₀. Clearly, these reductions provide substantial "headroom" for local emissions increases within the confines of the AAQS. Furthermore, these reductions appear to represent the most significant influence on forecasted pollutant concentrations in the years 2005 and 2015.

The overall sensitivity of the air quality analyses to the background concentration reduction is perhaps best recognized in examining the forecasted 2015 pollutant concentrations. Despite the 50% background concentration reductions for NO₂, annual average on-site NO₂ concentrations are forecasted to increase between 1996 and 2015. While the forecasted increase is not sufficient to cause a violation of the NO₂ AAQS, that may be entirely the result of the reduced background concentrations resulting from the flawed methodology employed. Clearly, the integrity of the AAQS compliance status hinges on the proper demonstration of background concentration propriety. Since this is the case, it is critical that assumed background concentrations be supported with appropriate analyses, and those analyses are currently lacking in both the DEIR and SEIR.

Response:

The commentor concludes that, because LAX does lie upwind (in the prevailing wind direction) of the on-site and Hawthorne monitoring stations, the estimate of background concentrations must be flawed. Since the background concentration is supposed to represent the ambient concentration without the influence of airport sources, the argument that the airport has little impact on the monitored concentrations does not indicate that the background concentrations are flawed. The methods used to

estimate future background concentrations are presented in the modeling protocol (Draft EIS/EIR, Technical Report 4, Attachment A), and are discussed in Response to Comment AF00001-28.

The actual background concentrations, both now and in the future, will vary by location around the airport. The peak concentrations from either the on-site monitor or the Hawthorne monitor (as described in the protocol) are used to represent concentrations at all locations around the airport. Since the peak short-term concentrations occur when the wind is blowing from east to west (offshore flow), the major sources contributing to the monitoring station peak concentrations are the major roadways and freeways just east of the airport and monitoring stations. The volume of traffic on these roadways is much higher than roadways on the west side of the airport. Therefore, using the peak concentrations from these monitors to represent existing background concentrations at all locations around the airport is likely to produce conservative (high) results. These conservative existing background concentrations are then used to estimate the future background concentrations in 2005 and 2015. Please also see Response to Comments AF00001-28 and AL00022-123 regarding the calculation of existing and future background concentrations.

SAL00016-33

Comment:

B. The SEIR Understates Aircraft Emissions.

Aircraft emissions are understated in the SEIR through utilization in the analysis of: (1) incorrect aircraft PM10 factors; (2) incorrect taxi times; (3) incorrect default aircraft engine assignments; and (4) omission to consider reverse thrust emissions.

Response:

Please see Response to Comment AL00016-48 regarding PM emission factors. Please see Response to Comment SAL00016-35 regarding taxi times. Please see Response to Comment SAL00016-36 regarding aircraft engine assignments. Please see Response to Comment AF00001-21 regarding emissions from aircraft reverse thrust.

SAL00016-34

Comment:

1. The SEIR Air Quality Analysis Utilizes Incorrect Aircraft PM10 Emission Factors.

As set forth in Attachment 1 to this letter, the DEIR's air quality analysis was based on incorrect PM10 emissions factors. As nothing has changed in the SEIR, this issue is again worthy of note. PM10 emission factor estimation in the DEIR shows that the basic estimation approach yields an emission factor that only considers the basis nonvolatile portion of the particulate. An adjustment factor (that varies with fuel sulfur content) should be used to correct the estimate to total PM. As set forth in Attachment 1, this factor is estimated to be approximately 2.6 for low sulfur (about 70 PPMW) jet fuel and 14.7 for high sulfur (about 675 PPMW) jet fuel. As EPA data demonstrates that U.S. jet fuel averages about 600 PPMW sulfur, the appropriate adjustment factor for the SEIR would be about 13.2. However, as the SEIR uses unadjusted emissions factors, PM10 emissions are underestimated by a factor of 13.

This alternative approach to PM emission factor estimation is based on a strong statistical relationship between measured PM and the inverse of measure NOx (with co-efficients significant at 99+% confidence levels). With such a relationship, the entire existing database of aircraft NOx emissions rates can be evaluated to develop aircraft engine and operating mode specific PM emissions rates. This approach produces PM emissions rates that range from 4 to 37 times higher (depending on operating mode) than those used in the DEIR and SEIR. The smallest differentials are observed at the highest thrust modes. For a typical landing/takeoff ("LTO") cycle at LAX (i.e., using local times in mode), the SEIR appears to underpredict the aggregate PM emission factor by a factor of about 17. The effect on related PM air quality analysis is obvious.⁶

Interestingly, if the appropriate carbon-to-total PM emission factor correction of 13.2 is applied to the emissions rates used in the DEIR and SEIR, the differential between the two emissions factor

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estimation approaches is dramatically reduced, from a factor of 17 to a factor of 13. However, even this differential is worthy of investigation since mode specific differences are in and of themselves significant and the overall air quality impact depends on how individual mode significance changes over time.

6 Inglewood acknowledges that the available PM emissions testing database is both small and dated. It does not, however, agree with the DEIR that the age of available testing data renders it valueless. While engine technology has advanced relative to the engines represented in the database, the fundamental combustion characteristics that give rise to PM formation have not. Further, the claim that the existing aircraft emissions factors are not of value since they reflect total PM as opposed to PM10 is also without merit. Virtually 100% of combustion related PM is PM10, so any error resulting from the substitution of total PM for PM10 is insignificant relative to the analysis errors contained in the DEIR and SEIR. Ironically, the PM emission factor estimation approach employed in both the DEIR and SEIR requires the very same assumption of equivalency between total PM and PM10.

Response:

Please see Response to Comment AL00016-48 regarding PM emission factors.

SAL00016-35

Comment:

2. The SEIR Inaccurately Represents Aircraft Taxi Times.

The DEIR did not present any aircraft to taxi/queue times. The SEIR, however, does present a single set of taxi/queue times that are stated to have been "used to estimate aircraft emissions for all alternatives in both horizon years". SEIR, App. S-E, p. 10. However, based on analysis of the data set forth in SEIR App. S-E, this statement does not appear to be accurate. As shown in Table 1 below, the main benefit ascribed to Alternative D is a reduction in taxi times.

TABLE 1

	NOx(tpy)	VOC(tpy)	CO(t)	SO2(tpy)	PM-10(tp)
Taxi Emissions - NA/NP Alternative	723.3	794.9	4,381.6	89.9	17.8
Taxi Emissions - Alternative D	659.2	707.6	3,956.6	80.9	14.6
Taxi Emissions Difference	-64.1	-87.3	-425	-9	-3.2
Aircraft Emissions - NA/NP Alternative	5,154.9	1,204.1	6,668.7	232.5	70.2
Aircraft Emissions - Alternative D	5,171.7	1,111.2	6,240.7	223.7	62.0
Aircraft Emissions Difference	16.8	-92.9	-428.0	-8.8	-8.2
Percent of Total Difference Due to Taxi	-382%	94%	99%	102%	39%

As also shown in Table 1, with the exception of PM10, changes in taxi related emissions account for virtually 100% of the claimed reductions in aircraft emissions from Alternative D. Therefore, it would be methodologically unlikely that the same taxi times were used for all airport alternatives, because if that were so, the differences between the alternatives would be far less distinguishable.

As the bulk of aircraft VOC and CO emissions are generated during taxi; and although NOx emissions rates are low during taxi, the amount of time spent in taxi mode results in a significant contribution to overall aircraft NOx emissions, it is important that taxi time be accurately modeled. The SEIR contains insufficient information to allow an appropriate evaluation.

Response:

Table S7 of Appendix S-E to the Supplement to the Draft EIS/EIR presented the data and source of the taxi/idle times used in EDMS 4.11 to calculate the emissions. This data is substantially different from that in the table presented by the commentor. The emission estimates presented by the commentor cannot be verified in the Draft EIS/EIR or the Supplement to the Draft EIS/EIR. However, it is possible that the differences in emissions that the commentor refers to are a result of the different number and type of individual aircraft included in each alternative since the Supplement considered taxi time to be identical for each alternative. Attachment V of Technical Report 4 and Attachment N of Technical Report S-4 provide aircraft emissions for all alternatives and modes of operations, including the taxi/idle mode.

SAL00016-36

Comment:

3. The SEIR Utilizes Incorrect Default Aircraft Engine Assignments.

The SEIR sets forth the assumed aircraft engines for all modeled airframes. It appears that these assumptions reflect the EDMS version 4.11 Default Engine Assignments without exception. While such an assumption would not affect the relative impacts of the various LAX alternatives, it can have a significant impact on the absolute level of aircraft emissions and the magnitude of associated ambient concentrations. The EDMS default engine reflects the "most popular" engine for an airframe based on total airframe sales. For a particular airport, total airframe sales may or may not be an accurate indicator of local conditions due to variations in airline specific activity (e.g., local vs. national). Different airlines favor different airports and the associated traffic into and out of those airports is biased toward local airline distributions. Thus, aircraft engine assignments should, at a minimum, be conducted on the basis of the local airline mix, which is unlikely to be consistent with EDMS default assumptions. The SEIR does not contain an analysis based on local airline mix and, thus, its conclusions with regard to aircraft emissions are not definitive.

Response:

The aircraft fleet mix assumed in the Supplement to the Draft EIS/EIR represents the collective professional judgment of experienced airport planners developing the LAX Master Plan. Since airlines are not required to use specific aircraft/engine combinations at individual airports, and are at liberty to divert individual aircraft to any airport they service, there is no more reasonably accurate way to forecast the exact LAX aircraft/engine fleet mix on a long term basis.

The EDMS default engine (as determined by FAA and market statistics) is an acceptably accurate way to assure that the most statistically probable aircraft/engine combination is used. Without basis, the commentor states that the "local airline mix is unlikely to be consistent with EDMS default assumptions". Since EDMS uses FAA and market statistics to define its engine assignments, it is more likely that an aircraft at LAX is using the most common engine assignment rather than a less common engine.

A survey of aircraft types is a fairly straightforward task. However, engine identification is more difficult. Air traffic control towers are not required to log engine types for arrivals and departures, making a survey of aircraft/engine combinations a difficult task. Although the air quality analyses might be affected by the selection of aircraft/engine combinations, it is expected that this difference would not be significant, since the most common aircraft/engine combination is already being used, and the same combinations would be used for forecast Alternatives.

SAL00016-37

Comment:

4. The SEIR Air Quality Analysis Does Not Include Reverse Thrust Emissions.

The SEIR, like the DEIR, omits from its air quality analysis emissions from aircraft reverse thrust operations, on the ground of lack of adequate emissions factors and short usage times. Both of these claims are, however, misleading. Reverse thrust is essentially a high thrust operating mode and emissions factors for such modes (i.e., climb out and takeoff) are readily available. Common practice utilizes takeoff emission factors. It is true that the time in mode for reverse thrust operations is short.

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However, high thrust modes produce very high NO_x per unit time relative to other operating modes such as aircraft taxi. For example, at a commonly utilized reverse thrust mode time of 15 seconds, overall effective takeoff time would increase by approximately 25% (approximately one minute standard takeoff time plus 0.25 reverse thrust minutes vs. one minute without reverse thrust). This, in turn, increases NO_x by 25% relative to takeoff alone. Since takeoff accounts for about 35% of total aircraft NO_x under all alternatives, including the No Project alternative, the overall aircraft NO_x inventory could increase by about 10% simply due to the inclusion of reverse thrust related emissions. Without some enforceable measure prohibiting reverse thrust operations, there is no supportable rationale for excluding reverse thrust emissions from the air quality analysis.

Response:

Please see Response to Comment AF00001-21 regarding reverse thrust.

SAL00016-38

Comment:

C. The SEIR Overstates Emissions Benefits from Electrification of Aircraft Ground Support Equipment and the Use of Gate Based Power.

As a threshold matter, emissions factors employed in the DEIR for off road engines, including, but not limited to, construction equipment and aircraft GSE were significantly underestimated by the use of outdated emissions factor sources. The SEIR purports to have corrected that flaw through the use of emissions factors for off road construction equipment derived from the California Air Resources Board ("CARB") OFFROAD Emission Factor Model. This would be the correct approach. However, it is not possible to confirm that the revised emissions factors are derived from the OFFROAD model, as the SEIR contains only an aggregate emissions summary (as opposed to the DEIR's actual emissions factors for comparison).

With respect to GSE, the SEIR relies on emissions factors derived from the latest version of the FAA's EDMS model (updated since the DEIR). While the emissions factors in the SEIR also appear consistent with those contained in EPA's NONROAD Emission Factor Model, the SEIR still raises significant concerns regarding the overall propriety of the GSE emissions analysis.

Response:

Comment noted. The construction equipment emission factors and crew sets are presented in Appendix F-B of the Final EIS/EIR.

SAL00016-39

Comment:

1. The SEIR Does Not Validate the Assumptions Contained in FAA's EDMS Model with Real Data.

Like the DEIR, the SEIR continues to rely on the FAA's EDMS model to estimate the LAX GSE population and equipment characteristics (e.g., horsepower, hours of use, load factor). Given that the current GSE population and most of the associated operating parameters for LAX are already known, it is appropriate to validate the EDMS model assumptions with actual LAX conditions. Ideally, the current assumptions should be replaced in their entirety with known LAX data. At a minimum, consistency should be demonstrated. The FAA has facilitated the use of actual airport data through their latest release of the EDMS model (Version 4.11, identical to that used to support the SEIR) by allowing users to replace aircraft based GSE activity assumptions with airport specific "census" data. The analysis in the SEIR should take advantage of this opportunity to establish the air quality analysis' accuracy.

Response:

The commentor suggests the use of the "population" method (rather than the currently used "LTO" method) in EDMS 4.11 to calculate GSE emissions. The commentor suggests that only the population method uses actual LAX conditions. However, both methods incorporate actual LAX conditions, and both methods are equally acceptable under FAA Air Quality analysis guidelines. The "population" method bases GSE usage on equipment surveys while the "LTO" method bases the amount of GSE

usage to be proportional to the actual number of aircraft landing-takeoff operation cycles. It is believed that the "LTO" method produces a more conservative estimate of GSE emissions, especially in future years, since GSE purchases by airlines would likely lag with the growth of aircraft operations.

SAL00016-40

Comment:

2. The SEIR's Assumption That Alternative D Will Involve GSE Electrification and the No Project Alternative Will Not is Groundless.

Like the DEIR, the SEIR posits a wide spread GSE electrification program under all four build alternatives, while retaining a large percentage of fossil fuel powered GSE under the No Project alternative. While this GSE electrification program is asserted to be the most effective mitigation measure set forth in the SEIR, there are no grounds to assume that GSE will not be similarly electrified under the No Project alternative, thus, eliminating any differential resulting from the use of fossil fuel powered GSE between the No Project and build alternatives.

First, its is arbitrary to apply GSE electrification only to the build alternatives, as there are no specific constraints to implementation under the No Project alternative. Moreover, electrification of GSE is cost effective from a market standpoint today so whatever incentive or mandate will be offered under the build alternatives to move toward electrification could just as easily be applied today to generate emissions reductions under a No Project alternative.

Even ignoring the tenuous relationship between the build alternatives and GSE electrification as a mitigation measure, by far the most troubling issue is that GSE electrification appears to be accounted for in the "unmitigated" emission estimates for all build alternatives. If this is a correct assessment, no additional emissions reductions will be achieved through GSE electrification. For example, unmitigated GSE emissions for Alternative D and the No Project alternative (from SEIR App. S-4, Attachment N), are virtually identical in terms of aircraft and, thus, GSE activity. Although there is no reason set forth in the SEIR to expect GSE to emit any differently between an unmitigated implementation of Alternative D and the No Project alternative, the data in Attachment N demonstrates that Alternative D presents a substantial reduction in emissions of all pollutants over the emissions in the No Project alternative.

TABLE 2

	NOx(tpy)	VOC(tpy)	CO(t)	SO2(tpy)	PM-10(tpy)
NA/NP Alternative	618.7	240.4	5,685.9	11.4	24.0
Alternative D	135.5	88.1	1,523.2	1.4	30.8
Percent Change	-78%	-63%	-73%	-88%	28%

There are only two possible explanations for the reported differences. Either the Table in Attachment N is incorrectly labeled, and actually reflects mitigated emissions differentials, or the GSE electrification is included in the "unmitigated" emissions from the Project.

In the final analysis, it is clear that the reason air quality impacts under Alternative D are reported to be less than those of the No Project alternative can be traced almost entirely to emissions reductions associated with GSE and aircraft taxi times. In fact, impacts for all other emissions sources under Alternative D are either null or negative compared to the No Project alternative.

TABLE 3

	NOx(tpy)	VOC(tpy)	CO(t)	SO2(tpy)	PM-10(tpy)
NA/NP Alternative	6,278.8	1,775.0	14,413.1	251.8	170.0
Alternative D	5,746.5	1,625.0	9,660.3	246.4	187.1
Total Emissions					
Difference	-532.3	-150.0	-4,752.8	-5.4	17.1
GSE Emissions					

3. Comments and Responses

Difference	-483.2	-152.3	-4,162.7	-10.0	6.8
Percent of Total Difference Due to GSE	91 %	102%	88%	185 %	40%
Aircraft Taxi Difference	-64.1	-87.3	-425.0	-9.0	-3.2
Percent of Total Difference Due to Taxi	12%	58%	9%	167%	-19%
Percent of Total Difference Due to GSE and Taxi	103%	160%	97%	352%	21%

If that conclusion is correct, then all air quality benefits accruing from GSE electrification in Alternative D could just as readily be applied to the No Project alternative, rendering any air quality benefits from Alternative D ephemeral at best.

Response:

LAWA continues its commitment to air quality improvement programs for activities over which it has direct control. Because the No Action/No Project Alternative does not constitute a build alternative, it does not represent a "project" within the meaning of CEQA or NEPA and its effects are neither significant nor insignificant, therefore it does not require mitigation to offset its effects.

SAL00016-41

Comment:

4. The SEIR Overstates the Emissions Benefits of Gate Based Power and Understates the Potential for Auxiliary Power Unit Emissions.

Like the DEIR, the SEIR assumes that 100% of air carrier gate power and conditioned air needs will be satisfied by gate-based electrically powered systems, as opposed to fossil fuel powered Auxiliary Power Units ("APU") or GSE. This assumption is overly optimistic because, even under conditions where gate based equipment is available, not all airlines or aircraft will utilize it consistently. Although the assumption of 100% availability and usage affects the No Project alternative and build alternatives equally, it is necessary to account for the full range of expected emissions in order to determine AAQS compliance. Without some enforceable policy requiring that gate base systems (both air and power) be used, and that any onboard APU be shut down until needed for main engine startup, a more realistic assumption for aircraft emissions purposes would be to base the fraction of aircraft that rely on gate base systems on the system usage rate for currently equipped gates at LAX.

Moreover, perhaps as a result of the assumption of universal use of gate based power, the SEIR assumes an emission factor of zero for all APU. While the impact of this assumption is buffered by the assumption of limited APU usage, APUs are still assumed to operate for seven minutes, at the time of main engine startup and shut down, and emissions during this period should be fully considered. Further, if the APU usage rate is corrected to better reflect actual gate based system usage, APU emissions could increase to 40 minutes or longer for a wide bodied aircraft, a level which would more properly reflect maximum short term emissions rates and maximum short term ambient concentration impacts. Without inclusion of APU emissions, it appears that the SEIR's air quality analysis is flawed.

Response:

Table H1 of S-4, the Supplemental Air Quality Technical Report, shows APU load factors and brake-horsepower values of either 0.0 or missing. The value of 0.0 is incorrect, as APU emissions are not calculated using these values (see Appendix K of 4. Air Quality Technical Report for APU emission factors). The load factors and horsepower values of all APUs should be blank since the APU emission factors are in units of mass per unit time (kilograms/hour).

Table N1 of the Supplemental Air Quality Technical Report shows non-zero APU emissions totals, confirming the fact that APU emission factors are non-zero.

SAL00016-42**Comment:**

5. The SEIR Relies on Outdated Load Factors for Off Road Equipment.

While the SEIR utilizes revised emissions factors derived from ARB's OFFROAD Model to assess the emissions impacts of off road construction and other equipment, it does not similarly employ revised operational load factors. Instead it relies on load factors derived from the CEQA Air Quality Handbook published in 1993. As considerable information has been collected in the last decade, relying on load factors from 1993 is likely to skew the air quality analysis in ways it is not possible to anticipate without the provision of relevant data.

Response:

The load factors assumed in the construction analysis are given in the SCAQMD's 1993 CEQA Handbook. This is the most recent version of this document available for use. Please note, load factors for specific types of construction equipment are not anticipated to significantly change over time.

SAL00016-43**Comment:**

6. The SEIR's Air Quality Analysis Omits Heavy Duty Trucks From Its Fleet Mix.

Perhaps the most surprising omission from the SEIR's air quality analysis is from the assumed fleet mix for vehicles on all airport roadway links, set forth in SEIR, App. S-4, Attachment J, which lacks any accounting for heavy duty truck travel. As Alternative D includes 3.1 million square feet of cargo space on airport property, not to speak of the cargo space that may be utilized off airport by cargo carriers; as Federal Express and other cargo carriers operate substantial fleets of heavy duty diesel trucks; and as heavy duty diesel trucks are large emitters of NOx and other pollutants, omission of heavy duty trucks from the on road fleet mix will have a substantial impact on the estimation of NOx emissions from Alternative D and other build alternatives which may render the SEIR's air quality analysis inadequate.

Response:

Diesel truck emissions are included in the both on-airport traffic and off-airport emission inventories as described in Section 4.6, Air Quality of both the Draft EIS/EIR and Supplement to the Draft EIS/EIR. The commentor's assumption is that there is an increase in heavy-duty diesel truck fleets operating in conjunction with cargo carriers as a result of the proposed project. Current analysis indicates that heavy-duty truck trips associated with cargo deliveries will not change significantly and may even decrease as a result of the proposed project.

In addition, as roadway improvements are made in and around the airport and current congestion problems are alleviated, heavy-duty trucks will have less idling time and, therefore, fewer emissions. Further, as heavy-duty vehicle fleets turnover, they will be replaced with cleaner-burning alternatives as technology improves and progresses.

SAL00016-44**Comment:**

D. The SEIR, Like the DEIR, Improperly Defers the Requisite Conformity Analysis.

The SEIR acknowledges the applicability of Federal conformity requirements, as set forth in Clean Air Act, 42 U.S.C. § 7506, and its implementing regulations, but, like the DEIR, defers both the conformity analysis and potential conformity determination to a final EIR/EIS. Such an approach makes it impossible for the public to comment constructively on either potential emission mitigation measures or the conformity process, since these processes and their result will be released for comment only after the underlying decision making has been finalized.⁷

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Moreover, the absence of a draft conformity analysis in the SEIR has more fundamental impacts. The Clean Air Act specifies, in pertinent part, that "no department, agency, or instrumentality of the federal government shall engage in, support in any way or provide financial assistance for, license or permit, or approve, any activity which does not conform to an implementation plan after it has been approved..." Clean Air Act § 7506(c)(1). Without at least a preliminary conformity analysis, it is impossible to document Alternative D's potential compliance or noncompliance with state air quality implementation plan (or verification that the project is already included in the State Implementation Plan). Absence of at least a draft conformity analysis at this stage of the Project's documentation violates the most fundamental goal of CEQA, i.e., "to encourage informed public information and decision making," and, consequently, may constitute a fatal flaw in the SEIR.

7 Inglewood hereby reserves its right to comment on the Draft and Final Conformity Analyses and/or determination for the Project.

Response:

Please see Response to Comment AF00001-4 regarding the general conformity determination. It must be noted that the requirement for a general conformity evaluation of the LAX Master Plan is separate, distinct, and independent from any requirements for air quality analyses under either NEPA or CEQA.

SAL00016-45

Comment:

V. THE SEIR'S ANALYSIS OF SURFACE TRAFFIC IMPACTS IS INCOMPLETE.

The SEIR's analysis of Alternative D's surface traffic impacts, like the more global analysis of Alternatives A through C in the DEIR: (1) omits analysis of certain critical intersections, and reaches conclusions based on data absent from the SEIR, or inconsistent with data contained in other planning documents for the same areas; (2) omits analysis of the traffic impacts, either beneficial or detrimental, of proposed off airport FlyAway terminals; (3) provides incomplete explanation of the Project's trip generation potential, including trip distribution and its potential impact on Inglewood; (4) fails to explain the way in which the proposed mitigation for the traffic impacts of construction, and the ultimate buildout of the Northside project, will be effectively implemented; and (5) fails to address the direct as well as cumulative traffic and parking impacts on Inglewood of the construction and subsequent utilization of the GTC.

Response:

Comment noted. Surface transportation impacts were addressed in Section 4.3, Surface Transportation, of the Draft EIS/EIR and Supplement to the Draft EIS/EIR, with supporting technical data and analyses provided in Technical Reports 2 and 3 of the Draft EIS/EIR and Technical Reports S-2a and S-2b of the Supplement to the Draft EIS/EIR. In addition, please see Response to Comment AL00043-3 regarding proposed traffic improvements for off-airport roadways and Topical Response TR-ST-2 regarding surface transportation analysis methodology.

SAL00016-46

Comment:

A. The SEIR's Analysis of Baseline, as Well as Current, Intersection Traffic Levels Lacks Analytic Support.

The SEIR's analysis of 1996 and 2001 updated baseline intersection traffic levels, for comparison with Alternative D's influence on traffic impacts at selected intersections, omits or obscures critical information which makes verification of the SEIR's conclusions difficult, if not impossible.

Response:

Comment noted. Surface transportation impacts were addressed in Section 4.3, Surface Transportation, of the Draft EIS/EIR and Supplement to the Draft EIS/EIR, with supporting technical data and analyses provided in Technical Reports 2 and 3 of the Draft EIS/EIR and Technical Reports S-

2a and S-2b of the Supplement to the Draft EIS/EIR. In addition, please see Response to Comment AL00043-3 regarding proposed traffic improvements for off-airport roadways and Topical Response TR-ST-2 regarding surface transportation analysis methodology.

SAL00016-47

Comment:

1. The SEIR's Conclusions Regarding the Continuing Relevance of the 1996 Baseline for Traffic Purposes is Unsupported.

SEIR, Section 4.3.2.3 contains an analysis of 38 intersections, updating traffic conditions reflected in the 1996 environmental baseline, apparently for the purpose of determining the continuing applicability of the 1996 base year. The updated data purportedly show a "combined" average annual growth rate for all intersections analyzed of "approximately 1.5%" and "1% for the a.m. and p.m. peak hours respectively." SEIR, Section 4, p. 4-244. On that basis, the SEIR concludes that: (1) the traffic growth rate is consistent with general population growth rate in the area; (2) that it is a "small" growth rate; and (3) 1996 is still the applicable environmental base condition.

The above conclusions are problematic. First, no background data are provided to support them. Second, the analysis purports to be of "combined intersections", but no methodology is set forth to explain the means by which the intersections were "combined" for statistical purposes, or, more fundamentally, the meaning of the term "combined" (e.g., statistically, arithmetically, other). Since the essence of traffic analysis is the determination of differential traffic impacts at different intersections, and as no such analysis is set forth in the SEIR, the integrity of this "combined" approach remains unestablished.

Third, as a result, there is no data with which to verify the SEIR's conclusion regarding consistency with the growth rates of the surrounding area, nor can the SEIR's conclusion that this is a small growth rate be substantiated. In fact, assuming the 1% growth rate in a.m. and p.m. peak hours is accurate; and assuming (for ease of computation only) the "combined" traffic at all 38 intersections totals 10,000 cars in each peak hour, the increase in the number of cars over the designated five year period is 510, or over 5%. Thus, even if 5% is deemed "small", if the total number of peak hour vehicles substantially exceeds 10,000, which it is more than likely to do, the actual traffic growth will not be small, casting doubt on the utility of the 1996 baseline for traffic comparison purposes.

Response:

This comment is similar to comment SAL00015-168. Please see Response to Comment SAL00015-168.

SAL00016-48

Comment:

2. The SEIR's Analysis of Traffic Impacts at Individual Off-Airport Intersections Conflicts with That of Other Contemporaneously Prepared Environmental Documents for Other Projects in the Same Area.

The SEIR was not prepared in a vacuum. It acknowledges that other projects are being planned and will be carried out contemporaneously with Alternative D. The environmental documentation for one of those cumulative projects, the Village at Playa Vista, was published as late as August, 2003. A comparative analysis of the Playa Vista EIR with the SEIR reveals significant discrepancies between the analyses of what are substantially the same relevant areas.

For example, the Playa Vista EIR identified two intersections not mentioned in the SEIR: (1) Centinella at La Brea; and (2) La Brea at Manchester, both apparently within the analysis area for the SEIR. Both intersections were identified as level of service F for both a.m. and p.m. hours, even without the Project. Since both the LAX and Playa Vista projects are geographically proximate, the baseline traffic analysis should use substantially the same assumptions and data, with the same results.

However, even intersections that are analyzed in both the SEIR and the Playa Vista EIR had notably different volume to capacity ratios and levels of service. The SEIR contains a table of the projected

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traffic in 2008 for Alternative D. The Playa Vista EIR provides similar information for the horizon year 2010. The following Table compares the levels of service for those two projections.

TABLE 1 COMPARISON LEVEL OF SERVICE PROJECTIONS

Intersection	A.M. Peak		P.M. Peak	
	LAX	Playa Vista	LAX	Playa Vista
Aviation - Arbor Vitae	D	B	B	D
La Cienega - Arbor Vitae	E	B	E	C
Aviation - Manchester	F	F	D	E
La Cienega - Manchester	C	E	D	E
Interstate 405 NB - Century	B	F	A	B

The discrepancies in projected levels of service, i.e., the lower levels of service reflected in the Playa Vista EIR, are not explained by any data or analysis contained in the SEIR.

Response:

LAWA is not in a position to substantiate the results of the Playa Vista traffic study or any other traffic analysis conducted within the vicinity of LAX. LAWA can only substantiate the traffic impact study prepared for the Draft EIS/EIR and the Supplement to the Draft EIS/EIR.

SAL00016-49

Comment:

B. The SEIR Contains No Analysis of the Traffic Impacts of the "FlyAway" Terminals.

The SEIR indicates that a series of new "FlyAway" locations are incorporated into Alternative D. Section 4.3.2.9.2 states that "the development of several new FlyAway away remote terminals is proposed to reduce the amount of vehicle traffic associated with travel to and from LAX," and that development of the "FlyAway" remote terminals would depend largely on the existing use and land use setting of the proposed site. The SEIR does not, however, designate the location of those proposed "FlyAway" remote terminals, nor does it analyze their impacts on traffic, either at LAX, or at their remote sites. Further, the SEIR does not indicate the amount of traffic which would be diverted from LAX by the use of these remote facilities.

Finally, the SEIR does not acknowledge that the use of remote sites does not eliminate the effects of traffic, but simply moves them to another location. As one of the suggested locations for a "FlyAway" terminal is in Inglewood, Inglewood has a cognizable interest in the anticipated traffic impacts of the use of remote sites, and as they are an integral strategy of Alternative D, the designated information is not "too speculative" to provide for public review at this point.

Response:

FlyAway locations considered will include the South Bay, downtown Los Angeles, Norwalk/Santa Fe Springs, Inglewood, and an additional San Fernando Valley site.

The Supplement to the Draft EIS/EIR illustrates the percentage of originating and terminating passengers who are expected to use a FlyAway bus to LAX in Table S17 of Technical Report S-2a, Supplemental Surface Transportation Technical Report, On Airport. Considering that in Alternative D the FlyAway buses will be the only passenger vehicles allowed in the CTA, a conservatively low estimate of 6.4 percent of domestic passengers and 9.5 percent of international passengers was used in the traffic study.

The appropriate environmental clearance will be sought for each location where LAWA has determined to pursue construction of a FlyAway. A traffic impact analysis would be conducted when required.

SAL00016-50

Comment:

C. The SEIR Fails to Adequately Analyze the Trip Generation Potential of Alternative D, its Construction, or its Projected Ancillary Development At, among Others, LAX Northside.

The SEIR fails to address at least three issues fundamental to the analysis and projection of Alternative D's trip generation potential.

First, the SEIR does not explain why, with roughly the same passenger and cargo activity, the No Project alternative and Alternative D generate different trip levels. The EIR states that facilities that comprise Alternative D were designed to serve an activity level similar to the scenario adopted by Southern California Association of Governments for the 2001 Regional Transportation Plan. This is an activity level of 78.9 million annual passengers. The No Project alternative assumes 78.7 million annual passengers. Nevertheless, even with the roughly equivalent numbers of passengers, a.m. and p.m. peak hour traffic volumes with Alternative D are projected to decrease, while they are projected to increase under the No Project alternative.

Response:

The trip generations for ground transportation forecasts for each alternative were based on 1) the proposed flight schedules, including percent of enplanements and deplanements that are originating, terminating, and connecting, 2) the number of visitors associated with each originating and terminating passenger, and 3) the lead and lag times associated with the flight activity. Because of these variables, there is no correlation between the number of million annual passengers or million annual tons of cargo and the number of hourly vehicle trips made during the AM, PM and Airport Peak hours.

SAL00016-51

Comment:

Second, the SEIR fails to explain the way in which a fundamental traffic mitigation measure, the trip cap on the Northside project, can be effectively implemented. The entire off-airport surface traffic assessment turns on the conclusion that there will be less traffic in the future as a result of the Project than there will be if the Project is not approved. The basis for this prediction is the reduction in traffic for "collateral trips". For example, for Alternative D, p.m. peak hour passenger and related trips are anticipated to increase by 1,198. However, there is a projected reduction of 7,825 collateral trips, resulting in a net decrease in trips of 6,627.

The source of the collateral trip reduction is, apparently, the change in the land use for the projected Northside and Continental City projects. SEIR, Appendix S-2b provides the basis for the projected reduction in collateral trips.

	A.M. Peak			P.M. Peak		
	No Project	Alt. C	Alt. D	No Project	Alt. C	Alt. D
Northside	7,217	3,922	3,922	7,131	4,423	4,421
Continental City	5,323	0	0	5,348	0	0
Manchester Square	0	212	212	0	233	233
TOTAL	12,540	4,134	4,134	12,479	4,656	4,654

The issue associated with the "collateral trip" reduction is the discretionary actions needed to modify the allowable land uses on the Northside and Continental City properties.

SEIR Section 4.2, Land Use, sets forth a "master plan commitment" that states:

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"to the maximum extent feasible, all [Q] conditions from City of Los Angeles Ordinance No. 159.526 that address the LAX Northside project area will be incorporated by LAWA into the Zoning Code Amendment and LAX Master Plan implementing Ordinance for the Westchester south side project. Accepting that certain conditions may be updated, revised, or determined infeasible as a result of changes to the LAX Northside project, the final [Q] conditions for the Westchester south side project will insure that the level of environmental protection afforded by the full set of LAX Northside project [Q] conditions is maintained."

"CEQA requires agencies to implement feasible mitigation measures or alternatives identified in the EIR." Fairview Neighbors, supra, 70 Cal.App.4th at 243. Further, as set forth above, "it is improper for lead agencies to defer formulation of possible mitigation measures by simply requiring future studies to see if mitigation may be feasible." Id. at 244. Thus, the suggestion that the trip cap on the Northside project, the principal mitigation measure for Alternative D's off airport surface traffic impacts, may, at some future time, for reasons as yet undisclosed, be deemed infeasible, is unacceptable under CEQA.

In fact, it is readily ascertainable even now that the trip cap may not, in fact, be feasible. First, both the Northside and Continental City projects have approved entitlements, allowing 4.5 million square feet of development in the Northside project alone. Alternative D has no impact on this entitlement. Thus, the SEIR's projection that the Northside project, while remaining at the same density but, in some undisclosed manner, generating fewer trips than it would have before Alternative D, is unsupported.

Response:

Please see Topical Response TR-ST-7 regarding the LAX Northside/Westchester Southside project. Also see Topical Response TR-ST-2 and, in particular, Subtopical Response TR-ST-2.13.1 regarding airport trip generation and distribution.

Under Alternative C, the area referred to as Continental City is designated for ancillary and maintenance facilities. Under Alternative D, this area is used for the Intermodal Transportation Center. These uses preclude the development of the planned commercial development at this site under the No Action/No Project Alternative.

SAL00016-52

Comment:

Finally, the SEIR appears to double count the traffic benefits of the trip cap. On the one hand, the SEIR relies on the mechanism of "land acquisition" for a reduction in traffic of 2,150 vehicles per hour in the a.m. peak hour, and 1,973 vehicles per hour in the p.m. peak hour. On the other hand, the SEIR contemplates that "space would be available in the LAX Northside development to accommodate compatible businesses displaced by Alternative D [land acquisition]", SEIR, p. 3-49. The SEIR, thus, subtracts traffic from peak hour totals due to land acquisition; relocates the "compatible" businesses to the Northside project; and, ultimately, imposes a trip cap that allegedly accounts for additional traffic reduction, even though the reduction in traffic attributable to the acquisition of certain businesses is apparently mooted by their relocation to the Northside development. By that means, the SEIR takes advantage of two potential mitigation measures: (1) the traffic reduction due to elimination of certain businesses; and (2) the traffic reduction due to the Northside project trip cap, neither of which, the SEIR acknowledges, may ultimately be realized.

Response:

The reduction of trip generation in the land acquisition area is appropriate. Existing trips being generated in this area today will not be made in the future at that location because the existing land uses will be removed. Reduction in trips due to the removal of existing land uses is consistent with traffic impact analysis guidelines published by the Los Angeles Department of Transportation. Additional trips generated in the LAX Northside area represent future trips generated by new buildings developed in the LAX Northside area. Land uses within the future LAX Northside area may include land uses displaced from the land acquisition area or any other future land uses, consistent with the definition of the proposed LAX Northside development. No trip reduction is assumed in the trip cap for LAX Northside - the peak hour trip generation estimates analyzed in the Draft EIS/EIR, and in the Supplement to the Draft EIS/EIR, are based on trip generation rates published by the Institute of Transportation Engineers (ITE), and do not include any additional trip reductions. To the extent that some land uses currently in the land acquisition area may be shifted to LAX Northside, the analysis

assumes that the trip generation rates for those land uses after being shifted to LAX Northside will be no lower than their current trip generation rates in the acquisition area.

SAL00016-53

Comment:

D. The SEIR Fails to Adequately Document the Mitigation of Off-Airport Construction Traffic Impacts.

The SEIR is emphatic that "...the project would be managed to ensure that there would not be any notable construction-related traffic generated by the project during those critical [a.m. and p.m. peak] hours." SEIR, p. 4-264. [Emphasis added.] In fact, the SEIR claims that construction traffic would be actually eliminated during the a.m. and p.m. peak hours, and virtually eliminated during the airport peak hour.

The SEIR, however, contains no discussion of the way in which "management" ensures this beneficial hourly redistribution of construction traffic. For example, there is no explanation of the way in which 2,449 employee trips will arrive by 7:00 a.m. but there will be no truck arrivals or departures until 11:00 a.m. Similarly, there is no explanation of the way in which "management" will ensure that there are no truck trips between 4:00 p.m. and 7:00 p.m., while allowing 120 trips per hour between 7:00 p.m. and midnight. Further, there is no indication of the way in which "management" will ensure that construction related truck trips will not divert onto residential surface streets in the vicinity of the project, absent constant monitoring by police or other kinds of security.

In short, the mitigation measures for construction related traffic are conceptual at best. Absent more information concerning the way in which they will be implemented and enforced, proposed mitigation measures, while generous in origin, must be considered largely infeasible.

Response:

LAWA, through its Ground Transportation Construction Coordination office, would enforce restrictions on construction employee arrival and departure times and construction truck routes and arrival and departure times through contractual obligations with the various contractors. Contracts between LAWA and the construction contractors would include penalties for violations of these rules. Please see Topical Response TR-ST-3 for additional information regarding construction traffic.

A footnote has been added to the Alternative D Summary of 2008 Airport Construction Trip Generation table in the Final EIS/EIR to clarify that this table reflects a worst-case condition with respect to the number of mid-day truck arrivals and departures. Mid-day construction trucks could arrive as early as 9:30 AM and depart as late as 4:30 PM. Truck trips could also shift from the mid-day period to nighttime hours.

SAL00016-54

Comment:

E. The SEIR Does Not Address the Way in Which Traffic Impacts from Utilization of the GTC Independently, or Cumulatively With Construction Traffic, Will be Mitigated.

The SEIR acknowledges that the GTC is located as close as 1,000 feet across the I-405 freeway from residences in the City of Inglewood, and, further, that the GTC will be the "primary access point for all passenger drop-off and pick-up and vehicle parking", SEIR, p. ES-19, under the assumptions of Alternative D. The SEIR further acknowledges that vehicles would access the GTC from, among others, eastbound Century Boulevard, and that direct access to Century Boulevard would be available for west bound traffic. SEIR Section 4.3.1.6.1.2, p. 4-226, 227. It is, therefore, reasonable to assume that the greatest preponderance of all LAX-bound traffic (847,394 vehicles in the year 2000, SEIR, Table S4.3.1-2) will terminate as close as 1,000 feet from the homes of Inglewood citizens. Moreover, the SEIR further acknowledges that demand for parking will exceed parking capacity under Alternative D, SEIR, Table S4.3.1-7, p. 4-235. Nevertheless, the SEIR gives short shrift to the potential surface street impacts of travelers looking for parking in lots that are already full, as well as those reluctant to pay the price of parking on City owned lots, or attempting to avoid delays in accessing crowded parking facilities.

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As important, the SEIR fails to fully address the construction traffic impacts on proximate surface streets in Inglewood. While it acknowledges that "when the ITC comes on line, there is expected to be a substantial shift in airport traffic patterns", SEIR, Section 4.3.2.6.2.2, p. 264, and that "the SEIR's general approach and methodology does not account for construction traffic for the three primary peak hours", SEIR, Section 4.3.2.6.2.2, p. 264 [emphasis added], the SEIR does not similarly acknowledge the same potential impact resulting from the opening of the GTC. Instead, it states only that "the facility is not expected to be opened until after 2008, at which time most of the final mitigation plan should be in place." SEIR, Section 4.3.2.6.2.2., p. 264 [emphasis added].

The SEIR misses the point. The only mitigation offered is that "the project would be managed to ensure that there would not be any notable construction related traffic generated by the project during those critical hours." SEIR, Section 4.3.2.6.2.2., p. 4-264, 265. Therefore, the SEIR does not offer sufficient firm mitigation to compensate for the potential adverse impacts arising from the normal but unanalyzed operation of the GTC, let alone the cumulative surface traffic impacts arising from Project construction, which is anticipated to last a minimum of seven years and perhaps as many as 12-13 years after the 2008 anticipated completion of the GTC.

In summary, the SEIR ignores Alternative D's surface traffic impacts on Inglewood, arising not only from traffic accessing the GTC, but from parking and construction traffic as well.

Response:

Although demand for parking exceeds capacity under Alternative D, this shortage represents only 1.8 percent of the parking demand, and would occur only during the highest demand parking periods. Demand management techniques and systems, such as installation of a parking space identification program, should increase the efficiency of the parking system. As a result, demand is not expected to regularly exceed the capacity, and therefore the public parking impact would be less than significant. Those passengers who choose not to use airport owned parking facilities may decide to park in a privately owned facility. These vehicle trips, as well as the shuttle bus trips that would take these passengers to the GTC, are accounted for in the traffic model.

The Supplement to the Draft EIS/EIR details the list of mitigations proposed for the peak construction year of 2008 in Section 4.3, Surface Transportation, in Table S4.3.2-11. Table S4.3.2-13 details the mitigations which would have to be completed prior to the opening of the GTC as well as and other project components. Also see "Mitigations Needed by 2008" and "Mitigations Needed by 2015" in Section 4.3 of the Supplement to the Draft EIS/EIR for an overall summary of the proposed improvements.

SAL00016-55

Comment:

VI. THE SEIR'S ATTEMPT TO COMPLY WITH THE FEDERAL ENVIRONMENTAL JUSTICE PROGRAM IS PATENTLY INADEQUATE.

The Environmental Justice Section [Section 4.4.3] of the SEIR falls far short of the mark for compliance with the Federal Environmental Justice Program. Executive Order 12898 and the Department of Transportation's ("DOT") implementing order, DOT Order 5610.2, require that, in the planning and development of any program or activity receiving Federal financial assistance, project proponents must not only identify disproportionately high and adverse environmental and health risk effects of the project on minority and low-income populations, but also ensure that those effects are avoided, minimized or mitigated. [DOT Order 5610.2, 5.d; 6.b.(2)]

DOT Order 5610.2 further mandates that DOT programs and activities that will have a disproportionately high and adverse effect on populations protected by Title VI be carried out only if, among other things: (1) alternatives that would avoid or reduce the disproportionately high and adverse effects are not practicable, taking into account the social, economic and environmental effects of avoiding or mitigating the adverse effects [DOT Order 5610.2 §7.c]; and (2) alternatives that would have less adverse effects on protected populations (and still satisfy the need for the program) would either (i) have other adverse social, economic, environmental or human health impacts that are more severe, or (ii) involve increased cost of extraordinary magnitude. [Order 5610.2. §7.d.(2)]. "The findings, determinations and/or

demonstration made in accordance with [DOT Order 5610.2, Section 7] must be appropriately documented, normally in the environmental impact statement... " DOT Order 5610.2 § 7.(f.)

The SEIR acknowledges that the LAX Master Plan Project will have overwhelmingly disproportionate Land Use and Relocation, Airport Noise, Air Quality and Health Risks impacts on minority and low-income communities located east of LAX, specifically including the City of Inglewood. [SEIR, Section 4.3.3]. However the SEIR: (1) fails to address project alternatives that would reduce or avoid those impacts; (2) incorrectly concludes that construction noise impacts will not fall disproportionately on minority and low-income communities east of LAX; (3) fails to propose a viable jobs benefit program to compensate for the Project's adverse environmental impacts including those of construction which will in fact fall disproportionately on minority and low-income communities; and (4) fails to explore mitigation measures which would have fewer disproportionate adverse environmental impacts on minority and/or low-income communities located east of the Airport. In addition, Section 4.4.3.4 states that no Master Plan Commitments for environmental justice are proposed. [SEIR, p. 4-138]

In Section 4.4.3.6, the SEIR states that LAX will work with the FAA and affected communities to develop mitigation programs and if, after those programs receive further input, the FAA concludes that disproportionately high and adverse human health and environmental effects on minority and low-income populations would still occur, "findings under the DOT Order would have to be made prior to project approval and the Final EIS/EIR would disclose those findings." [p. 4-335] However, as set forth above, it is "improper for lead agencies to defer formulation of possible mitigation programs by simply requiring future studies to see if mitigation may be feasible." *Fairview Neighbors*, supra, 70 Cal. App. 4th at 244. Moreover, the SEIR does not need additional studies as it already concludes unequivocally that, despite the proposed mitigation, the adverse environmental and human health impacts of the Project, under any alternative, will fall disproportionately on minority and low-income communities east of the Airport. [See, e.g., SEIR, pp. 4-321, 4-323, 4-424, 4,329]

Finally, the SEIR relies in part on a Memorandum of Understanding ("MOU") between Los Angeles and Inglewood for compliance with the mitigation requirements of the Environmental Justice Program [p. 4-337]. The SEIR does not disclose, however, that the MOU, which addresses measures involving residential noise insulation, air conditioning and studies to improve compliance with over-the-ocean takeoff and night-time over-ocean procedures, is terminable at will, by either City, and will expire by its own terms in February, 2011, at least four, and more likely 10 years before final implementation of the Project. Therefore, MOU, like the remainder of the suggested mitigation measures, does not create a sufficient commitment to Inglewood to comply with the mandates of Executive Order 12898 and DOT Order 5610.2.

Response:

Section 4.4.3, Environmental Justice, of the Draft EIS/EIR and Supplement to the Draft EIS/EIR, with supporting technical data and analyses provided in Appendix F of the Draft EIS/EIR and Appendix S-D of the Supplement to the Draft EIS/EIR, have been prepared in compliance with Executive Order 12898 and in general accord with guidance provided in DOT Order 5610.2. The potential for the project to result in disproportionately high and adverse environmental effects on minority and low-income populations, and means for avoiding, minimizing and mitigating such effects, are disclosed throughout these documents.

As further discussed below in Response to Comment SAL00016-55, Alternative D was formulated in direct response to the strongly expressed desire of many citizens, as indicated in comments on the Draft EIS/EIR, to limit activity at LAX in favor of a more regional approach to airport planning in Southern California. This desire was in large part based on the goal of more equitably distributing environmental impacts associated with air travel, and reducing potential future effects on communities surrounding LAX, including disproportionate adverse effects on minority and low-income communities. Alternative D has substantially reduced environmental effects compared to earlier alternatives in direct support of the DOT Order. Alternative D, only allows for increased passenger and cargo activity at a level similar to what would occur without a project, as represented by the No Action/No Project Alternative. Also, it should be noted that the airports disproportionate effects on communities to the east are largely due to the airport's long-standing runway orientation, which distributes much of the aircraft noise over the ocean, but consequently affects communities to the east more than those to the north and south. Accordingly, increases in aircraft activity at LAX, due to its physical layout, preclude a completely equitable distribution of impacts among the communities surrounding LAX.

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The comment that the Supplement to the Draft EIS/EIR acknowledges that the project would have overwhelming disproportionate relocation impacts on minority and low-income populations east of the airport is in error, as described in Section 4.4.3 (subsection 4.4.3.6), the project does not propose any acquisition in areas to the east of the airport, with the exception of improvements associated with the LAX Expressway, which are not a part of Alternative D, LAWA Staff's preferred alternative. Regarding the comment that the Supplement to the Draft EIS/EIR incorrectly concluded that construction noise impacts will not fall disproportionately on minority and low-income communities to the east, Section 4.4.3 indicates that construction activities will take place along the airports boundaries in areas generally west of the I-405 that are not predominantly minority and low-income communities. If the comment is referring to aircraft noise, it is true that impacts, including temporary shifts in flight paths and noise contours due to runway improvements, would disproportionately effect minority and low-income communities to the east of the airport. Properties effected would be addressed by the mitigation measures presented in Section 4.4.3, particularly mitigation measure MM-LU-1, as fully described in Section 4.2, Land Use of the Supplement to the Draft EIS/EIR. Regarding aircraft noise changes during construction also see Response to Comment SAL00017-29.

The comment that the Supplement to the Draft EIS/EIR fails to propose a viable jobs benefit program is in error. As further described below in Response to Comment SAL00016-57, the Supplement to the Draft EIS/EIR incorporates a number of job related benefits aimed specifically at minority and low-income communities, including the potential for thousands of construction related jobs and other long-term employment opportunities.

The comment that the Supplement to the Draft EIS/EIR fails to explore mitigation measures that would result in fewer disproportionate effects on minority and low-income communities located east of the airport is in error. In fact, the Supplement to the Draft EIS/EIR incorporates new mitigation measures based on consideration of comments received on the Draft EIS/EIR that reduce disproportionate effects, such those addressing single event noise levels, as further described in Section 4.4.3 (subsection 4.4.3.7). Also, the comment that Section 4.4.3 (subsection 4.4.3.4), indicates that there are no Master Plan Commitments for environmental justice, while true, is due to the provisions for benefits set forth under the Environmental Justice Program in subsection 4.4.3.7. There is no lack of commitment to addressing environmental justice. See Section 4.4.3, Environmental Justice (subsection 4.4.3.7), of the Final EIS/EIR, which provides an expanded and refined program based on comments received during circulation of the Supplement to the Draft EIS/EIR, including input received at the Environmental Justice Workshops conducted during 2003.

Contrary to the comment, there has been no improper deferment in the formulation of mitigation. The Draft EIS/EIR incorporated a comprehensive set of feasible mitigation measures and the Supplement to the Draft EIS/EIR expanded these measures further based on comments received during public circulation of the Draft EIS/EIR. As previously indicated there have been further changes to improve on and expand mitigation measures as represented in Section 4.4.3, Environmental Justice (subsection 4.4.3.7), and Chapter 5, Environmental Action Plan, of the Final EIS/EIR. Characterization of the environmental justice findings as preliminary in the Supplement to the Draft EIS/EIR was appropriate given that additional community outreach on environmental justice was planned for the public circulation period. And, the commentor is correct, even with the mitigation measures presented in the Final EIS/EIR, a finding has been made that the project would have disproportionate effects on communities to the east of LAX. Regarding future studies associated with proposed mitigation measures, see Response to Comment SAL00013-61.

Regarding the Memorandum of Understanding (MOU) between the City of Los Angeles and Inglewood, the Supplement to the Draft EIS/EIR does not rely on this document for compliance with CEQA and NEPA mitigation requirements. While this document is discussed as a relevant effort that LAWA has undertaken independent of the LAX Master Plan process, and it is true that programs in the MOU, such as a Part 161 Program and elimination of aviation easement requirements, were reflected in certain mitigation measures presented in the Supplement to the Draft EIS/EIR, the mitigation measures and benefits presented in the EIS/EIR represent firm commitments that stand alone and do not rely on the MOU.

SAL00016-56

Comment:

A. The SEIR Fails to Adequately Address Avoidance or Minimization of the Project's Adverse Environmental and Health Risks Impacts Which Would Fall Disproportionally Low Income and Minority Communities Including Inglewood.

The SEIR acknowledges that the Project will have overwhelmingly disproportionate adverse impacts on Inglewood, a predominately minority and low-income community, in the areas of Land Use and Relocation, Airport Noise, Air Quality and Health Risks. The SEIR fails, however, to address avoidance or minimization of those impacts.

Environmental Justice Section 4.4.3.5.1 acknowledges that noise impacts associated with all alternatives will fall disproportionately on minority and low-income communities and that, under Alternative D, by Year 2015, approximately 93 percent of those newly exposed to high noise levels [4,030 residents] will be minority and/or low-income residents [SEIR, p. 4-324], and 85 percent of those newly exposed to single event noise awakening [15,340 residents] would be located within minority and/or low-income communities. [SEIR, p. 4-324].

The effects of aircraft noise on public schools will also fall on schools located predominately within minority and/or low-income communities. Eleven of the 12 public schools that will be newly exposed to the adverse impacts of increased aircraft noise levels or the 94 dB SEL noise contour by 2015 are located within the Inglewood Unified School District. [SEIR, p. 4-324]

Despite recognition of these severely disproportional noise impacts on minority and low-income communities, including Inglewood, and an acknowledgment that proposed mitigation will be inadequate where, after sound insulation, minority and low-income communities will still be faced with adverse effects of high outdoor noise levels [SEIR, p. 4-329], the SEIR does not address avoidance or minimization of those impacts, as required by the Federal Environmental Justice Program.

For example, Environmental Justice Section 4.4.3.5.5.1, Relocation of Residences or Businesses, states that, under Alternative D, "No residential acquisition is proposed, and the number of businesses that would need to [be] acquired and relocated would be reduced to 38." [emphasis added]. In that terse sentence, the SEIR eliminates from consideration a viable means for avoiding Project impacts on low-income and minority communities. As neither LAX nor its surrounding communities can be conveniently moved, the feasible option is to move those residents who are adversely impacted.

Moreover, the SEIR is internally inconsistent on this issue. Land Use Mitigation Measure MM-LU-1 calls for mitigation of land uses that would be rendered incompatible by the noise impacts of the Project by means of sound insulation or acquisition of residences, schools, hospitals and churches within the highest CNEL measurement zone. [SEIR, p. 5-19] Mitigation Measure MM-RBR-2 calls for coordination with Inglewood to identify residential land uses where acquisition and conversion to compatible uses is contemplated or deemed appropriate. [SEIR, p. 4-339] Acquisition of residences for the purpose of converting residential to more compatible uses, and thus avoiding noise impacts on affected minority communities, necessarily implies relocation of displaced residents of the acquired properties.

Further, Mitigation Measure RBR-1, which applies to all alternatives, proposes preparation of a Residential and Business Relocation Plan and expansion the current relocation program. [SEIR, p. 5-6] The SEIR's relocation objectives include informing Project area residential occupants [in Spanish and other languages] about matters such as relocation assistance and benefits, replacement housing and housing referrals, notices to vacate, displaced persons assistance, applications and claims for relocation benefits, evictions and property management, and grievance procedures for relocatees. [SEIR, pp. 5-6 - 5-7] In direct contradiction to RBR-1, however, Section 4.4.3.5.5.1 disclaims any residential relocation plans, and fails to mention, much less address, avoidance or minimization of relocation impacts on minority and low-income residents, as required by Federal Environmental Justice statutes.

Finally, Section 4.4.3.5.2 states that the environmental impacts of air quality under Alternatives A, B and C have not materially changed, but, that under Alternative D, airport activity would be focused in areas

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at the east side of the airport, resulting in greater emissions east of the airport [SEIR, p. 4-329]. Most of those effects would remain adverse following implementation of proposed mitigation measures. Specifically: minority and low-income populations may be more severely affected because they may be more susceptible to asthma and other chronic respiratory illnesses trigger by the high O3 levels in the area; children within minority communities may be particularly susceptible to health effects of PM10, ozone and NO2, and thus may be more severely affected than other communities exposed to equivalent level of those pollutants; and children living in poverty who lack access to adequate health care may be especially at risk. [SEIR, p. 4-330]

Despite these acknowledged severe project impacts, and perhaps because of the further claim of the purported utility of proposed aggregate air quality mitigation measures, the SEIR fails to explore further minimization of specific effects, by feasible means such as committing to air condition homes and schools affected, see Los Angeles Unified School District, *supra*, 58 Cal.App.4th at 1029-30, or relocating impacted populations.

Response:

The Supplement to the Draft EIS/EIR incorporates a comprehensive set of feasible mitigation measures to address disproportionate noise impacts on minority and low-income communities. Although outdoor aircraft noise levels in areas would be high, they would not exceed thresholds of significance under Alternative D, LAWA Staff's preferred alternative, as further described in Topical Response TR-LU-4.

The Final EIR incorporates a comprehensive mitigation program and, as relates to environmental justice, where such measures would not reduce impacts to less than significant levels, off-setting benefits are provided to address disproportionately high and adverse effects on minority and low-income populations, as presented in Section 4.4.3 (subsection 4.4.3.7). Regarding the specific reference to residential relocation under Alternative D, LAWA does not view acquisition of residential property as a preferred means for addressing potential impacts on minority and low-income populations. Although not a preferred method for addressing aircraft noise impacts under LAWA's Aircraft Noise Mitigation Program (ANMP), acquisition of residential or other noise sensitive uses is allowed based on the discretion of local jurisdictions.

There is no improper internal inconsistency on the issue of relocation. As previously indicated, no acquisition of residential properties is proposed by LAWA under Alternative D, however, individual jurisdictions may elect to pursue acquisition in lieu of soundproofing to address significant noise impacts. Mitigation measure MM-RBR-2, relates to residential areas that have historically been exposed to high noise levels that are proposed for recycling to other land uses under the City of Inglewood General Plan and relevant redevelopment plan. The intent of this measure is for LAWA to encourage redevelopment and economic development in Inglewood in connection with the Master Plan relocation program in a manner that would be consistent with existing City policy. If relocation occurs with this measure it would be to address long-standing noise impacts, not noise impacts associated with the proposed LAX Master Plan. The Residential and Business Relocation Plan referenced in Chapter 5, Environmental Action Plan, combines steps to address both residential and business relocation. As described in Section 4.4.2, Relocation of Residences or Businesses, of the Supplement to the Draft EIS/EIR, and consistent with the statements in Section 4.4.3, no residential acquisition is proposed under Alternative D, although it is possible that limited acquisition could occur depending on the final design of surface transportation mitigation measure roadway improvements. Only if this residential acquisition occurs would the relocation plan for Alternative D involve steps to address residential acquisition.

Regarding impacts associated with air quality, see Topical Response TR-EJ-1 and Response to Comment SAL00013-56. Also note that LAWA's ANMP program currently provides air conditioning with soundproofing in areas east of the I-405. Regarding air conditioning in schools, as described in Response to Comment AL00035-23, provisions of the "Settlement Agreement" including aviation easements and prior noise mitigation payments resolved land use incompatibility and noise mitigation issues related to noise, vibration and fumes from LAX overflight operations.

SAL00016-57

Comment:

B. The SEIR's Proposal to Provide Job Benefits to Minority And/or Low-Income Communities Is Inadequate Where it Is Contingent on FAA Approval of the Use of Airport Revenues and Ignores the Projected Decrease in LAX Related Jobs under Alternative D.

DOT Order 5610.2 § 6.b. (2) requires that measures be proposed to provide offsetting benefits and opportunities to enhance communities, neighborhoods and individuals affected by DOT programs. The "Benefits" section [unnumbered] of the SEIR states that jobs are one of the economic benefits directly and indirectly attributable to LAX [p.4-339], and that LAX is working to create job recruitment, job training and job placement programs that will enable local youths and adults to more easily access jobs at and around LAX in the future. [SEIR, p. 4-339 - 4-340] However, the jobs related proposal is a house of cards where: (1) adoption and implementation of job recruitment, training and placement programs are subject to FAA approval of the use of airport revenue to fund such activities; and (2) even if use of airport revenues is approved for recruitment and job training, job placement under Alternative D will be difficult, where the SEIR acknowledges that Alternative D would have no meaningful contribution to job growth. [SEIR, p. 4-351]

The SEIR proposes to expand existing programs and create new programs at its Jobs Outreach Center which would be primarily focused on minority and/or low-income residents located east of LAX, including Inglewood. [SEIR, p. 4-340] Inglewood, as acknowledged in the SEIR is already disadvantaged with respect to employment at LAX, where only 2,304 (3.9%) of the 59,000 badged employees at LAX reside in Inglewood. [SEIR p. 4-339, fn. 100]. The SEIR's job creation proposal contains some giant loopholes. For example, funding for the proposed jobs related programs is totally contingent upon FAA approval of diversion of airport revenues for that purpose. The SEIR contains no evidence that LAX has made application for FAA approval, provides no information to the public on the likelihood that FAA approval will be granted, and offers no alternative plan for funding jobs programs if the FAA does not approve the use of airport revenues for jobs programs. In other words, if the FAA does not approve the use of airport revenues, the entire jobs program collapses.

Even if funds are approved by the FAA, and local minority and low-income residents are trained in aviation related skills, job placement under Alternative D will be difficult, where Alternative D would result in a net decrease of approximately 23,000 jobs within a ten-mile radius of LAX by 2015 [SEIR, p. 4-339]. Alternative D is projected to support roughly the same level of employment as the No Action/No Project Alternative in 2015, and would have no meaningful contribution to job growth [SEIR, p. 4-351].

Response:

Regarding job programs being contingent on FAA approval of the use of airport revenue, LAWA will investigate, pursue, and apply funding sources for environmental justice benefits, as feasible and allowable by law. Although it is accepted, as discussed in Section 4.4.1, Employment/Socio-Economics, of the Supplement to the Draft EIS/EIR, that there would be a decline in total jobs over the planning period due to productivity increases (i.e., producing more economic output per worker) that overwhelm net additional jobs under Alternative D, the alternative was developed based on extensive public comment and a desire for a more regional approach to accommodating air travel demand. The regional approach was advocated in large part to provide for a more equitable distribution of airport related environmental impacts. SCAG concluded in its 2001 Regional Transportation Plan that "limiting further growth at LAX is the best possible outcome from an environmental justice perspective." Accordingly, Alternative D has fewer impacts and impacts of less magnitude than the other build alternatives, generally consistent with the No Action/No Project Alternative, including reduced impacts on the City of Inglewood. Nonetheless, the job and educational related measures provided as part of the Environmental Justice Program represent real benefits, including the potential for 20 percent, or nearly 10,000 thousands of construction related jobs associated with Master Plan design and improvements. Additionally, even with a decline in jobs overtime due to productivity increases that would occur independent of the LAX Master Plan, Alternative D would provide a wide range of long-term employment opportunities within 17 different sectors of the economy. And furthermore, the job training and placement programs would have benefits that extend beyond the immediate LAX area with opportunities in the aviation industry not necessarily lost to the region, but shifted to other areas where

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passenger and cargo activity would be accommodated, such as Ontario International Airport, owned and operated by LAWA.

SAL00016-58

Comment:

C. The SEIR's Conclusion That Construction Impacts Would Not Fall on Minority Communities Is Unsupported by Any Analysis of the Project's Cumulative Noise Effects.

The SEIR's conclusion that construction noise effects would not fall on minority and/or low-income communities [SEIR, p. 4-333] is unsupported by any analysis of the cumulative effects of the Project's ground traffic, aircraft and construction noise on communities located east of LAX. In reaching that conclusion, the SEIR makes the erroneous assumption, as set forth in detail above, that road traffic and aircraft noise will drown out construction noise, and that construction noise impacts on Inglewood residents will therefore be less than significant. However, as also set forth in more detail above, the SEIR's reliance on this "ratio theory" to discount the effects of construction noise improperly masks the palpable adverse impacts of Project construction on communities to the east of the airport, particularly where Alternative D proposes more construction on the eastern portion of the airport, which, in turn, results in hitherto unanalyzed construction noise, air quality and traffic impacts.

Response:

As indicated above in Response to Comment SAL00016-30, the conclusion that construction activities for Alternative D will not result in significant construction-noise impacts to the nearest noise-sensitive use in Inglewood is based on application of the CEQA Thresholds of Significance, as was presented on page 4-37 of the Supplement to the Draft EIS/EIR. The conclusion is not based on a "ratio theory" as claimed in the comment, nor is the conclusion based on some sort of representation that road traffic and aircraft noise will drown out construction noise. As was indicated on page 4-333 of the Supplement to the Draft EIS/EIR, the conclusion that Alternative D would not result in a disproportionate construction noise impact on low-income or minority communities is based on Figure S20 in Appendix S-D of the Supplement to the Draft EIS/EIR. As indicated on the subject figure, and as described on page 4-333, significant construction noise impacts associated with Alternative D would occur primarily in Westchester/Playa del Rey and, to a lesser extent, the City of El Segundo.

SAL00016-59

Comment:

D. No Effective Mitigation is Provided to Ameliorate the Project's Adverse Impacts.

Despite the SEIR's acknowledgment that the project will have a grossly disproportionate impact on minority communities, it contains few measures, and no certain, binding commitments to ameliorate impacts of construction or Project implementation on affected communities including Inglewood. Such measures should include, but not be limited to:

1. OPERATIONAL MITIGATION.

In addition to all other operational mitigation specified in the DEIR and SEIR, the Part 161 Application to the FAA should be expanded to provide that no operations shall take place over Inglewood between the hours of 11:00 p.m. and 6:30 a.m.; and that where "over-water" operations are not feasible for reasons of wind, weather or other safety related conditions during those hours, operations will either be held in place, in the case of departures, or sent to other airports in the case of arrivals.

Response:

The statement that the Supplement to the Draft EIS/EIR contains few measures and no certain or binding commitments to address disproportionate impacts on minority communities is inaccurate. As shown in Section 4.4.3, Environmental Justice (subsection 4.4.3.7), of the Supplement to the Draft EIS/EIR, there are nine mitigation measures that are directly relevant to the disproportionate adverse effects identified, including a Part 161 Study. It is important to note that there are many other mitigation measures for impacts that have been identified as significant, but without a disproportionate effect on minority and low-income communities, that also address impacts within the City of Inglewood. These

mitigation measures, along with project design features and Master Plan Commitments that address environmental concerns in the City of Inglewood are provided in the over 70 pages that constitute Chapter 5, Environmental Action Plan, of the Supplement to the Draft EIS/EIR. Also see the Section 4.4.3, Environmental Justice, of the Final EIS/EIR, which includes measures and benefits that reflect public input that was received during environmental justice workshops, public hearings and otherwise by written comments received during circulation of the Supplement to the Draft EIS/EIR. Please see Topical Response TR-EJ-2 regarding environmental justice-related mitigation and benefits.

SAL00016-60

Comment:

2. NOISE COMPATIBILITY PLANNING AND IMPLEMENTATION.

(a) COMPLETION AND EXPANSION OF RESIDENTIAL SOUND INSULATION PROGRAM - A firm, binding commitment to: (1) provide funding to complete the existing residential sound insulation program provided in the ANMP and MOU between Inglewood and Los Angeles; (2) expand that program to include residences in the 60 CNEL contour and the 94 dB SEL "awakening" contour as set forth in the SEIR; and (3) maintain 45 dB interior noise levels over time in all properties subject to the residential sound insulation program, including, but not limited to, replacement of equipment and improvements that malfunction due to age or environmental factors, or become obsolete due to increases in noise levels applicable to the properties.

Response:

Mitigation measures that commitment LAWA to soundproofing of existing and future properties within the ANMP and that address the 94 SEL threshold of significance are provided in Section 4.2, Land Use, of the Supplement to the Draft EIS/EIR. LAWA's mitigation program, including measures to address single event noise, is comprehensive and goes beyond standards employed at most major airports in the country.

Regarding mitigation of properties within the 60 CNEL contour, see Topical Response TR-N-2.2.

LAWA's obligations under its ANMP program and the current MOU between Inglewood and Los Angeles represent firm commitments.

Regarding replacement of equipment and soundproofing improvements under the ANMP overtime to maintain a 45dB interior noise level, this type of on-going action is not considered necessary or feasible. With proper maintenance soundproofing materials, such as windows and doors, should remain adequate over a long-term period.

SAL00016-61

Comment:

(b) RELOCATION OF SCHOOLS - A firm, binding commitment, not contingent on the results of future studies, to relocate schools currently and newly impacted by noise resulting from the implementation of the project to sites specified by Inglewood;

Response:

Mitigation for aircraft noise effects on schools, as presented in Section 4.1, Noise, and Section 4.2, Land Use, of the Draft EIS/EIR and Supplement to the Draft EIS/EIR, would only apply to those significantly impacted schools without avigation easements. Please see Response to Comment AL00035-23 regarding avigation easements, prior noise mitigation payments, and other provisions of the "Settlement Agreement" which resolve land use incompatibility and noise mitigation issues associated with airport operations and the Inglewood Unified School District. For further discussion of aircraft noise effects on schools within the Inglewood Unified School District, please see Response to Comment AL00035-36.

Please see Section 4.4.3, Environmental Justice (subsection 4.4.3.7), of the Final EIR regarding mitigation measures and benefits that address disproportionately high and adverse effects on minority

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and low-income communities, as refined based on input gathered during circulation of the Supplement to the Draft EIS/EIR.

SAL00016-62

Comment:

(c) IMMEDIATE SOUND ATTENUATION OF ALL SCHOOLS, CHURCHES AND OTHER PUBLIC PLACES THAT CANNOT BE RELOCATED - A firm, binding commitment to sound attenuate, not contingent on further studies, all of the schools identified as impacted by the project in any way that cannot be relocated, as well as noise impacted churches and other public gathering places including medical and rehabilitation facilities;

Response:

LAWA is committed and has provided mitigation measures to address noise impacts for schools, churches, hospitals, and convalescent hospitals shown in the EIS/EIR to exceed the thresholds of significance provided in Section 4.1, Noise, of the Supplement to the Draft EIS/EIR. The references to other public places and medical and rehabilitation facilities, is not clear. Also see Response to Comment SAL00016-62 above and AL00035-36 regarding mitigation of schools.

SAL00016-63

Comment:

(d) LOCATION OF A FLY AWAY FACILITY - A firm, binding commitment to locate a fly away facility at the proposed location of the corner of Prairie Avenue and Century Boulevard in Inglewood;

Response:

Mitigation Measure MM-AQ-1, on Page 4-388, in Section 4.6, Air Quality, of the Supplement to the Draft EIS/EIR, includes a commitment to implement at least five FlyAway stations in the South Coast Air Basin. The locations of these stations will be contingent of the feasibility of individual sites and successful negotiations with individual jurisdictions.

SAL00016-64

Comment:

(e) ADDITIONAL ROAD AND STREET IMPROVEMENTS - A firm, binding commitment to improve streets used heavily for access to LAX and the new remote fly away facilities including, but not limited to, Century Boulevard, Manchester Boulevard, Arbor Vitae Street and Florence Avenue;

Response:

Please see Section 4.4.3, Environmental Justice (subsection 4.4.3.7), of the Supplement to the Draft EIS/EIR and the Final EIS/EIR, which incorporates a benefit for road and street improvements.

SAL00016-65

Comment:

(f) GENERAL PLAN - Binding commitment to provide funding for the development of a General Plan for the City of Inglewood to supercede its currently outdated land use element, and enable Inglewood to plan compatibly with airport operations;

(i) CENTURY BOULEVARD SPECIFIC PLAN - Development of a Specific Plan for the half mile length of Century Boulevard between La Cienega Boulevard and Inglewood Avenue in order to exploit its unique location to create a focused airport-patron environment predominantly composed of hotel and restaurants, with supportive retail and office uses, thus enhancing the primary portal into LAX from the freeway;

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(ii) FUNDING FOR CENTURY BOULEVARD CORRIDOR IMPLEMENTATION PROJECT - A firm, binding commitment to provide funding to complete the major study and improvement design for the Century Boulevard corridor, particularly between La Cienega and Prairie Avenue, including conversion of currently noise impacted single and multi-family residential buildings to commercial uses;

(iii) BUSINESS PARKS - A firm, binding commitment to provide planning and development funds for business and industrial parks, consistent with the development study currently underway by HNTB and the recently completed economic impact analysis by Kosmont Partners, along Century Boulevard between I-405 and Prairie Avenue, with specific emphasis on the area closest to the new GTC;

(iv) PUBLIC PARKS, GOLF COURSE, NATURE CENTER - A firm, binding commitment to provide funding for conversion of incompatible residential and other uses, other than those redeveloped for commercial purposes to public parks, a municipal golf course, and/or nature center;

(v) BRANDING, SIGNAGE AND WAY FINDING - A firm, binding commitment to provide adequate signage for those accessing LAX and the amenities of the City of Inglewood including Hollywood Park and Daniel Freeman and Centinella Hospitals.

(vi) LIBRARIES - A firm, binding commitment to fund the replacement of libraries to be impacted by the project, and the expansion of Inglewood's library system to accommodate increased student populations;

(vii) YMCA - A firm, binding commitment to fund the replacement of the existing YMCA at 102nd Street and Prairie Avenue;

(viii) HEAD START CHILD DEVELOPMENT FACILITIES - A firm, binding commitment to fund the development of new childcare and education centers in compliance with the requirements of the new General Plan;

(ix) SENIOR CITIZEN HOUSING - a firm, binding commitment to fund new senior housing and assisted living communities consistent with the requirements of the new General Plan.

Response:

Regarding the listing of possible benefits, please see Section 4.4.3, Environmental Justice (subsection 4.4.3.7), of this Final EIS/EIR, which reflects consideration of these and other suggestions related to environmental justice that were voiced during the public circulation period for the Supplement to the Draft EIS/EIR and in more recent briefings with civic, business and religious leaders within affected communities.

While all recommendations have been considered as possible additional components of LAWA's Environmental Justice Program, and certain of the commentor's suggestions have been incorporated into the program in some form, there was a practical limit to the number of off-setting benefits that could be selected to address disproportionately high and adverse environmental effects on minority and low-income communities associated with the proposed LAX Master Plan. Furthermore, while LAWA will investigate and pursue environmental justice benefits as feasible and allowable by law, implementation of any programs or measures is dependent upon LAWA's ability to utilize airport revenue funding or other state or federal funding sources for such implementation. Those benefits included in the Environmental Justice Program were selected based on their ability to respond to community concerns and their relationship to such criteria as: benefit provided relative to cost; ability to directly or indirectly address disproportionately high and adverse environmental effects; availability of funding to finance the benefit; practicality of maintaining or monitoring the benefit; and, the feasibility of and timeliness of implementation. Appendix F-A, of this Final EIS/EIR includes a matrix (Attachment 1), that lists the various benefits and measures suggested by the public that were evaluated as part of the Environmental Justice Program along with an indication of which benefits or measures were adopted and why certain measures were not adopted.

Also please see Topical Response TR-EJ-2 regarding environmental justice-related mitigation and benefits.

3. Comments and Responses

SAL00016-66

Comment:

(g) PROVISION OF FUNDS FOR ACQUISITION AND RELOCATION - A firm, binding commitment to provide funding for the acquisition of all properties falling within any of the criteria of significant noise impact in the SEIR and of funding for relocation housing and expenses;

Response:

As indicated in mitigation measures MM-LU-1 and MM-LU-2, in Section 4.4.2, Land Use (subsection 4.2.8), of the Supplement to the Draft EIS/EIR, the ANMP will be revised to incorporate all properties identified as significantly impacted by high noise levels pursuant to the thresholds of significance set forth in Section 4.1, Noise (4.4.1), unless such properties are already considered compatible uses. This mitigation leaves the option of conversion of land rather than soundproofing to individual jurisdictions, consistent with the current ANMP program. Any relocation undertaken as part of the ANMP would be in compliance with the Uniform Relocation Act which requires that no residential occupant be required to move until comparable decent, safe, and sanitary housing is made available. Relocation payments would be made in accordance with Federal Relocation Regulations.

SAL00016-67

Comment:

(h) JOB TRAINING - A firm, binding commitment to begin immediate training of Inglewood residents in: (a) construction related skills necessary to participate in the construction phase of the project; and (b) skills necessary to obtain long term employment at LAX, including, but not limited to, the creation of a new vocational school dedicated to preparing students for careers in aviation industries and emerging hi-tech industries of aviation maintenance, as required in concept by the MOU;

(i) FUNDS FOR JOB TRAINING - A firm, binding commitment to provide local funding for jobs training programs, either to augment Federal funds provided for training, or to fund the training program in its entirety if the FAA does not authorize the use of airport revenue for training purposes;

Response:

Please see Section 4.4.3, Environmental Justice (subsection 4.4.3.7), of the Supplement to the Draft EIS/EIR and the Final EIS/EIR, which addresses job training programs.

SAL00016-68

Comment:

(j) MODIFICATION OF THE MOU - A firm, binding commitment to extend the MOU at least through the year 2015, concurrent with the implementation of the LAX Master Plan, including, but not limited to, the abrogation of the requirement to dedicate aviation easements; acknowledgment that easements as yet unrecorded will not be re-recorded at the expiration of the MOU, and the reconveyance of all easements previously recorded.

Response:

Regarding the Memorandum of Understanding (MOU) between the City of Los Angeles and Inglewood, the Supplement to the Draft EIS/EIR does not rely on this document for compliance with CEQA and NEPA mitigation requirements. The mitigation measures and benefits presented in the Supplement to the Draft EIS/EIR represent firm commitments that do not rely on the MOU. As indicated in Section 4.2, Land Use (subsection 4.2.7), of the Supplement to the Draft EIS/EIR, under mitigation measure MM-LU-1, LAWA will re-evaluate its policy regarding aviation easements.

SAL00016-69**Comment:**

3. ADDITIONAL RESEARCH.

In addition to all other studies specified in the DEIR and SEIR, a study be conducted of the incidence of air pollutants, resulting from aircraft operations, traffic and other sources related to LAX, and their health effects, both generally and on residences of the City of Inglewood specifically.

Response:

LAWA has already committed to such a study under its MOU with the City of Inglewood, independent of the LAX Master Plan. Also see Topical Response TR-EJ-1 and the evaluation of air quality and human health provided in Section 4.6, Air Quality, and Section 4.24, Human Health and Safety, of the Draft EIS/EIR and Supplement to the Draft EIS/EIR. Supporting technical data and analyses are provided in Appendix G and Technical Reports 4, 14a, and 14c of the Draft EIS/EIR and Appendix S-C and S-E and Technical Reports S-4, S-9a, and S-9b of the Supplement to the Draft EIS/EIR.

SAL00016-70**Comment:**

In summary, while Inglewood appreciates the efforts that have been made by Los Angeles to cope with the difficult problems of limitation of airport operations and environmental compatibility with surrounding communities, more clearly needs to be done to remedy the problems that fall squarely on the shoulders of Inglewood and particularly its low income and minority residents. Inglewood looks forward to continuing its ongoing cooperation with Los Angeles in fostering both economic growth and improved quality of life for all citizens of Los Angeles and its neighboring communities.

Inglewood thanks Los Angeles for this opportunity to comment.

Response:

Comment noted. Please see Responses to Comments above.

SAL00016-71**Comment:**

ATTACHMENT 1

DRAFT ENVIRONMENTAL IMPACT STATEMENT/ ENVIRONMENTAL IMPACT REPORT, LOS ANGELES INTERNATIONAL AIRPORT PROPOSED MASTER PLAN IMPROVEMENTS - COMMENTS RE: ALTERNATIVES A THROUGH C

The following constitutes comments, pursuant to the requirements of the California Environmental Quality Act, Public Resources Code § 21000, et seq., ("CEQA") and the National Environmental Policy Act, 42 U.S.C. § 4321, et seq., ("NEPA"), concerning the Draft Environmental Impact Statement/Environmental Impact Report ("Draft EIS/EIR") for the Los Angeles International Airport ("Airport") Proposed Master Plan Improvements ("Project"), prepared jointly by the Federal Aviation Administration ("FAA") and the City of Los Angeles ("Los Angeles"),¹ and Alternatives A through C presented therein.

The issues raised by these comments fall into seven general categories, although they are not limited only to those categories:

(I) the baseline used in the Draft EIS/EIR, against which the various environmental impacts of the Project are compared, is not properly designated;

(II) the discussion of the Project's surface traffic impacts is misleading;

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(III) the noise impacts of the Project are inadequately addressed;

(IV) the potential air quality impacts of the Project are not fully disclosed;

(V) the Draft EIS/EIR does not explore all reasonable alternatives, and, thus, paves the way for its ultimate conclusion that expansion of the Airport's airside and groundside facilities are the sole way to meet future demand;

(VI) the LAX Master Plan and Draft EIS/EIR fail to satisfy applicable law because they do not conform to other relevant plans;

(VII) the Draft EIS/EIR fails to adequately specify mitigation measures or methods to enforce them;

(VIII) the recently articulated project goal of increasing safety obscures the Project's clear capacity-enhancing purpose. As a result of these defects, the Draft EIS/EIR cannot meet the high standards of disclosure that are the gravamen of both CEQA and NEPA;

(IX) the Draft EIS/EIR does not meet environmental justice requirements; and

(X) the Draft EIS/EIR fails to adequately account for human health risks.

1 The FAA and Los Angeles shall, for the remainder of these comments, be referred to collectively as "Project Proponents".

Response:

Please see Responses to Comments SAL00016-72 through SAL00016-153 below.

SAL00016-72

Comment:

I. THE DRAFT EIS/EIR DOES NOT PROPERLY DESIGNATE THE BASELINE FOR ANALYSIS.2

The specification of a baseline for comparison with Project impacts is a critical component of analysis under CEQA, because without an accurate specification of the baseline, "analysis of impacts, mitigation measures and project alternatives becomes impossible." *County of Amador v. El Dorado County Water Agency*, 76 Cal.App.4th 931, 953 (1999). A central concept of CEQA is that "a baseline figure must represent an environmental condition existing on the property prior to the project." *Save Our Peninsula Committee, et al. v. Monterey County Board of Supervisors, et al.*, 87 Cal.App.4th 99, 124 (2001). The regulations implementing CEQA, 14 Cal. Code Regs. § 15000, et seq., ("CEQA Guidelines") are specific as to the definition of "prior to the project":

"An environmental impact report must include a description of the physical environmental conditions in the vicinity of the project, as they exist at the time the Notice of Preparation is published, or, if no Notice of Preparation is published, at the time the environmental analysis is commenced... This environmental setting will normally constitute the baseline physical conditions by which a lead agency determines whether an impact is significant." CEQA Guidelines § 15125(a).

While the courts have taken the position that the "date for establishing a baseline cannot be a rigid one", *Save Our Peninsula Committee, supra*, 87 Cal.App.4th at 125, they have also held unequivocally that "an EIR must focus on impacts to the existing environment, not hypothetical situations", *County of Amador, supra*, 76 Cal.App.4th at 955. The baseline for analysis in the Draft EIS/EIR does not meet these tests.

2 Later sections II, III and IV more fully discuss the pitfalls arising from the use of the three separate and distinct baseline assumptions used in that analysis; Environmental Baseline, Adjusted Environmental Baseline, No-Project/No-Action.

Response:

Please see Topical Response TR-GEN-1 regarding baseline issues.

SAL00016-73

Comment:

A. The Draft EIS/EIR's Base Year Does Not Reflect the Physical Conditions on the Project at the Time of the Publication of its Notice of Preparation.

The Airport Master Plan, November, 2000, Technical Analysis ("Master Plan") is the basis of the analysis contained in the Draft EIS/EIR (Master Plan, Preface, page i). The analyses contained in Master Plan, Chapter II, Existing Conditions Working Paper, 4/19/96, use data from the base year 1994 (see, e.g., § 2.3.1, page II-2.1, re: Annual Weather Conditions; Figure II-2.17, page II-2.53, re: Design Day Hourly Distribution of Operations and Tables following). The Notice of Preparation, however, was published in July, 1997 (Draft EIS/EIR, page ES-2), almost three years after the conditions reflected in the original Master Plan data and analysis. Courts have consistently taken the position that a baseline should not "be set a number of years earlier than the commencement of the current project". See *Our Peninsula Committee*, supra, 87 Cal.App.4th at 127.

Moreover, the Master Plan and Draft EIS/EIR contain multiple inconsistent base years such that it is impossible for the public to ascertain which base year is used for a given purpose. On the one hand, the Draft EIS/EIR (page ES-2) states that the environmental analysis normally describes existing conditions as of the July, 1997 date on which the Notice of Preparation was published (even though none of the data in the Master Plan upon which the Draft EIS/EIR is based reflects a 1997 origin). On the other hand, the Draft EIS/EIR states that, where a full year's worth of data is needed, data from 1996 is used (see, e.g., Draft EIS/EIR Technical Report on Surface Traffic), and sometimes earlier years [unspecified], and sometimes even data from the later years 1999 and 2000 (even though these latter are more than two years after the publication of the Notice of Preparation). Additionally, the Master Plan is unclear as to whether 1994 or 1995 data is used. Finally, different base years are used for different components of the analysis, e.g., 1996 for surface traffic and noise, 2000 for water resources.

Response:

The content of this comment is essentially the same as comment AR00003-4; please see Response to Comment AR00003-4.

SAL00016-74

Comment:

Such selective shifting of baselines has substantive consequences. For example, the use of a 1994 (or even 1996) baseline in analysis of aircraft noise impacts artificially elevates the baseline for analysis by incorporating noise from the larger numbers of Stage 2 aircraft in the fleet in 1994/96. These aircraft were totally phased out of the United States fleet by the year 2000.

Response:

The 1996 environmental baseline for the Draft EIS/EIR includes many of the noisier Stage 2 aircraft that were phased out in the year 2000. Please see Topical Response TR-N-1, in particular Subtopical Response TR-N-1.3, regarding a comparison of 1996 baseline and Year 2000 conditions relative to the noise analysis, Topical Response TR-N-3, in particular Subtopical Response TR-N-3.3, regarding noise related to the phase out of Stage 2 aircraft, and Topical Response TR-GEN-1 regarding general baseline issues. The Supplement to the Draft EIS/EIR analyzed and compared Year 2000 conditions to baseline conditions for all five alternatives in Section 4.1, Noise, and Section 4.2, Land Use.

SAL00016-75

Comment:

Further, the use of a 1994 (or 1996) baseline year in the air quality analysis potentially overstates the baseline level of criteria pollutants in the L.A. region which has since come into attainment for all criteria

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pollutants except Ozone and Particulate Matter.³ In short, the nonspecificity of both the Master Plan and Draft EIS/EIR with respect to the base year for analysis renders the results of their analyses questionable.

3 The Draft EIS/EIR also states that its use of earlier years results in a more "conservative" analysis, because there were fewer passengers and operations in earlier years, and, thus, less noise and fewer emissions to compare against those generated by the Project. This claim is inaccurate at least with respect to noise and air quality analyses as set forth below. In any event, it does not account for the opposite effect of using later years 1999/2000 as the baseline, which would, by the logic used in the Draft EIS/EIR, artificially elevate the baseline and, consequently minimize the environmental impacts of the Project. As neither the Master Plan nor Draft EIS/EIR are specific as to the distribution of various baseline years throughout the analysis, it is impossible to ascertain the degree of distortion that may have occurred through the use of these alternate baselines.

Response:

This comment is essentially the same as comment AR00003-6; please refer to Response to Comment AR00003-6.

SAL00016-76

Comment:

B. The Master Plan and Draft EIS/EIR Baseline Analyses Are Based On Incomplete and/or Inaccurate Data.

The Master Plan defines the capacity of the Airport's existing airside facilities as "the number of aircraft operations, arrivals and departures, that the Airport can accommodate with a reasonable amount of aircraft delay." (Master Plan,) 2, page II-2.1) The correct determination of existing airside capacity is critical to identification of the Airport's potential to accommodate future air traffic demand and plan future airport's development. (Master Plan, Chapter 2, page II- 2.1) Various independent variables are used in the modeling of existing airport capacity, including, but not limited to: (1) runway operating configurations; (2) noise abatement procedures; (3) airspace operating assumptions; and (4) airfield operating assumptions. (Master Plan, § 2.3, page II-2.21) Delay is also apparently a contributing variable. The relationships within the model are such that, if the definition of a given variable, or the value assigned to it, are questionable, the capacity determination resulting from the model is prejudiced.

Here, even if, for argument's sake, the Draft EIS/EIR had specifically and accurately designated a base year, critical data used in the Master Plan baseline demand/capacity/delay analysis is incomplete or in some cases inaccurate.

Response:

The content of this comment is identical to comment AR00003-7; please refer to Response to Comment AR00003-7.

SAL00016-77

Comment:

As a threshold matter, the Master Plan demand/capacity/delay analysis is predicated on Aircraft Communications, Addressing and Reporting System ("ACARS"), and Official Airline Guide ("OAG") data sources. These two data sources exaggerate, or, inaccurately characterize, true (airport capacity related) delay. The Master Plan defines delay as "the difference between the actual time it takes an aircraft to perform an arrival or departure and the normal time it would take to perform the same operation with no interference from other aircraft." (Master Plan, § 2.1, page II-2.2) ACARS data is generated by the airlines, and is based on activities such as push back, parking at the gate, or opening or closing cabin doors. ACARS data includes information about on-time performance, based on the arrival and departure times developed by each airline for each segment of flight. Since the data is airline-generated, airline definitions of delay are automatically built into the report.⁴

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Further, the OAG is published for the express purpose of identifying the arrival and departure times of various airlines. When the airlines set up their schedules, they factor in the average delay for each leg of flight between city pairs. Thus, the OAG also builds delay into the departure and arrival times based on each airline's historical data and operating experience for each flight segment.

In summary, ACARS data is not original source data but is the product of third party intervention. It is manipulated by various airline functionaries before a final report is released. Similarly, OAG data is manipulated to include delay not after, but before the fact. Therefore, because both sources of data already include a delay factor, their use in the Master Plan's modeling, as set forth below, is likely to cause a double counting of delay.⁵

Instead of ACARS or OAG data, the Master Plan should have relied on radar data. Radar data is a memorialization of the movement of arriving aircraft from a specified distance outside the terminal control area until touchdown and, conversely, for departing aircraft, from the aircraft's lift-off from the runway to the same distance outside the airport's control area. Every operation is tracked in real time without the intervention of third party interpretation, manipulation, or extraneous factors, unrelated to the operational capacity of airport infrastructure.

4 When an aircraft pushes back from the gate or closes the cabin door, the aircraft could be late for a variety of reasons. Many delays are due to factors that are airline-controllable such as late boarding of passengers, customer service delays, maintenance delays, late arriving equipment, catering, fueling, baggage and the unavailability of crew members, to name but a few. Other types of delay would be attributable to airport, runway or taxiway design, airport acceptance rates, airport construction, noise abatement regulations, air traffic control restrictions and weather. These items are also introduced and incorporated into the ACARS report as a delay factor.

5 In addition, the Master Plan analysis relies on numerous sources other than ACARS or OAG data including personal observations, a small sampling of users and an unique determination of aircraft speeds and routes, none of which is suitable, let alone optimal, for developing baseline analyses or formulating assumptions. (See, e.g., Master Plan, § 2.1.3, pages II-2.5 - II-2.6)

Response:

The content of this comment is essentially the same as Comment AR00003-8; please refer to Response to Comment AR00003-8.

SAL00016-78

Comment:

The effects of this confounding of substantive with non-substantive delay factors are reflected in the Master Plan's modeling of demand/capacity/delay. The FAA's Simulation Model ("SIMMOD"), Version 2.1, was apparently used in the Master Plan's demand/capacity/delay analysis. SIMMOD simulates the movement of arriving and departing aircraft from their entry/exit into the Los Angeles Terminal Air Traffic Airspace through approach and landing phase, or taxi and takeoff, to their exit from the terminal air traffic airspace. Proper calibration of SIMMOD is essential since the resulting statistics depend upon the data used to develop the baseline assumptions and operating instructions for the model. In this case, ACARS and OAG data were used to calibrate SIMMOD. Because of the potential double counting inherent in these data sources, and the consequent exaggeration of delay in the model, the principal conclusion that is drawn from SIMMOD is that the only way to remedy delay is to build additional airport infrastructure. The most obvious flaw of such an analysis is that it eliminates, at the outset, opportunities to gain efficiency through improvements in operating practices and minor modifications to the air traffic system. Thus, what seems like a relatively minor data collection/designation problem pervades the demand/capacity/delay modeling upon which the Draft EIS/EIR's environmental analysis is based, and subtly biases the results.

C. The Draft EIS/EIR is Based on Implausible Modeling Assumptions.

The accuracy of SIMMOD's results depends on an accurate "description" of the "airport's operating environment". (Master Plan, § 2.1, page II-2.2) Both the Master Plan and Draft EIS/EIR acknowledge that the "description" is made up not merely of data purporting to represent actual current conditions, but also assumptions arising from that data (see, e.g., Master Plan, § 2, page II-2.1). Therefore, to the

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extent data and assumptions are incorrect or incomplete, so too will be the results of the model. In addition to the data problems specified above, SIMMOD, as used in the Master Plan, incorporates implausible, or biased, assumptions which, in turn, call into question the integrity of its output.

Response:

The content of this comment is essentially the same as Comment AR00003-9; please refer to Response to Comment AR00003-9.

SAL00016-79

Comment:

1. Assumptions Concerning Aircraft Delay Are Unexplained and Unsupported.

The Master Plan's (and Draft EIS/EIR's) definition and description of the delays at the existing (pre-Project) Airport are based on consultants' opinions and not on factual information. First, while the Master Plan acknowledges that "a standard definition of acceptable delay is not used in the industry" (Master Plan, § 2.1.3, page II-2.5), it then concludes that "delay levels of six to ten minutes indicate the need for additional facilities"; that "as average aircraft delay increases above six minutes, passengers tend to perceive service reliability problems"; "as delay approaches ten minutes per operation, further increases in demand are limited", and, "flight cancellations were assumed when delays exceed 20 minutes per average annual aircraft operation." (Master Plan, § 2.1.3, pages II-2.5 - II-2.6) These assumptions are apparently based on information derived from prior studies by the Master Plan consultants at airports other than Los Angeles, in years as early as 1988. In other words, the delay standards relied upon in the Master Plan are based on outdated data concerning potentially irrelevant subject airports. All of these have unique characteristics that may have influenced creation or perception of delay, and none of them are discussed in the Master Plan or Draft EIS/EIR.

Further, these unsupported assumptions do not reflect an understanding of the diverse ways in which delay is determined by the airlines, Air Traffic Control and the Department of Transportation. First, a typical airline will develop performance criteria for each phase of flight based on company goals and performance percentages, including arrival and departure delay. Airlines use "zero variance" as a standard for "on time" performance (i.e., zero difference between arrival and/or departure times and published schedules). The percentage goal for each activity will be based on the level of performance the airline hopes to, or, in some cases, must attain in order to remain competitive. Some airlines track on time performance plus five minutes and most will track on time performance plus 14 minutes.

FAA Air Traffic Control, on the other hand, computes delay based on actual delay time en route. An arriving aircraft is considered delayed only if the aircraft is held en route to the destination for 15 minutes or more at any given moment during the flight. It is possible that these aircraft could be held at more than one interval during a flight. However, if each holding period does not exceed the 15 minute threshold, no delay is recorded, even though the total delay might well be in excess of 15 minutes. Further, inbound delay is kept separate from outbound delay. A departing aircraft is not counted as delayed until: (1) the average taxi time for the airport; (2) the time from the gate to the runway; and (3) 15 minutes have cumulatively elapsed. Air Traffic Control delays do not consider airline schedules or internally generated delays in their reporting system. The majority of Air Traffic Control delays are as a result of weather and not system capacity. Finally, the Department of Transportation grades airline performance on the time of arrival at the destination airport within 14 minutes of the scheduled arrival time. The Master Plan utilizes none of those benchmarks. Thus, the Master Plan fails to adequately explain the basis for its demand/capacity/delay analysis.

Response:

The content of this comment is essentially the same as Comment AR00003-10; please refer to Response to Comment AR00003-10.

SAL00016-80

Comment:

2. The Master Plan's Assumptions Concerning Turboprop Operations are Manifestly Inaccurate.

Referring to its analysis of existing noise abatement procedures as they pertain to the creation or maintenance of demand/capacity/delay, the Master Plan states that "based on actual information obtained by the Los Angeles Noise Management Bureau, turboprop departures were permitted to turn slightly earlier than jet departures at the Airport VOR, which is located between runways 7L and 7R, west of Pershing Drive" (Master Plan, § 2.3.3, page II-2.31). In addition, Figures II-2.11 and II-2.12 indicate that, when the Airport is operating on a west flow, turboprop aircraft turn at the VOR.

These representations are inaccurate and lead to incorrect assumptions about flight paths. In fact, if such a turn were permitted, it would occur prior to the shoreline, contrary to current noise abatement procedures. Turning the turboprops early allows faster aircraft to depart behind the turboprops at a more accelerated rate than is currently allowed, thus allowing more aircraft to depart in a given interval. The results of this inaccurate assumption are that: (1) the baseline departure capacity is artificially elevated to a level higher than would be realized had actual air traffic data been used and the noise abatement procedures modeled as they are actually used; and (2) turboprops, as depicted in the Master Plan and Draft EIS/EIR, are directed over noise sensitive areas not previously overflowed, and, as a result, elevate the baseline noise levels, thereby concomitantly reducing the apparent noise impacts of the Project.

Response:

Please see Response to Comment AL00016-11.

SAL00016-81

Comment:

3. The Master Plan's Flight Schedule Assumptions Are Outdated.

The Master Plan reports the results of a SIMMOD analysis conducted in 1994, using 1994 data and 1994 assumptions. In addition to this obsolete data, the ACARS data upon which the SIMMOD analysis is based includes less than 51% of commercial operations and more than 46% of the total operations in the design day flight schedule. As: (1) operational configurations long pre-date the commencement of the environmental process; (2) current schedules were not used (although available), the assumptions concerning a typical day's traffic are substantially unsupported; and (3) not all of the aircraft operators were considered, the assumptions concerning a typical day's traffic are substantially unsupported.

Response:

The content of this comment is essentially the same as Comment AR00003-12; please refer to Response to Comment AR00003-12.

The aircraft activity developed for each Master Plan alternative includes all aircraft operator categories including air carrier, commuter, cargo, general aviation, and military. Due to the operation nature of each individual airport operator in terms of its service frequency, not all of them are included in the design day aircraft activity since the design day aircraft activity is designed to represent a typical day aircraft operations on average day of peak operation month. Please see Tables F-7 through 9 in Appendix F of the Draft LAX Master Plan for more information.

SAL00016-82

Comment:

4. The Master Plan's Fleet Mix Assumptions are Inaccurate.

The Master Plan relies on a fleet mix distribution derived from "August 11, 1994 OAG, NMB Do Daily Operations Records and LADOA 1994 Monthly Air Traffic Volumes" (Master Plan, Table II-2.16, page II-2.58). This 1994 fleet mix distribution is outdated and, thus, inadequate for use in SIMMOD. Specifically, it includes a large number of Stage 2 aircraft which are no longer in operation at the Airport. Not only are Stage 2 aircraft noisier, but they have different emissions characteristics from the newer high bypass ratio, Stage 3 aircraft. If a more recent base year had been selected, the proportion of Stage 2 aircraft would have been smaller, and the noise baseline lower, and, thus, more accurate.

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Response:

Please see Response to Comment AL00016-13.

SAL00016-83

Comment:

5. The Master Plan's Assumptions Concerning Aircraft Speed Are Inaccurate.

The Master Plan's assumptions concerning aircraft speeds were apparently inflated to fit the underlying assumption of unconstrained aircraft flows. The Master Plan model calls for all aircraft to operate at the same constant air speed before proceeding to the Airport and landing. The model further assumes that all aircraft exit the runway at the same point and within the same amount of time in order to reach the modeled flow rate. In actual conditions, the speeds of the aircraft vary, with high airspeed greatly reduced as the aircraft approaches the airport. Nor would all aircraft exit the runway at the same location. In short, this assumption of high constant speed will have an as yet unascertained impact on the model's results but would tend to overstate capacity of the existing facility, and, thus, the baseline for comparison with the Project's improvements.

Response:

The content of this comment is identical to comment AR00003-14; please refer to Response to Comment AR00003-14.

SAL00016-84

Comment:

D. The Master Plan's Model Omits Critical Variables.

Another crucial issue revolves around variables the Master Plan fails to include in its model. Specifically these include: (1) the capacity of the airspace beyond the Airport Terminal Control Area ("TRACON"); and (2) gate capacity for future scenarios.

1. The Master Plan Should Have Considered Airspace Capacity Beyond The Airport's Terminal Area Airspace.

According to the Master Plan, airspace considerations were limited to entry (and exit) from the Airport's TRACON airspace. (Master Plan, § 2.1.1, page II-2.3) The failure to consider airspace capacity beyond that point is a material omission from the analysis. This is because the majority of aircraft delays are absorbed in the en route environment before an aircraft arrives in TRACON airspace. By modeling only the terminal area, the results of the model are skewed for both arriving and departing aircraft. For departing aircraft, if the model does not consider the inherent constraints of the en route air traffic system, including differences in aircraft performance and the impacts of other air traffic transiting the area for other airports, the departure flow pictured in the model will remain unconstrained and aircraft can take off at a constant, predetermined rate. When reaching the boundary, the aircraft are dropped from the scenario, and the model does not further consider constraints of the en route system which naturally impact the TRACON airspace. Unfortunately, this unconstrained flow scenario is not normally possible in today's complex air traffic control system.

Similar problems exist in modeling arrivals without consideration of airspace outside the TRACON. Inbound aircraft are assumed, in the Master Plan model, to be at the entry point of terminal airspace when required by the model. Aircraft proceed inbound at a set speed, reduce speed at a predetermined point, land and proceed unimpeded to their gate. This is not a reasonable representation of a typical aircraft arrival. In fact, there is almost no likelihood that aircraft can be delivered to the terminal inbound fix at a rate consistent with the model's assumptions.

Instead, the Master Plan's arrival model appears to have been developed to insure that an arriving aircraft would be at the inbound fix at the specific time required in order to maximize the arrival rate for the airport. Although Air Traffic Control consistently tries to keep the aircraft sequenced as closely as possible "in-trail", it is not possible to consistently space aircraft a set distance apart for extended periods of time. The availability of aircraft to fit into the sequence, aircraft speeds, the mix of large and

small aircraft, a lack of demand, aircraft deviations due to weather, in-trail restrictions though an en route sector or in-trail restrictions required for an airport approach control facility and other variables cause the in-trail spacing of arrival aircraft to be inconsistent. As a result of these and many other factors, there is unused capacity in each of these arrival sequences. In summary, the Master Plan's failure to adequately consider constraining factors outside the TRACON airspace calls into question the validity of the model's result.

Response:

The content of this comment is identical to comment AR00003-15; please refer to Response to Comment AR00003-15.

SAL00016-85

Comment:

2. The Master Plan Should Have Modeled Gate Capacity.

The Master Plan did not include in its modeling aircraft gate operations for future activity levels, allegedly because of the inability of the existing gate facilities to accommodate the higher activity levels.⁶ (Master Plan, § 2.5.3, page II-2.104) The Master Plan disclaims the importance of this omission ["The inability to model gate operations in detail does not impact the results of the airside capacity analysis since at higher activity levels the runway system tends to be the primary constraint..." Master Plan, § 2.5.3, page II-2.110]. The Master Plan is in error.

If an aircraft cannot get to the gate unimpeded, the resulting delay must be factored into the analysis. In the Master Plan, taxi patterns are consistent and aircraft are dropped from the model when they reach the gate area. The model does not capture any delays in the gate area or any delays that might occur in reaching the gate due to congestion on the ramp. The same is true for departing aircraft. If a departing aircraft cannot leave the gate due to inbound traffic or other traffic in the gate area, the departure demand at the airport may not be as regular as is assumed in the Master Plan's model.

The importance of this omission is that it precludes development of a clear picture of the delay reduction, and consequent capacity enhancing, attributes of the Project. Without estimation of the potential groundside/terminal structure constraints on operations (capacity), the actual delay reducing, and capacity enhancing, benefits of the Project as a whole cannot be accurately ascertained.

6 Performance measures contained in the Master Plan, § 2.5.1, include "outbound ground delay" which, in turn, appear to include gate related variables such as "gate push-back delay". This performance measure was apparently used in the modeling of existing gate operations but not future ones. (Master Plan, § 2.5.1, page II-2.97)

Response:

The content of this comment is identical to comment AR00003-16; please refer to Response to Comment AR00003-16.

SAL00016-86

Comment:

3. The Master Plan Should Have Considered Currently Implemented Air Traffic Procedures.

While the Master Plan acknowledges the existence of the current Dual Civet Arrival procedure, it fails to analyze its delay reducing, or consequent capacity enhancing efficiencies. The procedure is mentioned, then drops off the "radar" screen. The Dual Civet Arrivals, however, have so greatly reduced arrival delay at the Airport that no national delay program for the airport has been established since the procedure's implementation. Ignoring the impacts of Dual Civet Arrivals results in an exaggeration of existing delay and a consequent exaggeration of the Project's delay reducing, and capacity enhancing benefits.

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Response:

The content of this comment is essentially the same as Comment AR00003-17; please refer to Response to Comment AR00003-17.

SAL00016-87

Comment:

E. Demand, as Defined in the Master Plan, is an Identity with Capacity.

Inaccurate data and assumptions are not alone in influencing the outcome of a modeling effort. Inadequate specification of a variable may also lead to an unrepresentative result. In this case, the independent variable, demand, as defined, is not independent but is virtually synonymous with, or surrogate for, the dependent variable, capacity. Thus, the demand variable has an interactive relationship with the dependent variable which influences the model's outcome in significant ways.

For example, the Master Plan defines aircraft demand as "a 24-hour flight schedule representative of design day activity." (Master Plan, § 2.1.2, page II-2.3) The "24-hour flight schedule" definition is almost identical to the definition of "capacity", "the number of aircraft operations, arrivals and departures, that the Airport can accommodate with a reasonable amount of aircraft delay." (Master Plan, § 2, page II-2.1) The two variables, therefore, vary together, i.e., as "capacity" increases, "demand" will also increase, rendering demand useless as a predictor of capacity. The precise degree in which the interaction of the independent and dependent variables in the model affect the analysis cannot be ascertained at this point without re-running SIMMOD. Suffice it to say that a new surrogate for demand, derived, for example, from airline market surveys, or annual enplanements, is necessary to insure the integrity of the model's results.

Response:

The content of this comment is essentially the same as Comment AR00003-18; please refer to Response to Comment AR00003-18.

SAL00016-88

Comment:

II. THE DRAFT EIS/EIR DOES NOT FULLY ANALYZE THE PROJECT'S OFF- AIRPORT SURFACE TRAFFIC IMPACTS.

While the Draft EIS/EIR's off airport surface traffic analysis adequately depicts some aspects of the Project's surface traffic generation potential, it is notably deficient in the following ways: (1) the use of the Adjusted Environmental Baseline for comparison with the Project's surface traffic impacts creates a misleading picture of the magnitude of those impacts; (2) the Draft EIS/EIR improperly equates the direct and cumulative impacts of surface traffic; (3) the Draft EIS/EIR provides inadequate information regarding the Northside/Westchester Southside Project; (4) the Draft EIS/EIR transportation planning horizon is improperly attenuated; and (5) the Draft EIS/EIR lacks a mitigation monitoring program detailing implementation of mitigation measures for the impacts of surface traffic.

Response:

Comment noted. Surface transportation impacts were addressed in Section 4.3, Surface Transportation, of the Draft EIS/EIR and Supplement to the Draft EIS/EIR, with supporting technical data and analyses provided in Technical Reports 2 and 3 of the Draft EIS/EIR and Technical Reports S-2a and S-2b of the Supplement to the Draft EIS/EIR. In addition, please see Response to Comment AL00043-3 regarding proposed traffic improvements for off-airport roadways and Topical Response TR-ST-2 regarding surface transportation analysis methodology.

SAL00016-89

Comment:

A. The Use of the Adjusted Environmental Baseline for Comparison With the Project's Surface Traffic Impacts is Misleading.

Three scenarios were used as baselines against which to evaluate the surface traffic effects of the proposed Master Plan improvements: (1) Environmental Baseline; (2) Adjusted Environmental Baseline; and (3) the No-Project/No-Action alternative. The Environmental Baseline is the existing condition pre-project. It includes existing roadways and land uses, and the current airport configuration. The year used in this baseline changed during the development of the Master Plan. At the initiation of the Master Plan process, the baseline year used was 1994. Information is reported in different Master Plan sections for 1994 and 1995. For the third iteration of the Master Plan, the baseline became 1996. The technical reports for the Draft EIS/EIR used 1996.

The Adjusted Environmental Baseline uses the current airport configuration but assumes that future off airport roadways and land uses already in the pipeline will be completed (see Section B.1 below). As with the Environmental Baseline, the definition of Adjusted Environmental Baseline changed with the development of the Master Plan. The existing condition section of the Master Plan (Chapter IV, Section 7) used horizon years of 2000 to 2015. The "constrained" alternatives section (Chapter V, Section 3) used the years 2005 and 2015. Finally, the No-Action/No-Project Alternative is the converse of the Adjusted Environmental Baseline and assumes that off-airport development will remain constant, but currently approved airport projects will be completed.

There are at least two issues of importance raised by reliance on the Adjusted Environmental Baseline: (1) accuracy of the Adjusted Environmental Baseline and its resulting projections; and (2) applicability of the Adjusted Environmental Baseline to the environmental impact analysis:

1. The Uncertain Definition of the Adjusted Environmental Baseline Makes the Results of its Comparison With Project Impacts Questionable.

The initial question about the Adjusted Environmental Baseline is the accuracy of the definition of "Existing Condition/Environmental Baseline" on which it is purportedly based. There are significant differences between the 1995 data concerning the "Existing Condition/Environmental Baseline" contained in the proposed Master Plan and the 1996 data contained in the Draft EIS/EIR. A comparison of Master Plan, Table II-7.2 and Draft EIS/EIR, Table 4.3.2-24, for the a.m. peak hour, shows changes in the "Existing Conditions/Environmental Baseline" between 1995 and 1996. As illustrated in the following Table, some intersections got significantly better and some significantly worse. In all but one case, the difference in V/C ratios between 1995 and 1996 exceeds thresholds used for determining significance in the Draft EIS/EIR.

Intersection	Master Plan Table II 7.2 1995 V/C*	EIS/EIR Table 4.3.2-24 1996 V/C	V/C Difference
Aviation/El Segundo	0.981(E)	0.835(D)	-.146
Aviation/Rosecrans	0.915(E)	1.121(F)	.206
Highland/Rosecrans	0.714(C)	1.069(F)	.335
Sepulveda/El Segundo	0.840(D)	0.869(D)	.029
Sepulveda/Mariposa	0.776(C)	0.730(C)	-.046
Sepulveda/Rosecrans	1.238(F)	1.220(F)	-.018
Vista Del Mar/Grand	0.755(C)	0.749(C)	-.006
Vista Del Mar/Imperial	0.821(D)	0.465(A)	-.356

* In Master Plan Table II 7.2 the first column heading is apparently mislabeled

Moreover, the "adjustments" to the "Existing Conditions/Environmental Baseline" involved adding additional roadways and additional traffic to the system based on anticipated projects. The definitions of these "adjustments" is not consistent within the Draft EIS/EIR, or between it and the Master Plan. For

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example, the Draft EIS/EIR states that: "A list of approved development projects were developed... (Draft EIS/EIR, page 4-279)" [Emphasis added.] The traffic technical report on which the Draft EIS/EIR is based states: "A list of planned development projects was developed..." (Technical Report, § 3b, page 2-3)" [Emphasis added.] Master Plan, Table IV-8.3; Master Plan, Chapter V, Appendix L; and Technical Report, 3b, Table 2-3, present projected regional roadway improvements. Master Plan, Chapter V, Section 2.6 indicates that the future roadway network used in the analysis includes those projects "...currently funded and approved or which have a high probability for completion by 2015..." Clearly, the distinction between "approved" and "planned" projects is critical to a functional definition of Adjusted Environmental Baseline. The baseline will be set much higher (and the consequent relationship of the Adjusted Environmental Baseline with the Project's impacts much lower) if all planned projects are included in addition to all approved projects.

Finally, Chapter IV of the Master Plan (Table VI-8.1, page IV-8.5) provides a "preliminary list of related projects" that differs from the list presented in Table 2.2 of the Draft EIS/EIR Traffic Technical Report, 3b. While differences are to be expected between the 1996 version of the Master Plan and the Updated 2000 version of the Traffic Technical Report, one difference may be more crucial than others - the projected size and resulting traffic impact of the Playa Vista Project. For example, according to the Master Plan, Table IV-8.1, the Playa Vista Project will contain 13,156 single-family units and 8,262 multi-family units. Master Plan, Chapter V, Appendix L, and the Draft EIS/EIR Traffic Technical Report specifies 13,085 multi-family units and no single-family units for the same Project. There is no explanation for the change, nor any reference to the source of either number. The difference is crucial because the traffic analysis assumed three people for each single-family home, and only two for each multi-family residence. The change therefore results in a significant diminution in traffic if the latter multi-family numbers are correct. Considering the potential of over 13,000 housing units for traffic generation, a complete explanation is needed to render the Draft EIS/EIR surface traffic analysis.

2. The Applicability of the Adjusted Environmental Baseline to the Draft EIS/EIR Traffic Analysis is Questionable.

As set forth above, the off airport surface traffic analysis in the Draft EIS/EIR uses the Adjusted Environmental Baseline as "the basis of comparison under CEQA for future mitigation for the three build alternatives" (Draft EIS/EIR, page 4-276). The Adjusted Environmental Baseline reflects projected conditions in the years 2005 and 2015 with off airport land use activities completed and regional circulation improvements in place, but without any increased use of the airport. This approach minimizes the potential direct impact from the adoption of the proposed Master Plan because: (1) the future traffic volumes without the Project increase thereby reducing the proportional effect of the added airport traffic from the Project and (2) additional circulation system improvements provide additional capacity. While it is reasonable to assess particular impacts at the time at which they might occur, relying on this approach requires assurances that the projected circulation improvements will actually be in place. No such assurances are provided in the Draft EIS/EIR.

The Off Airport Technical Report lists circulation system improvements that were included in the modeling process. This listing provides an indication of when certain improvements are anticipated. Without these improvements, the circulation system for the Adjusted Environmental Baseline would, apparently, be the same as for the 1996 condition, and many more intersections and roadway segments would be subject to significant adverse impacts as a result of the proposed Master Plan.

Response:

This comment is identical to comment AL00016-26. Please see to Response to Comment AL00016-26.

SAL00016-90

Comment:

It is important, therefore, that the Draft EIS/EIR traffic analysis include projected phasing of the anticipated improvements relative to the additional traffic resulting from airport use. This should include a discussion of the phasing of airport improvements as they pertain to traffic generation with respect to the circulation improvements used in the Adjusted Environmental Baseline. Limitations should be placed on airport traffic generation if anticipated circulation improvements off-airport do not occur. Once the Adjusted Environmental Baseline is accepted as accurate and the conditions to achieve it are

assured, the next issue concerns the significance of surface traffic impacts and the mitigation measures needed to reduce those impacts.

Response:

This similar to comment AL00016-27. Please see Response to Comment AL00016-27.

SAL00016-91

Comment:

B. The Direct and Cumulative Impacts of Surface Traffic Are Improperly Equated.

The surface traffic analysis uses traffic volumes from airport and non-airport projects. (See, e.g., Master Plan § 2.6.2, page V-2.279). Therefore, it is at least partially a cumulative impact analysis.⁷ Because the surface traffic analysis is based on cumulative traffic volumes, the significance of the direct impacts and the cumulative impacts are equated. However, the use of the Adjusted Environmental Baseline makes this equation between direct and indirect effects inappropriate. While comparing the Project to the adjusted future conditions may be appropriate for assessing direct impacts, the cumulative impact is the impact of all traffic relative to the existing condition, not expected future conditions as contained in the Adjusted Environmental Baseline.

The result of this improper equation of direct and indirect effects is material. The following Table (derived from Draft EIS/EIR, Table 4.3.2-24) for the a.m. peak hour illustrates the problem. The reported change in congestion between the existing conditions and Alternative C, the preferred project alternative, is often significant, while the comparison of Alternative C with the Adjusted Environmental Baseline (which incorporates future conditions) is not.

Intersection ⁸	Existing Adjusted		Alternative C		Difference	
	V/C(LOS)	V/C(LOS)	Baseline (w/mit)	V/C(LOS)	(w)	(w)
Aviation/EI Segundo	0.835(D)		1.097(F)	0.865(F)*		
Aviation/Rosecrans	1.121(F)	1.164(F)	1.171(F)	+0.050	+0.007	
Highland/Rosecrans	1.069(F)	1.211(F)	0.947(E)	-0.122	-0.264	
Sepulveda/EI Segundo	0.869(D)	1.190(F)	1.161(F)	+0.292	-0.029	
Sepulveda/Mariposa	0.730(C)		0.772(C)		0.803(D)	+0.073
Sepulveda/Rosecrans	1.220(F)	1.275(F)	1.243(F)	+0.023	-0.032	
Vista Del Mar/Grand	0.749(C)		0.918(E)	0.729(C)	-0.02	-0.189
Vista Del Mar/Imperial	0.465(A)		1.098(F)	0.903(E)	+0.438	-0.195

* Apparent error in Table 4.3.2-24 of the EIS/EIR (page 4-340)

Using this concept of the Adjusted Environmental Baseline, the result is that the cumulative impacts of the Project are often significant and not mitigated even when the Project's direct effects have been.⁹

⁷ The cumulative impact from several projects is the change in the environment which results from the incremental impact of the Project when added to other closely related past, present, and reasonably foreseeable probable future projects." (CEQA Guidelines, § 15355(b))

⁸ Change in V/C Rates of .01 defines significant impact for intersections at LOS F (Draft EIS/EIR, p. 4-291).

⁹ Note that if the comparison had been between Alternative C and the No- Project/No-Action Alternative, the difference would have been even greater, as the No- Project/No-Action Alternative provides for on-airport, potentially capacity-enhancing, improvements, but not off-airport surface traffic impact mitigation.

Response:

Please see Section 4.3.2.7 of the Supplement to the Draft EIS/EIR regarding cumulative impacts. Please also see Response to Comment AL00016-21 regarding cumulative impacts.

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SAL00016-92

Comment:

C. The Draft EIS/EIR Inadequately Documents the Northside/Westchester Southside Project.

The Draft EIS/EIR's impact analysis for off airport surface traffic is dependent upon the assumption that there will be a substantial reduction in the number of trips generated from the Northside Project. By "reconstituting" the Northside Project into the Westchester Southside Project, the Draft EIS/EIR projects that there will be a significant decrease in collateral trips with the adoption of the proposed Master Plan.

The source of the collateral trip reduction is the change in the land use for the Northside Project and Continental City Project. Attachment A of Technical Report 3b provides the basis for the reduction in collateral trips.

	AM PEAK			PM PEAK		
	Adjusted No Baseline	Alternative Project	Adjusted C	No Baseline	Alternative Project	C
Northside	0	7,217	3,922	0	7,131	4,423
Continental City	0	5,323	0	0	5,348	0
Manchester Square	0	0	212	0	0	233
Total	0	12,540	4,134	0	12,479	4,656

The issue here is the same as that concerning the Adjusted Environmental Baseline, i.e., the actions needed to insure that the reduction is achieved. The principal question is what specific discretionary actions are required to modify the allowable land uses in the Northside Project and in Continental City property, and how will compliance be assured?

The land use component of the Draft EIS/EIR and Condition LU-1 in Chapter V, Environmental Action Plan, presents a "Master Plan commitment" that:

"To the maximum extent feasible, all [Q] conditions... from the City of Los Angeles Ordinance No. 159,526 that address the Northside project area will be incorporated by LAWA into the Zoning Code Amendment and LAX Master Plan Implementing Ordinance for the Westchester Southside Project. Accepting that certain conditions may be updated, revised, or determined infeasible as a result of changes to the LAX Northside project, the final [Q] conditions for the Westchester Southside Project will ensure that the level of environmental protection afforded by the full set of LAX Northside projects [Q] conditions is maintained." (Draft EIS/EIR, Chapter V, page 5-2).

Since this traffic reduction is critical to the projected Master Plan trip generation, the detail associated with this property needs to be firmly established. It is unacceptable to assume that certain conditions may be "updated, revised or determined infeasible" if they are necessary to bring about the decrease in collateral trips upon which the Master Plan projections are based. While there are some discussions of the Northside/Westchester Southside Project in the Draft EIS/EIR's purpose and need chapter and Master Plan, Appendix Q, these are brief, general presentations lacking in specificity as to the actions needed to commit the City to limit these uses.

The importance of this lack of specificity in the definition of Project actions, as they relate to the Northside/Westchester Southside Project, is that there is no commitment by Los Angeles to insure that the traffic reduction represented by the changes in allowable land use will occur. The surface traffic capacity for the Project claimed through the reduction of traffic generation from the Westchester Southside Project is significant. Without a more adequate demonstration of the Master Plan's ability to achieve that reduction, and a concrete commitment to meeting those goals, the Draft EIS/EIR will remain inadequate.

Response:

Please see Topical Response TR-ST-7 regarding Westchester Southside traffic.

SAL00016-93**Comment:**

D. The Transportation Planning Horizon Used in the Draft EIS/EIR is Improperly Shortened So As To Minimize the Full Build Out Surface Traffic Impacts of the Project.

The Draft EIS/EIR modeled future conditions for the years 2005 and 2015. The current regional transportation plan, however, uses 2025 as the horizon year. The use of a later year between 2015 and 2025 for analysis is proper in light of the fact that the Project is anticipated to take 16 years to complete.¹⁰ If the Project commences as early as 2002, it will not be completed until 2018, three years after the 2015 horizon has expired. With the year 2013 being the second greatest peak construction year (Draft EIS/EIR, page 4-270), the proposed Master Plan improvements will not be complete by the time the present horizon year of 2015 is reached. The import of the choice of 2015 as horizon year, before the Project is completed, is that the full build-out ("worst case") impacts of the Project will remain unanalyzed.

¹⁰ The Draft EIS/EIR, Purpose and Need Section (Chapter 2, pages 2-12 through 2-13) indicates that the Project will be implemented in two phases. The first phase will last six years and the following phase 10 more years.

Response:

Please see Response to Comment AR00003-23 regarding the horizon year used in the analysis.

SAL00016-94**Comment:**

Further, while the impacts resulting from the adoption of the proposed Master Plan are generally evaluated against the Adjusted Environmental Baseline, much of the Draft EIS/EIR's discussion of surface traffic is compared to the No-Project/No-Action alternative (i.e., the alternative that assumes growth in operations and passenger demand at the Airport, along with completion of improvements already planned, but no off airport traffic or other development improvements). The comparison of the Project with two separate baselines in the years 2015 presents a misleading picture. While the reconstitution of the Northside Project may provide a reduction in the traffic generated in 2015, the existing airport improvements clearly permit growth beyond that currently possible.

Response:

This comment is identical to Comment AL00016-31. Please see to Response to Comment AL00016-31.

SAL00016-95**Comment:**

Therefore, the further into the future conditions are projected, the greater the effect of the proposed Master Plan improvements on traffic.

Response:

This comment is identical to comment AL00025-33; please refer to Response to Comment AL00025-33.

SAL00016-96**Comment:**

E. The Impacts of Construction Traffic Are Largely Ignored.

While the Project's construction will stretch over a period of 14 years, the impacts of the numerous construction vehicles that will be in use during that period remain unexplored. First, the Draft EIS/EIR

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acknowledges a volume of construction vehicles which includes 2.8 trucks per minute, 10 hours per day, 6 days per week, or 1.2 trips per minute, 20 hours per day in a 7 day work schedule (Draft EIS/EIR, page 4-319). While the Draft EIS/EIR purports to address mitigation by recommending that trucks trips be divided among four locations on the construction site, that purported mitigation does not consider the trucks' impacts on surrounding arteries even a short distance from the construction site.

Response:

This comment is identical to comment AR00003-33. Please refer to Response to Comment AR00003-33.

SAL00016-97

Comment:

Moreover, the Project will admittedly coincide with the construction of Playa Vista, located approximately 2 miles north of the airport (Draft EIS/EIR, page 4-320). The Draft EIS/EIR contains little or no analysis of the cumulative impacts of the construction of these two projects on surface traffic on surrounding arteries and the San Diego Freeway.

Response:

This comment is identical to comment AR00003-34. Please refer to Response to Comment AR00003-34.

SAL00016-98

Comment:

Moreover, the mitigation offered is slight. The Draft EIS/EIR offers to expand the "... Traffic Coordination Office..." to minimize the impacts of construction traffic (Draft EIS/EIR, page 4-320). This purported mitigation measure, even when combined with other assurances including that "construction traffic... can be managed..." (Draft EIS/EIR, page 4-320), and "traffic patterns around the airport for the general public would be largely maintained..." (Id.), does little, if anything, to assure that the manifest impacts of construction will be mitigated. The Draft EIS/EIR admits as much where it states "however, even with these commitments in place, the Project would still cause sufficient construction-related traffic to cause notable disruption of normal traffic flows near the airport." (Id.) Since construction is planned to last more than 14 years, the Draft EIS/EIR is basically stating that for that entire period, traffic is expected to be disrupted, and the Project's purported mitigation will be insufficient to restore stability.

Response:

This comment is similar to comment AR00003-35. Please refer to Response to Comment AL00003-35.

SAL00016-99

Comment:

Finally, the Draft EIS/EIR pays little or no attention to the traffic impact of vehicles used by construction workers. It states that construction employees will work in three shifts, and that the second shift will arrive before the first shift ends (Draft EIS/EIR, page 4-319). Using simple math, it appears that at some points during the day, parking would have to be provided for more than 8,000 workers when these two shifts overlap. While remote parking areas are suggested for construction employees, they are as far away as Palmdale, Van Nuys and Ontario (Id.). The likelihood of construction workers using such remote parking is slim to none. Therefore, the mitigation measure is largely useless. However, even if remote parking were utilized to any extent, the Draft EIS/EIR fails to discuss the traffic impacts of the shuttles which would bring the construction workers from these remote locations to the airport. In short, even though construction is expected to last for 14 years, the Draft EIS/EIR contains little, if any, analysis of the impacts of construction worker traffic which will take place on the entire street/freeway system 6 or 7 days a week during that period.

Response:

This comment is similar to comment AR00003-36. Please refer to Response to Comment AR00003-36.

SAL00016-100

Comment:

In summary, while "the general construction concept is to have many of the transportation improvements completed within the first five years after construction begins..." (Draft EIS/EIR, page 4-318), the LAX Expressway and northeastern portion of the ring road from the San Diego Freeway to Sepulveda Boulevard would not be available to traffic until well after the first five years (Draft EIS/EIR, Table 4.3.2-18, page 4-318). Therefore, there would be no new routes available for mitigating the above impacts during the heaviest construction period.¹¹ As a consequence of the above omissions, the Draft EIS/EIR's analysis of construction traffic impacts is materially deficient.

¹¹ The Draft EIS/EIR states that Phase 1 of the Project would be 5-6 years long and end in 2005. As the Draft EIS/EIR cannot be approved before late 2001, at the earliest, and Phase 1 of the construction could not then begin before 2002, Phase 1 could not end until at least 2007 or 2008. Similarly, Phase 2 which is estimated to extend 10 years past the completion of Phase 1, would end in 2017 not 2015, as assumed in the Draft EIS/EIR. This is important because the impacts of construction, and associated traffic, will now be extending well past the period anticipated in the Draft EIS/EIR.

Response:

This comment is similar to comment AR00003-37. Please refer to Response to Comment AR00003-37.

SAL00016-101

Comment:

F. The Draft EIS/EIR Lacks a Mitigation Monitoring Program.

The Draft EIS/EIR, Chapter V is entitled "Environmental Action Plan". It is not specific as to whether this constitutes a Mitigation Monitoring Program required by CEQA (CEQA Guidelines § 15091(d)). If it does represent a Draft Mitigation Monitoring Program, it is inadequate. The Section lacks a clear statement of the party responsible for implementing the mitigation, the mechanism for enforcement of the mitigation and the timing of implementation. Moreover, it lacks detailed explanation of the way in which the diminution of traffic from the Northside Project, as well as other surface traffic mitigation measures will be achieved.

Response:

This comment is identical to comment AR00003-24. Please see Response to Comment AR00003-24.

SAL00016-102

Comment:

III. THE DRAFT EIS/EIR NOISE ANALYSIS UNDERSTATES THE PROJECT'S AIRCRAFT NOISE IMPACTS.

A. The Draft EIS/EIR minimizes the Project's noise impacts by artificially inflating the Environmental Baseline.

As noted earlier, a threshold issue in environmental analysis is the establishment of a "baseline". The function of a "baseline" is to provide a benchmark of existing conditions against which the environmental impacts of a project may be measured. If the baseline is incorrectly designated at too high a level, the impacts of the Project will be improperly minimized. In this case, the Draft EIS/EIR utilizes three separate and distinct baselines for analyzing the impacts of the Project: (1) the Environmental Baseline (1996), i.e., the purported conditions in existence before implementation of the Project; (2) "No-Project" baseline for 2005 (and 2015) which includes "natural" growth on the airport resulting from implementation of already approved airport projects continued in the current Master Plan that purportedly would have occurred even if the Project is not implemented; and (3) Adjusted

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Environmental Baseline predicated on projected conditions in the years 2005 and 2015 with off-airport land use activities completed and regional circulation improvements in place, but without any improvement to airport facilities.

The Draft EIS/EIR chooses 1996 (i.e., the Environmental Baseline) as the base year for evaluation of aircraft noise impacts, and states that in 2015, the Project's horizon year, Alternative C "would reduce the total number of people exposed to aircraft noise above 65 CNEL compared to current conditions as represented by the Environmental Baseline year." (Draft EIS/EIR, page 4-11) By using 1996 as the benchmark, the Draft EIS/EIR's noise analysis artificially minimizes the apparent growth in noise impacts associated with the Project. This is because, in 1996, many noisy Stage 2 aircraft remained in the fleet (which were then phased out in late 1999). When the Notice of Preparation was published in July 1997, the Project proponents knew with certainty at that time that some of the noisiest aircraft in its fleet would not operate after December 31, 1999, and that the removal of these aircraft from the fleet serving the Airport would reduce the size of the airport's noise exposure contours. The Draft EIS/EIR concedes that the "reduction in noise exposure is the result of a federally mandated phase out of older, noisier Stage 2 jets," and not the implementation of the Project. Despite that fact, the Draft EIS/EIR consciously skews the analysis by using 1996 as the Base Year for its noise analysis.

The Draft EIS/EIR disregards the fleet mix changes brought about by the Stage 2 phase out. The Draft EIS/EIR's "Average Annual Day Operations and Fleet Mix - Environmental Baseline" (Draft EIS/EIR, Appendix D, page 11) includes a total of 139 noisy Stage 2 aircraft in the daily operations mix. In other words, nearly 7% of the aircraft included in the calculation of the baseline noise contour analysis are high noise producing aircraft the inclusion of which will increase the size of the baseline noise contours and, thereby minimize the apparent impacts of the Project.

Courts have displayed flexibility in dealing with cases involving complex long term environmental review. They have agreed that, for lengthy environmental review such as that at issue here, the analysis of such impacts as surface traffic (and aircraft operations) which normally fluctuate over time are properly assessed against a later baseline than the time of the publication of the Notice of Preparation. (Save our Peninsula Committee, supra, 87 Cal.App.4th at 125-126) Therefore, Project proponents are not tied to the 1996 baseline, the last full year of data before the year of Notice of Preparation Publication, but should, more properly, have used a year no earlier than 1999, the last full year of data available before publication of the Draft EIS/EIR. Moreover, that data should have been updated with available data from the year 2000. Absent such an update, the Draft EIS/EIR noise analysis is incomplete and, thus, inadequate.

Response:

The content of this comment is essentially the same as Comment AL00016-34; please see Response to Comment AL00016-34.

SAL00016-103

Comment:

B. The Draft EIS/EIR Fails to Satisfy Applicable Law Because it Improperly Analyzes the Health Effects of Aircraft Noise.

1. The Draft EIS/EIR Must Consider the Health Effects of Aircraft Noise.

The Draft EIS/EIR must fully consider all of the adverse health effects of aircraft noise. LAWA admits that its LAX Master Plan will create increased noise impacts upon the residents of the City of Inglewood. "Under Alternative C, which does not add a new runway, a decrease in noise exposure would occur in the City of El Segundo and the community of Del Aire with increases in portions of the community of Westchester and the City of Inglewood." Draft EIS/EIR Section 4.24.2 page 4-1040. There is strong scientific evidence of the adverse health effects of noise pollution on humans. Studies have shown clear health effects on animals, and these studies indicate the certainty of such effects on humans as well.

"A study sponsored by the EPA, constituting one of the most notable studies of animal noise exposure, examined cardiovascular effects of noise on monkeys. This research demonstrated that monkeys subjected to industrial noise at levels between 85 to 90 dba for several months developed significant

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elevations of systolic and diastolic blood pressure. It is particularly notable that these changes persisted long after exposure ceased, demonstrating that noise has a chronic effect on blood pressure."

Fred M. Svinth, Illingworth & Rodkin, Inc. "The Effects of LAX Aircraft Noise on Local Communities," January 2001, p. 9, attached hereto as Exhibit "I". LAWA admits that such studies exist and that noise has effects, but refused to seriously consider such reports. Instead, LAWA simply concludes that such studies are controversial and, therefore, that no in-depth analysis is required.

"Some studies suggest that there are indicators that high noise levels, particularly from aircraft, may have a detrimental effect on the cardiovascular system, mortality rates, birth defects, achievement scores, psychiatric admissions, sleep disturbance, and overall psychological well being; others show no conclusive evidence of these effects. However, the results of such studies continue to be controversial and are not accepted by the general scientific community at this time. Specifically, the scientific community has cited methodological and epidemiological problems with the studies and none of the studies has gained the universal acceptance from researchers that would allow them to be used as a basis for impact assessment."

Draft EIS/EIR Section 4.24.2 page 4-1041.

However, LAWA argues that it is impossible to "quantify" the relationship between noise and adverse human health effects. LAWA argues that no "threshold of significance" exists:

"Although there is consensus that noise has some health effects, there is no agreement as to the degree of the effects or the level at which they become significant. The scientific community and regulatory agencies have not developed numerical thresholds beyond which the health effects of noise are considered to be significant."

Draft EIS/EIR Section 4.24.2 page 4-1046.

In other words, LAWA takes the position that the absence of a specific threshold absolves it from having to address this issue in any meaningful way in the Draft EIS/EIR. Instead, LAWA focused on overall noise exposure caused by its expansion plan. "Since it is not possible to quantify noise health impacts for a population, such as the people who live in the vicinity of an airport, this analysis focused by necessity on quantifying overall noise exposure." Draft EIS/EIR Section 4.24.2 page 4-1039.

LAWA's admitted inability to fully analyze the Health Effects of Aircraft Noise itself renders the planned expansion violative of existing law. LAWA improperly fails to consider the admitted potentially significant adverse health effects of noise. "Significant and unavoidable impacts associated with aircraft noise are expected to occur. Such noise exposure is considered to pose a potential significant and unavoidable impact relative to health effects of noise, to the extent there is such a relationship between the two." Draft EIS/EIR Section 4.24.2 page 4-1050.

"The U.S. Environmental Protection Agency (USEPA) has taken the following position: 'Research implicates noise as one of several factors producing stress-related health effects such as heart disease, high blood pressure and stroke, ulcers and other digestive disorders. The relationship between noise and these effects has not yet been quantified.'"

Draft EIS/EIR Technical Report 14b. Health Effects of Noise Technical Report. No Master Plan Commitments for the health effects of noise are proposed. Draft EIS/EIR Section 4.24.2 page 4-1046. LAWA must fully examine the health effects of aircraft noise in order to fulfill the requirements of NEPA and CEQA.

Response:

The content of this comment is essentially the same as comment AL00017-52; please see Response to Comment AL00017-52.

3. Comments and Responses

SAL00016-104

Comment:

2. The Draft EIS/EIR NEEDS TO ADDRESS Aircraft Noise Interference with Classroom Activities and Sleep.

The Draft EIS/EIR fails to adequately address the interference of aircraft noise upon classroom activities and sleep. Interference with classroom activities and sleep are two of the most sensitive impacts of aircraft noise. LAWA admits the problem of interference with classroom activities, but fails to analyze this problem to the degree required under CEQA. According to LAWA:

"Interference with classroom activities and learning from aircraft noise has been the subject of much recent research. Several studies have been performed, including studies at LAX, London's Heathrow Airport, and Munich International Airport. These studies indicate that a relationship between aircraft-related noise and learning effects does exist, but that additional research is required to clarify how close the relationship is and at what noise levels the relationship appears. The relationship has been particularly difficult to document due to the confounding factors of background noise, school quality, and socioeconomic status. Additional research is being performed to try to account for these factors."

Draft EIS/EIR Section 4.24.2 page 4-1043. Similarly, LAWA admits but dismisses summarily the very real problem of sleep disturbance caused by aircraft noise. LAWA states:

"Generally, laboratory studies have shown considerably more disturbance than field studies, perhaps due to the subject's lack of familiarity with the location and experience. Sleep disturbance studies have also involved the collection of cumulative data from subjects.... A review of existing studies and literature indicates that additional research is required to clarify the relationships between aircraft-related noise and sleep disturbance."

Draft EIS/EIR Section 4.24.2 page 4-1044.

LAWA tries to minimize the sleep disturbance caused by aircraft operations at LAX. LAWA states, "LAX undertakes a different operational procedure for takeoffs and landings between midnight and 6:30 a.m. These 'over-ocean' procedures route both arrivals and departures over Santa Monica Bay, directing aircraft noise away from residential areas to the east of LAX during nighttime hours." Draft EIS/EIR Section 4.24.2 page 4-1045. However, due to constraints caused repeatedly by weather conditions, residents of Inglewood and other nearby communities are subjected to late night overflights. The Draft EIS/EIR fails to adequately analyze these issues.

Response:

Comment noted. The Supplement to the Draft EIS/EIR addressed the effects of single event aircraft noise relative to nighttime awakenings and school disruption associated with the No Action/No Project Alternative and all four build alternatives in Section 4.1, Noise, and Section 4.2, Land Use, with supporting technical data and analyses provided in Appendix S-C1 and Technical Report S-1. In addition, please see Topical Response TR-N-5 regarding nighttime aircraft operations.

SAL00016-105

Comment:

IV. THE DRAFT EIS/EIR AIR QUALITY ANALYSIS IS INADEQUATE.

The Draft EIS/EIR's air quality analysis exhibits serious deficiencies, not the least of which is the total absence of a formal air quality conformity analysis required under federal law where, as here, the Project's air quality impacts are not claimed to be insignificant (see 42 U.S.C. § 7506 12). The absence of a conformity analysis necessarily renders the following comments preliminary.

12 No department, agency, or instrumentality of the federal government shall engage in, support in any way or provide financial assistance for, license, permit or approve any activity which does not conform to an implementation plan..." (42 U.S.C. § 7506(c)(1))

Response:

Please see Response to Comment AF00001-4 regarding the general conformity determination. It should be noted that the requirement for a general conformity evaluation of the LAX Master Plan is not based on a finding of significance per se.

SAL00016-106

Comment:

A. The Baseline for the Draft EIS/EIR Air Quality Analysis is Not Appropriately Estimated.

The Draft EIS/EIR assumes that annual aircraft operations will be essentially identical regardless of whether the Preferred Alternative is implemented (Draft EIS/EIR, page ES-9). Under the No-Action/No-Project Alternative, total operations are expected to be 98 percent of operations under the preferred expanded capacity scenario (Alternative C). Furthermore, air passenger operations activity will actually be higher under the No-Action/No-Project Alternative. At the same time, the Preferred Alternative moves about 15 percent more passengers through higher aircraft load factors. Basic economic theory, however, dictates that under free market conditions, demand will reach equilibrium for a given level of supply at a certain market cost (including time costs associated with delays, congestion, etc.). If the supply curve (for air transportation) is then shifted, as would occur under an increased capacity situation such as that proposed,¹³ the supply/demand equilibrium for the same level of market cost will shift to a point of higher demand. This shift is often referred to as induced demand, and analyses which do not consider this effect (or which assume demand levels counter to market behavior as appears to be the case with the Draft EIS/EIR) are not accurate in general, or specifically with respect to future air quality conditions under any of the various alternatives. Viewed from a practical rather than theoretical perspective, the Draft EIS/EIR presumes that the Airport will support over 391,000 aircraft landing and takeoff (LTO) cycles in 2015 by doing nothing other than carrying through with those projects already adopted. Although operations without the Project would be constrained by greater delays as well as excessive times to reach the airport, the Draft EIS/EIR does not account for the discouraging effects of these delays, and assumes that under the Preferred Alternative, specifically designed to relieve these problems of congestion and delay, the total number of annual LTOs will increase by less than 2 percent (to 398,000) over the No- Action/No-Project Alternative. There are only two possible explanations for this relationship: (1) either usage under the No-Action/No-Project baseline is overstated; or (2) usage under the Preferred Alternative is understated.

¹³ The Preferred Alternative lengthens and reconfigures runways, adds a new West Terminal, and improves traffic flow.

Response:

The content of this comment is essentially the same as Comment AR00003-45; please refer to Response to Comment AR00003-45.

SAL00016-107

Comment:

Correspondingly, either emissions for the No-Action/No- Project baseline are overstated or emissions for the Preferred Alternative are understated. The result is an artificial (and erroneous) minimization of the difference in emissions between baseline conditions and those of the Project.

Response:

The content of this comment is essentially the same as comment AR00003-46; please see Response to Comment AR00003-46.

3. Comments and Responses

SAL00016-108

Comment:

This same issue affects stationary source emissions. Increased airport capacity can be expected to attract associated industrial and commercial activity into the area. This attraction would not occur without the increased capacity and, therefore, must be accounted for if a true assessment of airport emission impacts is to be determined. Note that this commercial development is distinct from currently planned commercial development, in that it occurs due to airport capacity expansion, but outside the formal planning process of the airport. One must recognize that the estimates of reduced emissions under the action alternatives (either the preferred or alternative scenarios relative to a No-Action/No-Project scenario) are due almost entirely to "flow" improvements in the form of reduced taxiway congestion and improved traffic movement both on and offsite. If these congestion reductions are eliminated or reduced through increased air travel or associated demand that is not properly accounted for in the Draft EIS/EIR, the predicted emissions impacts will not be accurate.

Response:

The content of this comment is essentially the same as comment AR00003-47; please see Response to Comment AR00003-47.

SAL00016-109

Comment:

B. Future Background Pollutant Concentrations Are Not Appropriately Estimated.

Background pollutant concentrations are required to accurately estimate the impact of the proposed Airport expansion on National Ambient Air Quality Standards/California Ambient Air Quality Standards ("NAAQS/CAAQS") compliance. These concentrations must account for the combined impacts of the universe of emission sources not explicitly accounted for in the airport analysis. In effect, the background concentrations determine the emissions baseline upon which Airport emissions are placed. If this base is underestimated, the overall affect of airport expansion on NAAQS/CAAQS compliance could be similarly understated. Alternatively, if the base is too high, the Draft EIS/EIR analysis could be conservative. While the Draft EIS/EIR presumes the latter (Draft EIS/EIR, Technical Appendix G, page 46), it contains no data to support such a conclusion and some reason to believe that the converse may be true.

Current short term (sub-annual) background concentrations for the Draft EIS/EIR are based on measurements taken at an onsite monitoring station located just east of the southern runway configuration. Current annual concentrations are based on data collected at a South Coast Air Quality Management District ("SCAQMD") monitoring facility (Hawthorne) located near, but southeast of the Airport (Draft EIS/EIR, Technical Report 4, Attachment A, page 3). On the premise that measurements from these sites inherently include emissions from the Airport, the Draft EIS/EIR concludes that such emissions represent conservative background concentration baselines for air quality analysis (since Airport emissions will be added on top of a background that already includes Airport emissions).

However, the prevailing wind direction for the Airport area is southwest to northeast (Draft EIS/EIR, Technical Report 4, Attachment A, page 3). Therefore, there is probably little influence from the Airport on the offsite concentrations used as background, as well as only moderate influence on the onsite-based background concentrations. The bulk of airport activity, including all terminal and motor vehicle operations occur under the influence of a prevailing wind plume that crosses Airport property to the north of the onsite monitoring station. While certain aircraft takeoff and queuing emissions are undoubtedly accounted for in the onsite baseline concentrations, these represent only a small fraction of overall airport emissions. Comparative data for concentrations from both monitoring stations could demonstrate the validity of the claim of conservatism, (i.e., do the observed concentrations for identical monitoring periods show a higher background at the onsite station?), but the Draft EIS/EIR apparently contains no data for the offsite monitoring station (other than the specific background concentrations used in the Draft EIS/EIR and associated documents, which are not comparable to the data for the onsite monitoring station).

3. Comments and Responses

More importantly, the emissions inventory rollback techniques used to forecast future background concentrations (Draft EIS/EIR, Technical Appendix G, pages 45-46) are of questionable validity for the Airport area. Background concentrations as well as future emission reduction influences around the Airport are constrained by geography. Since the prevailing wind flows from the southwest to the northeast, the Pacific Ocean represents a physical constraint that may significantly influence emission reduction impacts on background concentrations. In effect, the implemented rollback procedure to estimate future background concentrations reduces current background concentrations in proportion to expected regional emission inventory reductions over the same time period. Therefore, this procedure inherently assumes that inventory reductions are homogeneous throughout the region in terms of their influence on background concentrations. This is perhaps a viable assumption in instances where one part of a region has similar source characteristics with another, but the Airport region is clearly constrained to those source characteristics along the Pacific coastline to the immediate south of the Airport. It is the expected reductions from these sources in particular that should be used to adjust Airport background concentrations.

Generally background concentrations for 2005 are reduced 30 to 40 percent while concentrations for 2015 are reduced 50 to 60 percent from the current measured data (Draft EIS/EIR, Technical Report 4, Attachment A, page 4). Clearly this assumes significant emission reductions will affect coastal monitoring sites and provides substantial headroom for emissions increases within the confines of the NAAQS/CAAQS. These reductions probably represent the most significant influence on forecast pollutant concentrations in 2005 and 2015. It is critical that the propriety of the assumed background concentrations at least be supported by comparative analysis of current Airport and offsite monitoring data as well as analysis of emissions source classifications for the area immediately to the south of the Airport with the remainder of the air basin. This comparison will either provide the proper support for the currently implemented approach or suggest a more appropriate alternative.

Response:

The content of this comment is essentially the same as Comment AR00003-48. Please see Response to Comment AR00003-48.

SAL00016-110

Comment:

C. Reverse Thrust Emissions from Aircraft Are Not Included in the Draft EIS/EIR Air Quality Analysis.

The Draft EIS/EIR makes an affirmative determination not to address emissions from aircraft reverse thrust operations, ostensibly on the basis of inadequate emission factors and short usage times (Draft EIS/EIR, Technical Appendix G, page 4). Both of these claims are misleading. First, reverse thrust is essentially a high thrust operating mode and emission factors for such modes (i.e., climbout and takeoff) are readily available. Common practice is to use takeoff emission factors. Second, it is true that the time in mode for reverse thrust operations is short, however high thrust modes produce very high unit time NO_x. For example, at a commonly utilized reverse thrust mode time of 15 seconds, increased NO_x emissions would be equivalent to the NO_x produced by increasing overall takeoff time by 35 percent (0.7 minutes plus 0.25 minutes versus 0.7 minutes). Since takeoff accounts for about 35 percent of total aircraft NO_x (Draft EIS/EIR, Technical Report 4, Attachment C), the overall aircraft NO_x inventory could increase by nearly 13 percent simply due to the inclusion of reverse thrust-related emissions alone. Without some affirmative determination that such operations will be prohibited under the action alternatives, reverse thrust emissions should be included in the Draft EIS/EIR air quality analysis.

Response:

Please see Response to Comment AF00001-21 regarding the use of reverse thrust in air quality emissions estimates.

SAL00016-111

Comment:

D. The Applicability of the Construction Equipment NO_x Standard is Overstated.

3. Comments and Responses

The Draft EIS/EIR states that only construction vehicles meeting a 2.5 grams per brake horsepower-hour (g/bhp-hr) NO_x standard will be used for airport construction projects by 2005 (Draft EIS/EIR, Technical Appendix G, page 3). Furthermore, this requirement will be phased in between 2001 and 2005, beginning at 20 percent of vehicles and increasing at a rate of 20 percent per year. This "requirement" raises several concerns as it is applied to the construction equipment emissions analysis in the Draft EIS/EIR. First, the 3.0 g/bhp-hr NMHC+NO_x standard (that is the basis for the 2.5 g/bhp-hr NO_x assumption) for construction vehicles does not take effect until 2005 for 300-750 horsepower (hp) engines, 2006 and 2007 for 100-300 hp engines, or not at all for engines of other hp. Mandating this equipment for Airport work at an accelerated schedule beginning in 2001 may or may not be successful, but clearly requires some statement of commitment by the regulated parties. Voluntary, so-called "Blue Sky Series," engines can be certified by manufacturers before 2005 but there is no requirement to do so (and little incentive since these engines cannot be used in the emissions averaging programs associated with non-Blue Sky engines, averaging programs which are currently relied on by all heavy duty engine manufacturers for emissions standards compliance). In reality, construction firms will only be able to provide equipment that is available on the market and it is dubious that the number of engines meeting the suggested standard in the required years will be significant.

Second, the mandatory "clean engine" standards that do begin in 2001 require NO_x at levels around 4.0 g/bhp-hr (an exact value is not possible since the standard is again expressed as NMHC+NO_x in this case 4.8 g/bhp-hr). However, these standards also only apply to 300-750 hp equipment. While a number of construction equipment engines fall into this category, many others range from as low as 25 hp up through 300 hp. For these lower hp categories, standards do not begin until 2003 or 2004 and get progressively less stringent as engine size decreases (to 5.6 g/bhp-hr for engines below 100 hp).

Third, even if this low emissions requirement could be enforced (i.e., allow use of only new Blue Sky Series engines at the Airport), an assumption of 100 percent in-use compliance is overly optimistic. While it is not possible to say with certainty what fraction of equipment may operate at emissions levels above certification standards, experience has demonstrated that engines employing sophisticated engine management strategies and aftertreatment controls (as is expected for engines meeting these stringent standards) are subject to both malperformances and maintenance effects. For first generation engines, such problems are usually exacerbated. What can be stated with certainty is that construction emissions impacts will be larger than the level acknowledged in the Draft EIS/EIR.

Response:

The analysis completed for Alternative D utilized the CARB off-road model. All emission factors were obtained from CARB's document entitled, "Emission Inventory of Offroad, Large Compression Ignited Engines Using the New Offroad Emissions Model." A mix of off-road engines is assumed to be included in the CARB model. Further, many of the requirements will be in effect during the construction phase of this project (2005 - 2015).

Worst-case construction emission estimates were calculated by assuming that all construction equipment on-site would be idling for approximately 8.5 hours per day. As phases of construction activities could potentially overlap, emission estimates of all equipment from all phases of activities are assumed to be used simultaneously.

SAL00016-112

Comment:

E. General Emission Factors for Offroad Equipment are Understated.

In general, it appears that the emission factors employed for offroad engines, even in the absence of the 2.5 g/bhp-hr issue noted above, are significantly underestimated. This underestimation affects not just construction equipment, but both baseline and ongoing aircraft Ground Support Equipment ("GSE") operations, and results from the fact that outdated emission factor sources were utilized. The net effect is that airport emission and air quality impacts are underestimated.

Offroad engine emissions knowledge is currently in a state of rapid development and estimation techniques need to maintain currency with the latest methods. In California, this would imply use of the California Air Resources Board's ("CARB") OFFROAD emission factor model, while nationally a similar model termed NONROAD has been developed by the U.S. Environmental Protection Agency ("EPA").

While development continues on both, they clearly represent the most up-to-date compendiums of current offroad engine emissions estimation techniques. For example, these models employ the most recent emission factor test data, emissions deterioration test data, and equipment size and activity factors. References cited in the Draft EIS/EIR (Draft EIS/EIR, Technical Report 4, Attachment A), such as the EPA's AP-42 and Procedures for Emissions Inventory Preparation documents as well as the SCAQMD's CEQA Handbook, employ less developed and, in many cases, seriously outdated data.

An example of the magnitude of the emissions underestimation can be derived by comparing emission factors across the alternative methods. The Draft EIS/EIR relies on the use of the FAA's Emissions Dispersion and Modeling System ("EDMS") to generate GSE emission estimates. However, EDMS includes significantly outdated GSE emissions data.¹⁴ A quick comparison indicates that CARB OFFROAD model and EPA NONROAD model GSE (average) emission rates (for the same equipment activity distribution assumed in the EIS/EIR) are, for diesel equipment, from 7 to 13 times greater for VOC, 5 to 10 times greater for PM, 5 to 9 times greater for CO, 4 to 5 times greater for NOx, and 4 to 5 times greater for SO₂. For gasoline GSE, the models produce average emission rates 10 to 20 times greater for VOC, 1 to 6 times greater for PM, 15 to 16 times greater for CO, 6 to 9 times greater for NOx and 2 to 4 times greater for SO₂. The impact of using outdated emission rates is clearly significant and should be reevaluated if realistic air quality impacts are to be derived.

F. Ground Support Equipment Populations Are Not Appropriately Specified.

As stated above, the Draft EIS/EIR uses the FAA's EDMS model to estimate GSE emissions (Draft EIS/EIR, Technical Report 4, Attachment A). Inherent within this approach is an assumption that EDMS properly estimates GSE populations. Since the current GSE population at the Airport is known, it would be appropriate to determine whether EDMS assumptions are consistent with the Airport's actual population and use-hour statistics. This would provide support for the validity of EDMS equipment estimation algorithms and allow for a more appropriate assessment of the accuracy of the GSE emissions estimates and air quality impacts of the Draft EIS/EIR.

¹⁴ This situation may be improved in the latest version of EDMS, which was released subsequent to the completion of the Draft EIS/EIR.

Response:

The model used for this analysis is EDMS 4.11, which includes the latest GSE emission factors from the EPA's NONROAD model, which is an acceptable method for estimating emissions from GSE.

The commenter suggests the use of the "population" method (rather than the currently used "LTO" method) in EDMS 4.11 to calculate GSE emissions. Both methods are equally acceptable under FAA Air Quality analysis guidelines. The "population" method bases GSE usage on equipment surveys while the "LTO" method bases the amount of GSE usage to be proportional to the actual number of aircraft landing-takeoff operation cycles. It is believed that the "LTO" method produces a more conservative estimate of GSE emissions, especially in future years, since GSE purchases by airlines would likely lag with the growth of aircraft operations.

SAL00016-113

Comment:

G. Emissions Benefits of Conversion of GSE to Electric, Hybrid, and Alternative Fuels are Overstated.

The Draft EIS/EIR contemplates a widespread GSE replacement program under all three of the action alternatives, while retaining primarily fossil fuel powered GSE for the No-Action/No-Project Alternative (Draft EIS/EIR, Technical Report 4, Attachment L). While this could be construed as a mitigation measure and, in fact, is listed as the single most effective mitigation measure on the list of potential mitigation measures included in the Draft EIS/EIR (pages 4-514 through 4-519), it is arbitrary to apply the measure only to the action alternatives, as there are no specific constraints to such substitution today or under the No-Action/No-Project Alternative. Electric GSE is cost effective from a market standpoint today. Therefore, whatever incentive or mandate will be offered under the action alternatives to move toward electrification could just as readily apply today. Required infrastructure modifications are relatively modest, with no dependency on the expansions associated with any of the action alternatives. But by far the most troubling issue is that the replacement program already appears to be accounted for

3. Comments and Responses

in the "unmitigated" emission estimates for all three action scenarios. If this is the case, no additional emission reductions will be achieved through GSE electrification as is claimed in the proposed list of mitigation measures.

Response:

Please see Response to Comment AL00016-47 regarding the conversion of GSE to electric power.

SAL00016-114

Comment:

H. Incorrect Aircraft PM Emission Factors Are Used in the Draft EIS/EIR Air Quality Analysis.

Two issues exist with respect to the aircraft PM analysis that result in an underestimation of the Project's potential air quality impacts. First, it appears that the Draft EIS/EIR is based on the incorrect emission factors from the supporting analysis undertaken to develop those factors (Draft EIS/EIR, Technical Report 4, Attachment H). Second, it appears that the approach used to develop PM emission factors for aircraft¹⁵ produces estimates that are not consistent with previous PM emission testing results.¹⁶

Analysis of PM emission factor estimation reveals that the basic estimation approach used in the Draft EIS/EIR yields an emission factor that only considers the basic non-volatile portion of particulate. An adjustment factor (that varies with fuel sulfur content) exists and should be used to correct the estimate to total PM (Draft EIS/EIR, Technical Report 4, Attachment H). This factor is calculated to be about 2.6 for low sulfur (about 70 ppmW) jet fuel and 14.7 for high sulfur (about 675 ppmW) jet fuel.¹⁷ Since existing EPA data demonstrates that U.S. jet fuel averages about 600 ppmW sulfur, the appropriate adjustment factor for the Draft EIS/EIR would be about 13.2. However, from figures presented in the Draft EIS/EIR, it appears that the unadjusted emission factors were used for all emissions analysis. If so, PM emission impacts are significantly underestimated and should be reassessed after applying an adjustment to increase the PM emission rate by a factor of 13.

In addition there is a potential deficiency in the approach employed to estimate PM emission factor data. The underlying need for a statistical estimation technique such as that employed cannot be disputed as the available aircraft PM emissions testing database is both small and dated. However, the Draft EIS/EIR (Technical Report 4, Attachment H) statement that the age of that data renders it valueless are questionable. Engine technology has advanced relative to the engines represented in the test database, but the fundamental physical and chemical combustion characteristics that give rise to PM formation have not. The additional claim that the existing aircraft emission factors are not of value since they reflect total PM as opposed to PM-10 is also without merit. Virtually 100 percent of combustion-related PM is PM-10, so any error resulting from the substitution of total PM for PM-10 will be insignificant.

In fact, the PM emission factor estimation approach employed in the Draft EIS/EIR requires just such an assumption of equivalency between total PM and PM-10 (as stated in Technical Report 4, Attachment H).

If relationships between aircraft PM and another routinely measured pollutant can be developed for one or more of the standard aircraft operating modes, then measured values for this "independent" pollutant can be used to estimate PM emission rates in that mode (or modes). Such a statistical approach can take advantage of the limited existing PM emissions database, while at the same time recognizing the substantial progress that has been made in aircraft engine performance. It is, however, critical that such relationships consider possible operating mode-specific differences in any identified PM relationship, as engine and combustion efficiency vary substantially across modes. For example, one would expect PM emission rates to be inherently low in high efficiency (high NO_x) modes of operation since the same high temperature, high pressure conditions that give rise to high NO_x also favor more complete fuel combustion. Conversely, PM would be expected to be high in low efficiency combustion modes. In short, it should not be expected that the significance of any inter-species relationship(s) is/are invariant across the full range of operating modes.

A very strong statistical relationship between measured PM and the inverse of measured NO_x is observed in three of the four standard aircraft operating modes (approach, takeoff, and climbout), with

coefficient t-statistics all significant at 99-plus percent confidence. A strong coefficient can also be observed for the taxi mode, but it explains virtually none of the observed variation in PM and NOx (whereas variance explanatory significance exceeds 99 percent confidence for the other three modes). The magnitude of the relationship coefficients varies from 28.4 in takeoff mode to 45.0 in climbout mode, and is 33.0 in approach mode. While all three modes exhibit significant relationships, takeoff mode serves as the best basis for an overall relationship, as it statistically produces the smallest root mean square error based on regression data (an error 35 to 40 percent lower than those of climbout and approach modes). Using this takeoff mode PM-to-NOx relation as a means to estimate aircraft takeoff PM emission rates for each of the engines with NOx measurements in the overall ICAO emissions database, PM emission rates for the other three operating modes (climbout, approach, and taxi) can be developed based on observed statistical relationships between mode-specific PM and takeoff PM (i.e., PM-to-PM regressions across modes). Linear coefficients for all three modes (1.42 for climbout, 1.53 for approach, and 3.10 for taxi, all in pounds per thousand pounds fuel burned space) are significant at 99-plus percent confidence, with adjusted correlation coefficients for climbout and approach at 0.78 and 0.83 respectively. Taxi mode correlation is poor, but the PM-to-PM relation does account for observed variance at greater than 99 percent confidence.

Using existing ICAO emissions measurement statistics, this alternative approach produces PM emission rates that are 4 to 37 times higher than those used in the Draft EIS/EIR. The smallest differentials are observed at the highest thrust modes. The differentials grow with reducing thrust possibly because the Draft EIS/EIR approach does not take operating efficiency differentials between modes into consideration. Nevertheless, for a typical LTO cycle (as per Draft EIS/EIR times-in-mode), the aggregate aircraft PM emission factor will be underpredicted by a factor of 17 using the Draft EIS/EIR approach. The effect on PM air quality analyses is obvious.¹⁸

15 The International Civil Aviation Organization ("ICAO") emissions certification process for aircraft does not include PM, so alternative emission factor estimation approaches are required.

16 Adjustments not employed in the Draft EIS/EIR may compensate for most of this deficiency.

17 This calculation is based on data presented in the Draft EIS/EIR (Technical Report 4, Attachment H).

18 Interestingly, if the appropriate carbon-to-total PM emission factor correction of 13.2 is implemented as suggested in the support material for the Draft EIS/EIR (Technical Report 4, Attachment H), the bulk of the emission factor differentials between the two estimation approaches virtually disappear (i.e., a correction factor of 13 versus an underestimation factor of 17 for an aggregate LTO). Nevertheless, significant differences would still exist on a mode specific basis.

Response:

Please see Response to Comment AL00016-48 regarding PM emission factors.

SAL00016-115

Comment:

I. Aircraft SO₂ Emissions are Underpredicted.

The Draft EIS/EIR relies on version 3.2 of the EDMS model to predict aircraft SO₂ emissions (Draft EIS/EIR, Technical Appendix G, page 4). This model underestimates aircraft SO₂ emissions by a factor of two due to reliance on an incorrect AP-42 emission factor (the emission factor was developed without accounting for the factor of two ratio between SO₂ mass and fuel sulfur mass). To the extent that the Draft EIS/EIR already demonstrates potential ambient SO₂ concerns, those concerns will be exacerbated by this underprediction.

Response:

The content of this comment is essentially the same as comment AR0003-54; Please see Response to Comment AR00003-54.

SAL00016-116

Comment:

J. The Assumption of Gate-Based Power and Air for All Aircraft is Questionable.

3. Comments and Responses

The Draft EIS/EIR assumes that 100 percent of air carrier gate power and conditioned air needs will be satisfied by gate-based electrically powered systems as opposed to fossil fuel powered auxiliary power units (APU) or GSE (Draft EIS/EIR, Technical Appendix G, page 10). Experience has shown that even under conditions where gate-based equipment is available, not all airlines or aircraft will utilize it consistently. This seems to be especially true for quick-turnaround airlines such as Southwest. Although the assumption of 100 percent availability and usage affects the no action and action scenarios equally, it is important from an ambient air quality perspective to account for the full range of expected emissions. Without some definitive airport policy that gate-based systems (both power and air) be used and that any on-board APU be shut down until needed for main engine startup, the Draft EIS/EIR would present a more realistic assessment of aircraft emissions if it adjusted the percentage of gate-based system usage to match currently observed use rates at the Airport.

K. APU Emission Factors for SO₂ and PM Not Considered.

APU emission factors for both SO₂ and PM are assumed to be zero. This results from deficiencies in the EDMS model and should be corrected to properly estimate aircraft-related air quality impacts. SO₂ emissions are a function of fuel sulfur content, so that emission rates can be readily calculated and applied. APU PM emission rates can be developed using the same methodology applied to main aircraft engines. The potential impacts of this deficiency would be magnified were the Draft EIS/EIR to properly attribute some fraction of gate power and air support to APU.

Response:

The content of this comment is essentially the same as comment AR00003-55; please see Response to Comment AR00003-55.

SAL00016-117

Comment:

L. Aircraft Taxi Times are Not Included in the Draft EIS/EIR or Supporting Data.

Aircraft taxi-idle times are not included in the Draft EIS/EIR, its technical appendices or supporting documentation.¹⁹ It can be deduced from the included emissions estimates for aircraft taxiing that those emissions decrease substantially under the action scenarios, but the actual times should be included to allow the public an opportunity to better evaluate their propriety. In addition, the ability of SIMMOD to accurately estimate aircraft taxi times must be demonstrated by comparing SIMMOD predictions for current conditions at the Airport to observed taxi times at the Airport. The issue of aircraft taxi times is critical. The bulk of Aircraft VOC and CO emissions are generated during taxiing. In addition, although NO_x emission rates are low during taxiing, the amount of time spent in taxi mode results in a significant taxi contribution to overall NO_x emissions. Most critically, it is expected that virtually all of the aircraft emissions differential between the project baseline and the project alternatives is due to assumed reductions in aircraft idle time. Clearly, it is important that taxi times be accurately modeled. However, sufficient information is not included in the Draft EIS/EIR to determine that accurate modeling was performed.

¹⁹ The Draft EIS/EIR contains references to the development of the taxi/idle times using SIMMOD, but no actual indications of what those times were.

Response:

The content of this comment is essentially the same as comment AR00003-56; please see Response to Comment AR00003-56.

SAL00016-118

Comment:

M. The Project's Conformity Cannot Be Determined from Data and Analysis Contained in the Draft EIS/EIR.

Even without consideration of the various issues noted above, the Draft EIS/EIR presents several air quality concerns relative to the NAAQS/CAAQS under the Preferred Alternative. Although a series of

mitigation measures are discussed and preliminary emission reduction estimates presented, these estimates are not documented and therefore, the calculation methodologies cannot be evaluated. The Draft EIS/EIR defers formal review of potential mitigation measures until a Final EIS/EIR is developed (Draft EIS/EIR, page 4-459). Similarly, the Draft EIS/EIR acknowledges the applicability of federal conformity requirements, but defers both the conformity analysis and a proposed conformity determination to the Final EIS/EIR (Draft EIS/EIR, page 4-460). Unfortunately, such an approach makes it impossible to comment constructively on either potential emission mitigation measures or the conformity process, since these processes will be released for comment only after the underlying decision-making has been finalized.

Response:

The Supplement to the Draft EIS/EIR provided an enhanced discussion of air quality mitigation measures in subsection 4.6.8 and in Appendix S-E Section 2.3. Please see to Response to Comment AF00001-4 regarding the general conformity determination.

SAL00016-119

Comment:

N. The Draft EIS/EIR Fails to Satisfy Applicable Law Because it Does Not Adequately Address the Impact of Toxic Air Pollutants.

1. The Draft EIS/EIR Lacks A Proper Baseline Regarding Air Toxics.

The Draft EIS/EIR does not contain a proper baseline for air toxics emissions from LAX and LAX-related sources. As a result, it does not adequately address the effects of toxic air pollutants upon human health, including the health of the residents of the City of Inglewood.

CEQA requires that an EIR includes a description of the environment in and around the project at the time of the Notice of Preparation. CEQA Guidelines §15125(a). Such a description, or baseline, serves as the basis for the EIR's analysis of the environmental impacts of a project. CEQA also requires that detailed analysis of the potential environmental impacts from each of the projects contained in the aviation alternatives cannot be deferred to subsequent environmental documents. Public Resources Code § 21100; Stanislaus Natural Heritage Project v. County of Stanislaus (1996) 48 Cal.App.4th 182. The Draft EIS/EIR does not contain an adequate basis from which to determine the current impact on human health of air toxics emitted by LAX. "The HHRA did not evaluate impacts of toxic air pollutants associated with current airport operations." Calkins Phase I Report, p. 8. As noted by Mr. Calkins, this oversight means that LAWA does not provide a sufficient baseline from which to draw later conclusions. Without a baseline, LAWA cannot adequately assess the environmental effects of its plans to expand LAX.

Response:

Please see Topical Response TR-HRA-1 regarding the baseline used for the human health risk assessment included in Section 4.24.1 of the Draft EIS/EIR and Supplement to the Draft EIS/EIR. In accordance with CEQA guidelines the Draft EIS/EIR uses the date of July 1997, the date on which the Notice of Preparation (NOP) was published, as the baseline for its environmental analysis. The environmental baseline used in the Human Health Risk Assessment of the Draft EIS/EIR reflects historical airport activity for the full year 1996 and the physical facilities of the airport as they existed in 1997. For a discussion of baseline conditions associated with LAX operations please refer to Section 4.6, Air Quality, of the Supplement to the Draft EIS/EIR, Section 3.3, Emissions Estimates for TAPs, of Technical Report 14a and Attachment F of that Technical Report, which is the Air Quality Modeling Protocol for Toxic Air Pollutants, LAX Master Plan EIS/EIR (Attachment F). The use of an earlier rather than later baseline date generally results in a more conservative environmental analysis. This conservatism is due to the steadily increasing number of passengers and cargo that use LAX, and the correspondingly greater levels of traffic and congestion-related air pollution. By using earlier years for baseline environmental conditions, impacts associated with future activity levels are measured against lower levels of airport activity and therefore incremental impacts are greater.

Data representative of more current airport operations (Year 2000) were available for the Supplement to the Draft EIS/EIR and air toxic-related risks were estimated under Year 2000 conditions as a basis for comparison to air toxic-related risks estimated using the 1996 baseline presented in the Draft EIS/EIR.

3. Comments and Responses

Due to the decrease in air travel following terrorist actions in September 2001, the data for 2001 was not representative of typical or expected conditions, and, therefore, were not used.

SAL00016-120

Comment:

2. LAWA Failed To Properly Study Toxic Air Emissions.

The Draft EIS/EIR does not properly study toxic air emissions related to LAX. LAWA's Health Risk and AirToxics evaluation is deficient due to the failure to organize and complete a study, such as the Air Quality and Source Apportionment Study, prior to the release of the Draft EIR/EIS. The Air Quality and Source Apportionment Study are not yet complete. This study will shed important information on the health impacts to the surrounding community as well as identify mitigation measures. It will also determine the contribution of various airport-related activities on selected air pollutant concentrations in relation to those pollutants caused by other, non-airport sources in the surrounding community without the Source Apportionment study. LAWA cannot assess the incremental impact of LAX operations on local air quality. Therefore, LAWA has failed to investigate this area fully before preparing the Draft EIS/EIR. A prudent course of action would be to place any LAX expansion plans on hold until completion of this study. This would allow proper consideration of the serious human health issues addressed in this study. Without this study, the Draft EIS/EIR will not withstand scrutiny under CEQA and NEPA.

Response:

Please see Topical Response TR-AQ-2 regarding the LAX Ambient Air Quality and Source Apportionment Study. In addition, please also see Topical Response TR-HRA-1 regarding the baseline used for the human health risk assessment included in Section 4.24.1 of the Draft EIS/EIR and Supplement to the Draft EIS/EIR and TR-HRA-4 concerning human health mitigation strategies.

SAL00016-121

Comment:

3. LAWA's Health Risk Assessment Does Not Adequately Factor Time as a Variable.

The Health Risk Assessment in the Draft EIS/EIR should be extended to consider a longer time period. There do not appear to be any tables or data in the Draft EIS/EIR on cancer and non-cancer health risks for any year after 2015. However, the operation of the expanded airport during those latter years may well have continuing impacts on the residents of the surrounding communities. Health impacts are often seen in the resident population over a much longer time span than the 15-20 years assessed in the Draft EIS/EIR tables. Other major planning assessments, such as the RTP (2025) and the AQMP (2030), examine impacts of their action over a much longer time frame. Calkins Phase II Report p. 22. The Health Risk Assessment in the Draft EIS/EIR should be extended to conform to this model.

Response:

The content of this comment is identical to comment AL00017-30; please refer to Response to Comment AL00017-30.

SAL00016-122

Comment:

4. LAWA's Study Of Air Pollutants Fails to Consider Relevant Issues.

It is unclear in the Draft EIS/EIR what LAWA's criteria are for determining net change in chronic and acute hazard indices for air pollutants. LAWA does not include the criteria pollutants in this analysis, and this is a critical, indeed fatal, omission. The results of the Source Apportionment study, which was only recently initiated, would have provided valuable input to assessing criteria (NAAQS) as well as various toxic air pollutant impacts on health, if it were available to the LAWA at the time of preparation of the Draft EIS/EIR.

Response:

Regarding criteria for determining the net change in chronic and acute hazard indices, please refer to Response to Comment AL00017-31. The Draft EIS/EIR and Supplement to the Draft EIS/EIR address criteria pollutants in Section 4.6, Air Quality, separate from the analysis of TAPs in Section 4.24.1, Human Health Risk Assessment. Regarding potential impacts of interaction between TAPs and criteria pollutants, please refer to Response to Comment AF00001-38. Please refer to Topical Response TR-HRA-1, regarding the use of the Source Apportionment study to assess criteria pollutants and toxic air pollutants.

SAL00016-123

Comment:

The Draft EIS/EIR also appears to ignore the incremental cancer and non-cancer risks to people who do not "receive a certain hazard level criterion." Calkins Phase II Report p. 22. These issues must be addressed and resolved in the Draft EIS/EIR.

Response:

The content of this comment is identical to comment AL00017-32; please refer to Response to Comment AL00017-32.

SAL00016-124

Comment:

V. THE DRAFT EIS/EIR DOES NOT MEET THE REQUIREMENTS FOR ALTERNATIVES ANALYSIS OF EITHER CEQA OR NEPA.

A. The Draft EIS/EIR Alternatives Analysis Does Not Conform to the Requirements of CEQA.

The LAX Master Plan and Draft EIS/EIR fail to conform to CEQA because they do not properly consider alternatives to expansion at LAX. Proposals that entail expansion at other airports instead of LAX should have been analyzed and considered. Instead of considering only three "build" alternatives, each of which called for massive expansion of LAX (in comparison to a flawed No Action/No Project Alternative), LAWA and the FAA should have considered alternatives that included expansion and/or construction at Ontario Airport, El Toro Marine Corps Air Station, Palmdale Airport and March Air Force Base.

In discussing alternative locations for a project, the CEQA Guidelines state, "The key question and first step in analysis is whether any of the significant effects on the project would be avoided or substantially lessened by putting the project in another location." CEQA Guidelines § 15126.6(f)(2). The CEQA Guidelines further state:

"An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. The range of alternatives required in an EIR is governed by a 'rule of reason' that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project."

CEQA Guidelines § § 15126.6(a), (f).

According to LAWA, its "preferred" alternative, Alternative "C", causes fewer substantial impacts to the environment surrounding LAX than its other alternatives, "A" and "B." However, the impacts that it does cause are substantial. Moreover, the analysis does not consider whether any of the significant effects of the project would be avoided or substantially lessened by putting the project in another location, as required by CEQA Guidelines, Section 15126.6(f)(2) cited above. The CEQA Guidelines state that alternatives that cause less environmental harm must be considered. Accordingly, inasmuch as the

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Draft EIS/EIR fails to consider another location, i.e., Ontario, Palmdale, El Toro, etc., the Draft EIS/EIR fails to follow the CEQA Guidelines.

Feasible alternatives to massive expansion of LAX do exist. The Guidelines set forth a number of factors to consider when determining whether or not an alternative is feasible.

"Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries (projects with a regionally significant impact should consider the regional context), and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent)."

CEQA Guidelines section 15126.6.

Considering these feasibility factors in connection with expansion at LAX illustrates why the LAX Master Plan and the Draft EIS/EIR are not consistent with CEQA. LAX is located in the midst of a heavily populated residential area. The area is not well suited for the airport operations that currently exist, let alone massive expansion. LAX is economically viable, but expansion of LAX offers little, if any, additional economic benefit regionally when compared to other expansion scenarios considered by the planning body for Southern California, the Southern California Association of Governments ("SCAG"). "Southern California Aviation Industry Impact Analysis," CIC Research, Inc., July 11, 2000, p. v, attached hereto as Exhibit "C". The LAX Master Plan contemplates massive construction at LAX because, as it stands today, the infrastructure at LAX is not sufficient to handle the expanded operations in the plan. In reality, however, this places LAX in a similar position to that of every other airport in the area. If LAX is to expand, massive construction will have to take place. The LAX Master Plan is simply not consistent with other plans, in particular SCAG's 2001 Regional Transportation Plan ("RTP") (see below for further discussion) and the 1999 and 2001 Air Quality Maintenance Plan's ("AQMP's"). Lastly, the LAX Master Plan virtually ignores the regional approach to airport expansion, by failing to fully analyze any alternative that does not call for massive expansion at LAX. Given the fact that LAWA owns several of the other airports in the region meets or exceeds the feasibility of expansion of LAX, when considering the factors mandated by CEQA.

Response:

The content of this comment is essentially the same as comments AL00017-13 through AL00017-15; please see Response to Comment AL00017-13 regarding the range of alternatives analyzed, Response to Comment AL00017-14 regarding economic benefits, and Response to Comment AL00017-15 regarding the regional approach and Alternative D.

SAL00016-125

Comment:

B. The Draft EIS/EIR's Alternatives Fail to Satisfy the "Purpose and Need" for the Project.

The mandate to evaluate and compare alternatives is the "heart" of an EIS (CEQ Guidelines, § 1502.14). FAA Order 1050.1D, paragraph 63, implementing NEPA, mandates that an EIS "shall briefly specify the underlying purpose and need to which the agency is responding in proposing the alternatives including the proposed action." The FAA Order further requires that the EIS Alternatives analysis include a rigorous exploration and objective evaluation of all reasonable alternatives. Courts have concluded that to be reasonable, the suggested alternatives must meet the goals of the proposed action.²⁰

The Draft EIS/EIR's alternatives analysis fails to meet the stated goals of the Project. The Draft EIS/EIR states that the general "[p]urpose and objectives of the Master Plan are to provide... sufficient airport capacity for passengers and freight in the Los Angeles region to sustain and advance the economic growth and vitality of the Los Angeles region." (Draft EIS/EIR, volume 1, pg. 2-1) More specifically, the Draft EIS/EIR outlines three objectives which the Project needs to satisfy: (1) "to respond to the local and regional demand for air transportation during the period 2000 to 2015, taking into consideration the amount, type, location, and timing of such demand"; (2) "to ensure that new investments in airport capacity are efficient and cost-effective, maximizing the return on existing infrastructure capital"; and (3)

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"to sustain and advance the international trade component of the regional economy and the international commercial gateway role of Los Angeles."21

20 See, generally, *City of Carmel-By-The-Sea v. United States DOT*, 123 F.3d 1142 (1997); *National Wildlife Federation v. Federal Energy Regulatory Commission*, 912 F.2d 1471 (1990).
21 *Id.*

Response:

This comment is the same as Comment AL00016-53; please see Response to Comment AL00016-53.

SAL00016-126

Comment:

It is not clear, however, that the proposed runway improvements that form an integral part of Alternative C, the Preferred Alternative, constitute a superior, or even an efficient way to accomplish the Project's stated purposes. For example, all three of the Project's objectives could potentially be, at least partially, achieved through airspace/air traffic modifications, both within the terminal airspace and in the en route system. This alternative is neither acknowledged nor explored in the Draft EIS/EIR. Nevertheless, this conclusion is supported by the fact that the Dual Civet arrival configuration has reduced arrival delay for operations from the east significantly since 1998 and has resulted in an average time-savings of 4.4 minutes per Civet turbojet arrival aircraft. In fact, since the Dual Civet arrival procedures were implemented, there have been no national delay programs set up for the Airport, since delay has not been an issue. However, the Draft EIS/EIR does neither addresses nor incorporates the capacity or delay reduction efficiencies gained through this procedure in any of its modeling.22

22 Where the Master Plan does address air traffic procedures, it is in error. The Master Plan states that the Departure Sequencing Program (DSP), a program that provides the capability to sequence departures from Los Angeles basin airports, would enhance capacity at the Airport. (Master Plan, § 2.6.1.3, page II-2.137) However, the DSP program has been cancelled by the FAA due to a lack of benefit. Essentially, the Southern California TRACON consolidation effort occurred many years ago and the references to it in the Master Plan and the Draft EIS/EIR are outdated. Many innovations and changes in airspace and procedures at the TRACON over the past few years have occurred, and none are referenced or adequately considered in the Draft EIS/EIR. Basically, the Draft EIS/EIR does not address the changes in airspace design or the new routes that have been developed as a result of airspace enhancements in Southern California.

Response:

Please see Response to Comment AL00016-54.

SAL00016-127

Comment:

Moreover, a closer examination of the Master Plan and the Draft EIS/EIR reveals that the Draft EIS/EIR may have ignored relatively inexpensive improvements in air traffic procedures in favor of very expensive, physical changes to the airfield. This is apparently because the Project's true purpose does not include the first two claimed in the Draft EIS/EIR, i.e., the broad ones of providing "sufficient airport capacity for passengers and freight in the Los Angeles region" (Draft EIS/EIR, Volume 1, page 2-1), in an "efficient and cost effective" way (Draft EIS/EIR, page 2-1). Instead, the Project's principal purpose is the narrow and singular one of accommodating "New Large Aircraft" ("NLA") that, with their long haul capabilities, would potentially serve the Airport in order to "sustain and advance the international trade component of the regional economy." (Draft EIS/EIR, page 2-1)23

This conclusion is substantiated by the fact that the current aircraft fleet does not require 12,000 feet of runway to take off. Even today's heavy aircraft such as the B-747-400 and the B-777-400 only need 8,000 - 10,000 feet of runway for take-off and landing (under the weather conditions prevailing at the Airport). The Airport's existing runways are 8,295- feet, 10,285-feet, 12,091-feet, and 11,096-feet in

3. Comments and Responses

length. Thus, even the shortest runway at the Airport can accommodate the heaviest and largest aircraft in the fleet under prevailing circumstances today.

The result of the Draft EIS/EIR's failure to acknowledge the Project's primary purpose, i.e., to increase the proportion of super long-haul aircraft in the fleet, is a concomitant failure to analyze the full range and magnitude of environmental impacts that may arise from the desired change in fleet mix. While it is, as yet, early in the NLA development process, some technical facts about the aircraft are already known, sufficient to make at least some educated projections concerning its impact. For instance, ascertaining the projected climb rate will enable an estimate of whether the NLA can meet current airport noise abatement operational requirements; or whether those will have to be altered; or whether the NLA will, ultimately, overfly noise sensitive communities at lower (or higher) altitudes, resulting in higher (or lower) noise levels over those communities. Similarly, preliminary data concerning engine type and emissions characteristics would enable at least a preliminary analysis of the air quality impact of the NLA, as well as the GSE needed to support it, if different from those categories already in use. Finally, the Draft EIS/EIR should have included the capacity/delay impacts from the increased use of NLA. As the Draft EIS/EIR fails to model ground operations in detail, the delay impacts that may result are not considered in developing an accurate analysis of arrival and departure flows and the congestion which may ensue even after Project implementation.

23 The Draft EIS/EIR comes close to admitting as much: "Development of NLA aircraft is driven by increasing demand and constrained international gateway airports around the world, including LAX ... Development of the NLA will allow these airports to continue to meet the growing demand for travel between primary trading partners. As one of the three major (and busiest) gateway airports in the nation, LAX would be one of the first airports to be served by NLA." (Draft EIS/EIR, page 2-11)

Response:

The content of this comment is essentially the same as Comment AR00003-60; please refer to Response to Comment AR00003-60.

SAL00016-128

Comment:

In summary, because the alternatives analysis is the "heart" of the NEPA process; because the Draft EIS/EIR fails to consider, or analyze, the impacts of eminently reasonable alternatives such as airspace changes to meet the Project's stated purposes; because Alternative C does not alone meet the Project's stated purposes; and because the most significant result of implementing Alternative C, the increased capacity to accommodate NLAs, remains unanalyzed from an environmental perspective, the Draft EIS/EIR's alternatives analysis is seriously flawed.

Response:

The comment is the same as Comment AL00016-56; please see Response to Comment AL00016-56.

SAL00016-129

Comment:

VI. THE LAX MASTER PLAN AND DRAFT EIS/EIR FAIL TO SATISFY APPLICABLE LAW BECAUSE THEY DO NOT CONFORM TO OTHER RELEVANT PLANS.

Federal regulations require that all airport development conform to local plans. The FAA's Airport Environmental Handbook clearly states that any airport plan must conform to the local air emissions plans:

"Section 176(c) of the Clean Air Act Amendments of 1977 states in part that no Federal agency shall engage in, support in any way or provide financial assistance for, license or permit, or approve any activity which does not conform to a State Implementation Plan after it has been approved or promulgated under section 110 of that Act. It is FAA's responsibility to assure that Federal airport actions conform to state Plans for controlling area wide air pollution impacts."

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Airport Environmental Handbook, Chapter 5, p. 12. In addition, the Airport Environmental Handbook states that the 1982 Airport Act requires that Airport Improvement Program applications for projects involving airport location, runway location, or a major runway extension shall not be approved unless the governor of the state in which the project is located certifies that there is a "reasonable assurance" that the project will be located, designed, constructed, and operated in compliance with applicable air and water quality standards. Airport Environmental Handbook Chapter 5 p. 14. Finally, the FAA's Airport Environmental Handbook states that all airport development must conform to local plans:

"For all airport development there shall be evidence to support the following Airport Improvement Program grant assurances as required by the 1982 Airport Act.

(a) The project is reasonably consistent with existing plans of public agencies for development of the area (section 509(b)(1)(A));

(b) Fair consideration has been given to the interest of communities in or near the project location (section 509(b)(4)); ...

(d) Appropriate air and water quality certificates have been or will be obtained for projects involving airport location, runway location, or a major runway extension (section 509(b)(7))."

Airport Environmental Handbook, Chapter 9, p. 3.

The LAX Master Plan and Draft EIS/EIR fail to conform to two key local plans. How the Master Plan and EIS/EIR fail to conform is discussed in the two paragraphs that immediately follow. However, it should be noted as an initial point that since the Master Plan and EIS/EIR fail to conform to two key local plans, they violate Section (a) referred to immediately above.

First, the LAX Master plan fails to conform to the relevant Air Quality Maintenance Plan. Mr. David Calkins, an expert in air emissions planning and compliance issues, reviewed the LAX Master Plan and Draft EIS/EIR. His reports are attached hereto as Exhibits "E" and "F". In his report, Mr. Calkins states, "Review of Chapter 4.6 found several inconsistencies in LAWA's reference to the conformity and SIP planning process." Calkins Phase I Report, p. 11.

Second, Mr. Calkins has found that the Draft EIS/EIR fails to conform to the Regional Transportation Plan ("RTP") in at least eight different ways. These differences are discussed in detail below. In addition to the Federal law requirements discussed above, under CEQA an EIR must discuss any inconsistencies between the proposed project and applicable general plans and regional plans. CEQA Guidelines § 15125(d). The Draft EIS/EIR fails to meet these requirements.

Response:

Please see Responses to Comments AL00017-19 through AL00017-27.

SAL00016-130

Comment:

A. The LAX Master Plan Fails to Conform to the Air Quality Maintenance Plan.

The LAX Master Plan does not conform to the local air pollution reduction plan. Southern California is designated a "non-attainment area"²⁴ under the 1990 Clean Air Act.

Therefore all major projects must be constructed with assurance to the Federal Government that the project fits into the current air pollution reduction plan, known as the Air Quality Maintenance Plan ("AQMP"). See Calkins Phase II Report pp. 11-12. Mr. Calkins has determined that the LAX Master Plan Draft EIS/EIR fails to conform to the relevant AQMP in regards to the following:

1. Emission Inventory - the 2001 AQMP, currently in development, will require changes to the Draft EIS/EIR's emission inventory.

2. Mitigation Measures - LAWA's failure to commit to specific mitigation measures in the Draft EIS/EIR inhibits development of the 2001 AQMP.

3. Comments and Responses

3. Baseline Issues - use of the "adjusted" environmental baseline for off-airport traffic impacts does not allow comparison of the Draft EIS/EIR alternatives with current conditions, but actually compares the alternatives to a future condition.

4. Aircraft Mix - the Draft EIS/EIR assumes an aircraft mix of mostly jumbo airliners, in conflict with the adopted 2001 RTP calculations, which will cause differences in projected emissions between the Draft EIS/EIR and the AQMP.

5. Stationary Source Emissions - LAWA's alternatives do not take into account the increase in nearby, off-airport stationary source emissions, despite LAWA's assertions to the contrary; thus, it cannot conform to the regional plan.

6. Ground Support Equipment - LAWA failed to follow the California Air Resources Board's ("CARB") latest off-road emission model when concluding that emissions for future Ground Support Equipment would be zero.

Calkins Phase II Report at 13-14. These are serious conformance problems that must be first detailed, then remedied by LAWA before any action can be taken on the LAX Master Plan or its Draft EIS/EIR.

24 A "non-attainment area" has monitored air pollution levels in excess of the National Ambient Air Quality Standards ("NAAQS").

Response:

The content of this comment is essentially the same as comment AL00017-19; please refer to Response to Comment AL00017-19.

SAL00016-131

Comment:

B. The LAX Master Plan Fails to Conform to SCAG's 2001 Regional Transportation Plan.

The LAX Master Plan does not conform to the local Regional Transportation Plan ("RTP"). The Southern California Association of Governments ("SCAG") is the main planning body for Southern California. At least every three years, SCAG adopts a RTP for the area, which sets forth its plan for the foreseeable future, usually 25 years. SCAG adopted a new RTP in April 2001. This RTP replaced SCAG's previous plan, which was adopted in 1998. The Final RTP has not yet been formally released, but its contents in most areas relevant to LAX are known.

As discussed in the Calkins Phase II Report, attached as Exhibit F, the LAX Master Plan Draft EIS/EIR fails to conform to the RTP as follows:

1. Projected Passenger Load - the LAX Master Plan Draft EIS/EIR projects LAX handling over 92 million annual passengers ("MAP") in 2015; the RTP limits LAX to handling what is considered to be its current physical capacity of 78 MAP.

2. On-Road Emissions Factors - The Draft EIS/EIR utilizes EMFAC2000, but the RTP uses emission factors based upon EMFAC7G. This inconsistency makes it quite difficult to compare the air quality impacts of the Draft EIS/EIR upon the RTP.

3. Different Model Years - The Draft EIS/EIR models years 2005 and 2015, but the RTP models 2025 as its model year.

4. Market Incentives - There are significant differences between the two plans in choice of market incentives, which causes potential conflicts between the two plans.

5. Aircraft and Passenger Characteristics - These differ in regards to projected aircraft types and passenger growth during the relevant periods.

6. Cargo Handling Projections - The Draft EIS/EIR projects much larger cargo handling for LAX than that planned for in the RTP.

7. High Speed Rail Projections - The Draft EIS/EIR rejects this project as too speculative, but the RTP bases projections on passenger and cargo demand in part upon the inclusion of this transportation mode.

Response:

Please see Response to Comment PC02223-12 regarding conforming to the 2001 RTP.

SAL00016-132

Comment:

8. Funding Projections - The RTP does not include the Ring Road, 105 Freeway extension, or 405 Freeway Connector Projects in its funding projections. The Draft EIS/EIR plans for funding of all these projects, presumably from Federal Highway funds.

Calkins Phase II Report at pp. 9-10.

Response:

This comment is similar to comment AL00017-26. Please see Response to Comment AL00017-26.

SAL00016-133

Comment:

LAWA's failure to even discuss these issues is a serious deficiency in the Draft EIS/EIR. The Draft EIS/EIR cannot be acted upon until it is modified to conform to the RTP, assuming that is possible to do without simply scratching the entire analysis and starting over. If it is possible to salvage some small part of the plan, such as the mitigation measures, then the Draft EIS/EIR must be reissued for public comment.²⁵

²⁵ When new significant information becomes available after the public review period, Public Resources Code Section 21092.1 and CEQA Guidelines Section 15088.5 required re-circulation of an EIR prior to certification.

Response:

This comment is the same as Comment AL00017-27; please see Response to Comment AL00017-27.

SAL00016-134

Comment:

VII. THE DRAFT EIS/EIR DOES NOT ADEQUATELY SPECIFY MITIGATION MEASURES OR METHODS TO ENFORCE THEM.

CEQA requires that agencies identify the environmental impacts of a project, and implement mitigation measures to lessen the adverse environmental impacts. (CEQA Guidelines §15002 (a)(3)). However, the Draft EIS/EIR fails to comply with CEQA by (1) failing to provide a complete list of mitigation measures, and (2) failing to specify, at a minimum, a Draft Mitigation Monitoring Program to inform the public of how the project proponents intend to ensure the implementation of mitigation measures.

Response:

Please see Response to Comment AR00003-63.

3. Comments and Responses

SAL00016-135

Comment:

A. The Draft EIS/EIR Delays Disclosure of the Full List of Mitigation Measures Until the Final EIS/EIR.

CEQA Guidelines §15126.4(a)(1)(B) mandates that the "[f]ormulation of mitigation measures should not be deferred until some further time." While the Draft EIS/EIR acknowledges the existence of significant unmitigable impacts, it also states that, "A final package of design features, Master Plan Commitments, and Mitigation Measures will be developed ... The resulting Environmental Action Plan will be published in the Final EIS/EIR." (Draft EIS/EIR, Executive Summary, pg. ES-30) By deferring to the Final EIS/EIR to reveal the mitigation measures, the public's opportunity comment will have been attenuated.

Response:

Please see Response to Comment AR00003-63.

SAL00016-136

Comment:

B. The Draft EIS/EIR Fails to Provide a Draft Mitigation Monitoring Program.

California Public Resources Code §21081.6 requires that a public agency "adopt a reporting or monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment. The reporting or monitoring program shall be designed to ensure compliance during project implementation." (Cal. Pub. Resources Code §21081.6 (a)(1)). If an EIR "identifies one or more significant environmental effects of the project," CEQA Guidelines §15091(a) requires an agency to "make one or more written findings for each of those significant effects, accompanied by a brief explanation of the rationale for each finding." With these findings, the CEQA Guidelines mandate that "the agency shall also adopt a program for reporting on or monitoring the changes which it has either required in the project or made a condition of approval to avoid or substantially lessen significant environmental effects. These measures must be fully enforceable through permit conditions, agreements, or other measures." (CEQA §15091(d))

The Draft EIS/EIR violates CEQA Guidelines §1509(d) and California Public Resources Code § 21081.6 in that it fails to set forth a program that monitors or reports on each mitigation measure. Although the Draft EIS/EIR cites some mitigation measures to combat the environmental impacts of the Project, it makes no mention of the "permit conditions, agreements, or other measures" (CEQA Guidelines § 15091(d)) which would ensure compliance with mitigation measures. In other words, it does not specify the steps necessary to ensure compliance, the responsible party to ensure compliance, or the resulting consequences should compliance not occur.

Response:

Please see Response to Comment AR00003-63 regarding the mitigation monitoring and reporting program.

SAL00016-137

Comment:

VIII. THE UNRELATED ISSUE OF "SAFETY" SHOULD NOT BE USED AS A SMOKE SCREEN TO PUSH THE CAPACITY-DRIVEN DRAFT EIS/EIR FORWARD.

In recent public statements, the FAA and LAWA have introduced the notion that because of its high number of runway incursions, the Airport is unsafe, and that the Project's "improvements" are critical to remedying the adverse safety conditions.

Contrary to the FAA's contention, however, runway incursions are largely a function of pilot or air traffic controller error, not airport layout and design.²⁶

In fact, the Airport can eliminate runway incursions only if it builds runways with no entrances and no exits. However, simple solutions such as enhanced marking and lighting for runways, increased awareness and training for pilots and controllers, improvements in communications and procedures, and resolving management issues at the FAA²⁷ are all basic and available measures that should be implemented at the Airport. In addition, affordable incursion-reducing technologies currently available to the Airport such as the Airport Movement Area Safety System (presently in use at the San Francisco International Airport), which uses radar to alert controllers to potential collisions, would minimize the problem as well.²⁸ In fact, even the FAA has even pressed the need for instituting technological improvements at airports to combat the runway incursion issue. ²⁹

While recent incidents have made runway incursions a "hot button" in the eyes of the public, Congress, and aviation organizations, this recently surfaced "safety" issue cannot serve as justification for a project which otherwise fails to meet environmental standards.

26 A pilot might enter a runway without proper authorization or clearance; a pilot is unfamiliar with an airport, does not hear an instruction, or fails to acknowledge an instruction to hold short of an active runway; a pilot, when approaching an active runway, crosses the hold line for that runway; a controller may clear an aircraft onto an active runway without ensuring that there are no other aircraft operating on that runway; the controller may fail to coordinate an aircraft crossing a runway with the controller who has the responsibility for approving all operations on that runway; a controller may clear an aircraft to cross a runway and the pilot may take an excessive amount of time crossing and may interfere with another aircraft; and the controller may fail to exercise the proper oversight of the operation and allow two aircraft to occupy an active runway resulting in a runway incursion.

27 Transportation Department Inspector General Kenneth M. Mead recently told a House subcommittee that the "FAA's director of runway safety has little authority over FAA employees who work on runway safety projects. Result: Almost every FAA runway safety project runs years late at more than double the anticipated cost, often failing to meet original expectations." The Washington Post Company, "Runway Alert", page A22, July 7, 2001.

28 "It's the first surface detection equipment that really gives an alert to the controller and allows the controller to prevent a collision." CNN, "Close Calls on Runways Alarm Aviation Experts", June 27, 2001.

29 The Director of the FAA's Runway Safety Office, Mr. Bill Davis, expressed that "he needs additional authority to coordinate and speed up technological improvements." The Washington Post Company, "Runway Alert", page A22, July 7, 2001.

Response:

The content of this comment is essentially the same as AR00003-65; please see Response to Comment AR00003-65.

SAL00016-138

Comment:

IX. THE DRAFT EIS/EIR IS INSUFFICIENT AS A MATTER OF LAW BECAUSE IT DOES NOT SATISFY ENVIRONMENTAL JUSTICE REQUIREMENTS.

A. The Master Plan and EIS/EIR Unfairly Burden the Minority and Lower-Income Communities Surrounding LAX in Violation of Federal and California Law.

Federal law requires that each federal agency "make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse health or environmental effects of its programs, policies, and activities on minority populations and low-income populations." Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations" (Executive Order 12898, February 11, 1994). Environmental Justice is also a requirement of California law. Cal. Pub. Res. Code §72000-72001. Under California law Environmental Justice means "the fair treatment of all people of all races, cultures, and incomes with respect to the development, adoption, implementation and enforcement of environmental laws, regulations, and policies." Cal. Pub. Res. Code § 72001. The California Environmental Protection Agency is charged with the responsibility to "[P]romote enforcement of all health and environmental statutes within its

3. Comments and Responses

jurisdiction in a manner that ensures the fair treatment of people of all races, cultures, and income levels, including minority populations and low-income populations of the state." Cal. Pub. Res. Code §72000(b). These requirements imposed on LAWA the responsibility to consider the impacts of LAX expansion on lower income and minority communities.

Response:

LAWA has fully evaluated environmental justice issues pursuant to relevant requirements and guidance. The Draft EIS/EIR and Supplement to the Draft EIS/EIR addressed environmental justice, including relevant regulatory requirements and guidance, in Section 4.4.3, Environmental Justice, with supporting technical data and analyses provided in Appendix F of the Draft EIS/EIR and Appendix S-D of the Supplement to the Draft EIS/EIR.

SAL00016-139

Comment:

Several of the communities surrounding LAX, and to the east of LAX, in particular, contain predominantly minority populations and lower income populations. The Draft EIS/EIR contains a demographic analysis of the communities surrounding LAX that will be impacted by the LAX Master Plan. LAWA analyzed seventy census tracts, comprising parts of the City of Los Angeles, El Segundo, Inglewood, Hawthorne, and unincorporated areas of Los Angeles County. Draft EIS/EIR, Appendix F, Environmental Justice Technical Report, pp. 5-6. Fifty-four of the seventy census tracts within the study area are considered to be predominantly minority. A tract is so defined when more than fifty percent of the population is minority. *Id.* at 10.

Similarly, thirty-three of the seventy census tracts within the Impact Study Area are considered to be low-income. Low-income is defined as having more than 15% of the resident population below the poverty level. *Id.* Thirty-two of the thirty-three census tracts identified as low-income are predominantly minority. *Id.* at 15.

LAWA's analysis shows that the distribution of minority and non-minority populations may cause differential impacts between these two groups:

"This data reveals a readily discernible pattern of minority and low-income communities in the areas surrounding LAX. While the areas to the north and south of LAX are predominantly non-minority, the area east of I-405 within the study area is predominantly minority. Furthermore, within these areas east of I-405 minority populations are heavily concentrated: 39 of the 70 minority census tracts with the study area have minority percentages greater than 90 percent. The uneven distribution of minorities throughout the study area, as evidenced by the data showing that most census tracts have less than 20 percent or greater than 90 percent minorities, increased the potential for differential impacts on minorities and non-minorities."

Id.

Response:

Comment noted. Also see Section 4.4.3, Environmental Justice and Appendix S-D of the Supplement to the Draft EIS/EIR which contain new information and analysis, including demographics for Year 2000 conditions.

SAL00016-140

Comment:

Minority and low-income populations are and have been disproportionately burdened by the impacts of LAX long before the massive expansion planned under the LAX Master Plan:

"[M]inority and low-income residential communities within the study area are currently concentrated east of LAX, separated from the airport by predominantly commercial and industrial airport-related land uses and the I-405 freeway. In contrast, residential areas of El Segundo and Playa Del Rey/Westchester, to

the immediate north and south of the airport, do not have high concentrations of minority and low-income populations. LAX has always had an east-west runway configuration to take advantage of the prevailing wind pattern and to maximize efficient use of airspace. The combination of the long-standing runway orientation and more recent changes in the demographic patterns in the area around LAX means that minority and low-income residential communities are directly under the primary arrival flight path. The primary impacts on minority and low-income communities from current airport operations are therefore most associated with aircraft noise and air emissions. While residential areas of El Segundo and Playa Del Rey/Westchester directly adjacent to the airport are also exposed to high levels of side-line noise, the areas of exposure are much smaller in comparison to the noise-impacted residential communities to the east."

Id. at 16.

Response:

Comment noted.

SAL00016-141

Comment:

Inglewood is one of the predominantly minority communities located east of LAX which receives a disproportionate share of the impacts of LAX. Inglewood's population is 46.4% African-American, 46% Hispanic, 4.1% White, 1.6% Multi-racial, 1.1% Asian, 0.3% Pacific Islander, 0.2% Native American, and 0.2% Other. California Department of Finance, Demographic Research Unit, California State Census Data Center, Census 2000, "Table Two, Population by Race/Ethnicity, Incorporated Cities by County, p. 5, attached hereto as Exhibit "A". In addition, a large percentage of the low-income census tracts in LAWA's study area are located in Inglewood. Draft EIS/EIR, Appendix F, Environmental Justice Technical Report, Figure 3, "Low-Income Census Tracts Within the Study Area."

Response:

Comment noted.

SAL00016-142

Comment:

LAWA's plan for massive expansion of LAX unfairly burdens the minority and lower-income communities surrounding LAX. LAWA failed to consider alternatives that would have shifted burdens away from minority or low-income populations, or that would at least have distributed the burdens and benefits of expansion more equitably. Instead of planning for massive expansion of LAX, LAWA should have considered alternatives to massive expansion of LAX.

Response:

As indicated in Chapter 3, Alternatives, of the Supplement to the Draft EIS/EIR, Alternative D was formulated in response to the strongly expressed desire of many citizens, as indicated in comments on the Draft EIS/EIR, that LAWA limit activity at LAX in favor of a more regional approach to airport planning in Southern California. This desire was in large part based on the goal of more equitably distributing environmental impacts associated with air travel, and reducing potential future effects on communities surrounding LAX, including disproportionate adverse effects on minority and low-income communities. Alternative D has substantially reduced environmental effects compared to earlier alternatives in direct support of the primary goal of an alternatives analysis under CEQA. Alternative D has the fewest overall impacts of the build alternatives and less impact on minority and low-income communities. As further described on page 4-175, in Section 4.2, Land Use, of the Supplement to the Draft EIS/EIR, relating to aircraft noise, implementation of Alternative D would result in fewer overall individuals exposed to high noise levels than would occur if the project were not approved, as represented by the No Action/No Project Alternative. It should also be noted that the airport's disproportionate effects on communities to the east are largely due to the airport's long-standing runway orientation, which distributes much of the aircraft noise over the ocean, but consequently affects communities to the east more than those to the north and south. Accordingly, increases in aircraft activity at LAX, due to its physical layout, preclude a completely equitable distribution of impacts among

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the communities surrounding LAX. However, all feasible mitigation measures to address disproportionately high and adverse effects on minority and low-income populations have been identified and are presented along with offsetting benefits in Section 4.4.3, Environmental Justice (subsection 4.4.3.7), of the Final EIS/EIR.

SAL00016-143

Comment:

LAWA admits that its Master Plan for expansion of LAX imposes a disproportionate burden of noise impacts upon persons of color and/or low income, and that it does not know if the Plan also imposes a disproportionate burden of toxic air emissions on those same groups. LAX Master Plan Draft EIS/EIR, Chapter 4.4.3 Environmental Justice, p. 4-395. As discussed in the report of Dale Hattis, PhD., attached hereto as Exhibit "B," if LAWA had chosen to seriously consider alternatives that did not include massive expansion at LAX, LAWA would have been able to consider alternatives that would reduce the human health risk overall and spread the environmental burden more equitably among the general population of Southern California. Hattis Report p. 3. Dr. Hattis observes:

"The framing of the options for analysis in the current draft is exclusively focused on engineering changes. Future "demand" for air services is estimated from a single set of assumptions about future population and economic growth in Southern California, and future national average costs of air travel in revenue per seat-mile, and then "build" options are designed to meet this projected "demand" either in full or in part. There is no apparent recognition or analysis of the possibility that at least some of the growth in "demand" for air services could be shifted to outlying airports downwind of major population concentrations (or out of the South Coast Air Basin entirely, in the case of connecting flights) by changes in economic pricing such as airport user fees. Such economic measures might not completely avoid the need to expand capacity at LAX, but they seem worthy of explicit consideration at least as supplements to the existing engineering options..."

Hattis Report p. 3.

For these reasons, LAWA should have considered alternatives to massive expansion of LAX. Dr. Hattis notes three specific reasons why such an analysis of alternatives should take place: (1) User fees, in addition to re-directing demand, could be used for mitigation measures; (2) This approach would allow LAWA to slow growth at LAX, which would allow expansion at a much slower pace, which, in turn, will reduce congestion and, therefore, the significant impacts on the environment from construction; and (3) without such fees the real beneficiaries could be the airlines rather than the flying public. Hattis Report p. 3. LAWA should immediately and seriously consider other alternatives and analyze them to the same degree that it analyzed Alternatives A, B, and C in its current Master Plan. Anything less fails to adequately address Environmental Justice, as required by law.

Response:

Subsequent to the publication of the Draft EIS/EIR, a new alternative, Alternative D - Enhanced Safety and Security Plan, was added to the range of alternatives currently being considered for the LAX Master Plan. That alternative was evaluated in the Supplement to the Draft EIS/EIR. Alternative D, developed pursuant to the direction of Mayor Hahn, provides an emphasis on safety and security improvements and is designed to serve a future (2015) airport activity level comparable to that of the No Action/No Project Alternative. The Alternative D approach of not expanding the capacity of LAX is consistent with the SCAG Regional Transportation Plan (RTP) policy framework, which is intended to accommodate future regional aviation demand at airports other than LAX. As further described in TR-EJ-3, Alternative D would also be consistent with the stated RTP desire to address disproportionately high and adverse aircraft noise impacts by distributing growth regionally and limiting growth at LAX. A description of Alternative D was provided in Chapter 3, Alternatives, of the Supplement to the Draft EIS/EIR. For additional information, please see Topical Response TR-MP-2 and Topical Response TR-EJ-3, regarding the SCAG Regional Transportation Plan and Topical Response TR-RC-1 regarding the LAX Master Plan role in the regional approach to meeting demand.

SAL00016-144

Comment:

B. The EIS/EIR Fails to Disclose LAWA's Economic Gain from the Proposed Expansion at the Expense of Surrounding Minority and Low Income Populations.

The LAX Master Plan Draft EIS/EIR fails to disclose the increased revenues that LAWA and the City of Los Angeles expect from the massive expansion plan, or that it comes at the expense of local low income and minority communities. As Dr. Hattis notes:

"[T]here are some glaring omissions of important effects from the economic impact analysis. Economic impacts are assessed in terms of changes in employment, and overall economic activity, for the South Coast as a whole, Los Angeles County, and the City of Los Angeles. Changes in on-airport employment are also described, as are the expected capital costs of the various policy options. Unaccountably, there does not seem to be any readily locatable presentation of expected effects on operating revenues and costs for the major economic actors that are directly affected by the proposed project LAWA itself, the City of Los Angeles as owner and taxing authority, and the airlines. Projections of these expected impacts must exist. Moreover, they are highly relevant to judgments of the equity (fairness) of the distribution of expected good and bad effects on the different policy options for different groups, including an expanded Environmental Justice analysis."

Hattis Report p. 6.

Response:

LAX is a public use airport. Rates and charges are imposed to cover the cost of maintaining and upgrading the facility for public use. LAX is a public entity not a "for profit" entity. It is an agency of the City and any "economic gain" in the form of increased revenue must be utilized for airport purposes.

Although benefits may be taken into account in making findings regarding a project's potential for disproportionately high and adverse environmental and health effects pursuant to U.S. Department of Transportation Order 5610.2, there is no legal requirement under NEPA or CEQA for economic benefits, or for benefits to be proportionate to environmental burdens. The primary focus of the EIS/EIR under NEPA and CEQA is to disclose and mitigate physical impacts on the environment. Regarding firm commitments, the mitigation measures and benefits set forth in Section 4.4.4, Environmental Justice (subsection 4.4.3.7), of this Final EIS/EIR, will be conditions of project approval implemented pursuant to a Mitigation Monitoring and Reporting Program.

Also note, as described in Section 4.4.3, Environmental Justice, of the Supplement to the Draft EIS/EIR, that activity levels and resulting aircraft noise and related effects under Alternative D would be generally equivalent to what would occur if the project were not approved, as represented under the No Action/No Project Alternative. Alternative D cannot be accurately characterized as a "massive expansion plan." Accordingly, the revenues that would be derived from Alternative D, in light of its limited increase in activity and design and construction costs, are expected to be modest.

SAL00016-145

Comment:

LAWA and the City of Los Angeles stand to reap tremendous financial benefits from LAX expansion. Since these benefits are not specified, the comparative benefit to local low income and minority communities - or the lack thereof - cannot be and has not been evaluated. LAWA must disclose these figures for a meaningful analysis of the relative benefits and burdens to be considered.

Response:

Please see Response to Comment SAL00016-144 above.

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SAL00016-146

Comment:

C. The Master Plan Creates a Disproportionate And Unfair Distribution of Incremental an Total Direct Job Impacts.

The LAX Master Plan does not fairly distribute new jobs among local minority and low- income communities. According to LAWA's own economic analysis, cities in the "Primary LAX Area" (El Segundo, Hawthorne, Inglewood, Del Aire and Lennox) receive only 3.8% of the incremental "direct jobs" at LAX due to expansion. LAX Master Plan Draft EIS/EIR, Economic Impacts Technical Report, Table 46, "Distribution of Incremental Direct Job Impacts of the LAX Master Plan Alternatives, By County and City, 1996-2015", p. 95. This same area also receives only 3.4% of the total direct job impacts from LAX in 2015. LAX Master Plan Draft EIS/EIR, Economic Impacts Technical Report, Table 47, "Distribution of Total Direct Job Impacts of the LAX Master Plan Alternatives, By County and City, 2015," p. 96. Compared to the year 1996, the City of Inglewood shows a net increase of only 489 jobs in "LAX- Related Employment" if LAWA adopts Alternative C. LAX Master Plan Draft EIS/EIR, Economic Impacts Technical Report, Table 48, "LAX-Related Employment in the South Bay and North Bay Cities and Communities For the LAX Master Plan EIS/EIR Alternatives, 1996, 2005, and 2015," p. 97. Conversely, the environmental burdens of LAX fall most directly upon those living in its immediate vicinity, like Inglewood. LAWA should make firm commitments to take all reasonably practical steps to ensure that a proportionate share of the economic benefits of LAX also reach those communities. Under the LAX Master Plan, according to LAWA's own jobs projections, that does not occur.

Response:

The LAX Master Plan does not unfairly distribute jobs. The distribution of jobs presented in the LAX Master Plan Draft EIS/EIR, Economic Impacts Technical Report, is based on a regional economic model that translates passenger and cargo activity to jobs among 17 different manufacturing sectors and a variety of airline industry, government, and tourism-related sectors. The geographic distribution is based on patterns that reflect where these industries are located. The decline in jobs over the planning period is not a product of the alternative but rather results from productivity increases (greater economic output per worker) that overwhelm net additional jobs associated with Alternative D. This loss of jobs would occur independent of the LAX Master Plan. LAWA has made firm commitments and taken reasonable steps to ensure that economic benefits accrue to those who are most affected by the airport as feasible and within funding and legal limits. Please see Section 4.4.3, Environmental Justice (subsection 4.4.3.7), of the Final EIS/EIR.

SAL00016-147

Comment:

D. The Economic Benefits Of The LAX Master Plan Are Not Proportionate to the Environmental Burdens it Imposes on Surrounding Minority and Low Income Communities.

LAWA should share the economic benefits that flow from LAX with the surrounding communities to the same degree that the environmental burdens are borne by those communities. Offsetting environmental burdens with economic benefits is an important part of Environmental Justice: "In making determinations regarding disproportionately high and adverse effects ... mitigation and enhancement measures ... and all offsetting benefits to the affected minority may be taken into account." Department of Transportation Order 5610.2 -Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, April 15, 1997. Firm commitments in this regard should be made by LAWA in the Draft EIS/EIR.

Response:

Please see Response to Comment SAL00016-144 above. Also note that there is no legal requirement under NEPA or CEQA to provide economic benefits, or for benefits to be proportionate to environmental burdens. Regarding firm commitments, the mitigation measures and benefits set forth in Section 4.4.3, Environmental Justice (subsection 4.4.3.7), of this Final EIS/EIR, will be conditions of project approval implemented pursuant to a Mitigation Monitoring and Reporting Program. Furthermore, while LAWA will investigate and pursue environmental justice benefits as feasible and allowable by law, implementation

of any programs or measures is dependent upon LAWA's ability to utilize airport revenue funding, or other state or federal funding sources for such implementation.

SAL00016-148

Comment:

For example, regarding increased cargo capacity at LAX, the Draft EIS/EIR states:

"It is possible that some of the increased demand [for cargo handling] could be met nearby in Inglewood where the City's General Plan indicates a priority for expanding existing industrial firms and providing increased employment opportunities while mitigating residential areas significantly impacted by aircraft noise."

Draft EIS/EIR "Induced Socio-Economic Impacts," Section 4.5, page 4-446.

Although it acknowledges the potential symbiosis of cargo expansion for LAWA and Inglewood, the Draft EIS/EIR fails to incorporate a reasonable and proportionate distribution of the economic benefits of LAX expansion. If the burdens of LAX expansion are to be thrust upon the City of Inglewood, fair treatment requires that efforts be made to direct potential benefits to the communities impacted by those effects - effects that are significant and cannot and will not be mitigated. The proposed redevelopment along Century Boulevard is a good first step in this direction; however, more needs to be done. LAWA should make concrete commitments to address this issue, and its failure to do so renders the EIS/EIR insufficient as a matter of law.

Response:

Regarding increased cargo capacity at LAX and concrete commitments to address disproportionate effects, see Section 4.4.3, Environmental Justice (subsection 4.4.3.7), of the Supplement to the Draft EIS/EIR and note that mitigation measure MM-RBR-2, supports employment and economic growth in the City of Inglewood. Also, regarding concrete commitments, this measure along with the other measures presented in Section 4.4.3, Environmental Justice (subsection 4.4.3.7), of this Final EIS/EIR, will be firm conditions of project approval implemented pursuant to a Mitigation Monitoring and Reporting Program. Furthermore, regarding first steps and concrete commitments, the MOU between LAWA and the City of Inglewood and the programs provided therein, should be acknowledged.

SAL00016-149

Comment:

X. THE DRAFT EIS/EIR FAILS TO SATISFY APPLICABLE LAW BECAUSE IT IMPROPERLY MEASURES HUMAN HEALTH RISKS.

A. LAWA's Study does not Adequately Factor Time as a Variable.

LAWA analyzes environmental health impacts for two years - 2005 and 2015; however, the environmental health impacts will occur over time. Accordingly, LAWA's analysis inaccurately minimizes certain risks and fails to consider numerous cumulative impacts.

Further, as noted by Dr. Hattis, "2005 does not represent even the peak year for construction-related impacts." Hattis Report p.4. In fact, emissions of particulate matter in year 2004 are expected to be more than twice those in 2005 (approximately 44,000 lbs/day versus 19,000 lbs/day). For a proper analysis, LAWA should "analyze and express impacts in terms of both peak-year and integrated bottom-line measures of effect over a reasonably foreseeable extended time over which the facilities will be built and operated." Hattis Report p. 4.

Response:

The content of this comment is identical to comment AL00017-33; please refer to Response to Comment AL00017-33.

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SAL00016-150

Comment:

B. The Draft EIS/EIR Fails to Adequately Delineate Health Risks.

The increased health risks associated with the LAX Master Plan should be set forth with more clarity and specificity in the Draft EIS/EIR. Impacts are expressed primarily in terms of "significance" of effects for the most exposed individual, or, when considering certain carcinogenic effects, in terms of the areas or numbers of people exposed to concentrations expected to exceed a 1/100,000 lifetime incremental cancer risk criterion or an unusual criterion for non-cancer effects of a hazard index of 5. Hattis Report p. 4. However, the usual criterion used in many impact assessments under other environmental statutes, including Superfund, is a hazard index of 1.5. 30 Id. Dr. Hattis notes:

"These ways of expressing health impact results are of some relevance because they help the audience judge the fairness of the burden of extra risk imposed for residents of the areas most affected by the project options. However, exclusive definition of impacts in terms of the area or number of people who receive an increment of risk or (for non-carcinogenic agents) exposure to pollutants from LAX-related sources alone that is deemed to exceed a single bright line of 'significance' ignores the incremental cancer and non-cancer risks to people who do not happen to be moved across such a criterion level. Further, these ways of summarizing impacts can not, by themselves, give decision-makers and the public a sufficient description of the overall health impacts to arrive at a reasoned judgment of whether the mix of economic, human health, and environmental impacts of the proposed "build" option is more desirable overall than the comparable impacts of other options. The current analysis of economic activity describes projected aggregate changes in jobs and overall economic activity for the City of Los Angeles, Los Angeles County, and the whole Southern California area. To be comparable with these aggregate economic impacts, aggregate measures of health impacts must be created and the current artificial limitation of the study area for quantifying air pollution impacts must be transcended."

Hattis Report pp. 4-5.

30 The difference between a hazard index of 1 and 5 is fivefold in the toxicity-weighted concentrations of the pollutants covered by the index in terms of risk. The fraction of people who suffer irritation and other non-cancer effects is likely to be larger than fivefold, depending on the shape of the dose response relationship.

Response:

The content of this comment is identical to comment AL00017-34; please refer to Response to Comment AL00017-34.

SAL00016-151

Comment:

Decision-makers and the public should be informed of the differences among options in overall cases of cancer that are expected to arise over the lifetimes of the individuals exposed over particular periods of construction and operation of the proposed facilities. This should be done for the entire geographic area of the South Coast Air Basin that receives incremental changes in exposures. Hattis Report p. 5. Human health impacts can and should be expressed in aggregate incremental cancer cases, aggregate incremental deaths, aggregate incremental hospitalizations and aggregate incremental asthma effects for the entire Los Angeles basin associated with the LAX Master Plan. Hattis Report p. 5. These calculations are certainly feasible and would inform the decision makers and the public of the true human health effects of the project. Until this is done, the document is deficient in addressing this topic.

C. The Draft EIS/EIR Fails to Consider Health Risks on a Regional Basis.

The Draft EIS/EIR's human health risk assessment should study risks created by the Master Plan in the entire Southern California region, not simply in those areas immediately surrounding LAX. Failure to so

conceals the advantages in terms of health risks from expanding other airports instead of LAX As Dr. Hattis notes:

"Were the analysis expanded to include some options shifting additional air service to outlying airports (as recommended above), continued use of the more localized health impact analysis method would cause analysts to miss important benefits that would accrue from placing emissions downwind rather than upwind of the major population centers of the Los Angeles area."

Hattis Report p. 5. Restricting the environmental impact analyses to the immediate LAX area and the options considered only to expansion of LAX prevents considering the relative burdens of LAX expansion on minority and lower-income communities versus expansion of air service at other airports. The City of Inglewood appears to be substantially included in the existing boundaries of the air dispersion modeling study, but it is important to have impacts broken down by various political jurisdictions covering the most affected communities. Hattis Report pp. 5-6. LAWA's current approach on this risk assessment fails to fully capture all relevant data.

Response:

The content of this comment is essentially the same as comment AL00017-35; please see Response to Comment AL00017-35.

SAL00016-152

Comment:

D. LAWA Failed to Conduct a Sensitivity Analysis of Its Human Health Risk Assessment.

LAWA failed to conduct a sensitivity analysis of its health risk assessment. This failure means that the health risk assessment does not attempt to assess and communicate uncertainties in a quantitative way. Whether through sensitivity analysis, or use of a more sophisticated model, such analysis can be and is used to inform interested parties of the uncertainties in key results. Hattis Report p. 6. One aspect of the modeling that needs such analysis is the assumed behavior responses of airlines to increasing delays as the intensity of usage of airport facilities increases. Id. This variable affects "capacity" calculations, emissions estimates and economic results. LAWA should perform such sensitivity analysis of its methods and conclusions.

Response:

The content of this comment is essentially the same as comment AL00017-36; please see Response to Comment AL00017-36.

SAL00016-153

Comment:

XI. CONCLUSIONS.

Based on the above analyses, the Draft EIS/EIR does not serve its most fundamental purpose as an "environmental alarm bell" to "alert the public and responsible officials to environmental changes before they have reached ecological points of no return." (See, e.g., County of Inyo v. Yorty, 32 Cal.App.3d 795, 810 (1993).) Among other things, the varying baselines, selectively applied to areas of potential impact so as to artificially diminish the apparent impacts of the Project; and the lack of consideration of imminently reasonable alternatives, including air traffic alternatives, to the expenditure of billions of dollars in what are ultimately only marginally effective airfield improvements, require substantial analytic revisions to the Draft EIS/EIR. Absent further revision of the analyses set forth in the Draft EIS/EIR as set forth above (Center Sensible Planning, Inc. v. Board of Supervisors, 122 Cal.App.3d 813, 822 (1981), the public will have been denied its statutorily mandated opportunity to test, assess and evaluate the new data and conclusions contained in the Draft EIS/EIR, and to make informed judgments as to their validity, in direct contravention of CEQA requirements.

3. Comments and Responses

Response:

This comment is essentially the same as Comment AL00025-67. As indicated in the response to that comment, please see the individual comments and related responses for Comment Letter AL00025, which pertain to the conclusions stated by the commentor.

SAL00017 None Provided Inglewood Unified School 11/6/2003
District

SAL00017-1

Comment:

Although the Inglewood Unified School District has undertaken the task of providing this Response, it believes it to be procedurally incorrect and financially unfair for a school district of extremely encumbered financial resources to be burdened with the costs of conducting the initial research and analysis required to be in the SEIS/EIR but omitted.

Response:

Comment noted.

SAL00017-2

Comment:

To the extent new facts and issues are raised in the SEIS/EIR, the Inglewood Unified School District provides its Response below. To the extent that the SEIS/EIR relies upon or is consistent with the Original EIS/EIR, the Inglewood Unified School District incorporates its September 21, 2001 Response and Comments by reference herein. This Response also incorporates the exhibits from the September 21, 2001 Response, and continues numbering the exhibits from that document.

Response:

Comment noted. The Inglewood School District's September 21, 2001 comment letter on the Draft EIS/EIR is identified as comment letter AL00035. For responses to these comments, please see responses to comment letter AL00035. For responses to the Inglewood School District's comments on the Supplement to the Draft EIS/EIR, please see Responses to Comments below.

SAL00017-3

Comment:

Based upon its review and analysis of the Original EIS/EIR and the SEIS/EIR, the Inglewood Unified School District respectfully submits the EIS/EIR fails to satisfy the requirements of either CEQA or NEPA. Accordingly, the Inglewood Unified School District respectfully requests LAWA substantially revise its EIS/EIR to: (1) include additional alternatives that address LAWA's new paramount safety and security objectives; (2) specifically address the impacts of the Alternative D discussed herein, as well as the other alternatives contained in the Original EIS/EIR; and (3) provide for proposed mitigation at Inglewood Unified School District schools for the benefit of the disproportionately affected children in attendance.

Response:

Comment noted. Please see Responses to Comments below.

SAL00017-4

Comment:

DISCUSSION PART ONE

THE ENVIRONMENTAL JUSTICE ANALYSIS OF THE SUPPLEMENT TO THE DRAFT EIS/EIR VIOLATES CEQA

All of the alternatives presented by LAWA in its EIS/EIR, including Alternative D presented in the SEIS/EIR, disproportionately impact minorities. The students of the Inglewood Unified School District receive an unfair share of the burdens of Alternative D, including educational and health impairments.

Response:

While it is true that all of the build alternatives affect minority and low-income communities, largely relating to aircraft noise, there are substantial variations in the magnitude of these effects. The effects are largely due to the airports long-standing runway orientation, which distributes much of the airports noise over the ocean, but consequently affects communities to the east more than those to the north and south. Alternative D has the fewest overall impacts of the build alternatives and less impact on minority and low-income communities. Regarding disproportionate noise effects on schools that could impair education, see Section 4.4.3, Environmental Justice (subsection 4.4.3.5.1.2), of the Supplement to the Draft EIS/EIR. Regarding potential disproportionate effects on human health related to minority communities, see Section 4.4.3, Environmental Justice (subsection 4.4.3.5.3), of the Supplement to the Draft EIS/EIR. Please see Topical Response TR-EJ-1 regarding potential air quality and health risk impacts on low-income and minority communities.

SAL00017-5

Comment:

1. The SEIS/EIR Is Bound by Environmental Justice Considerations.

LAWA is mandated by federal and state law to identify and address environmental justice issues in its environmental review. Executive Order 12898 requires that each federal agency "make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse health or environmental effects of its programs, policies, and activities on minority populations and low-income populations." ("Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," Executive Order 12898, February 11, 1994, Exhibit 15.)

State law similarly requires consideration of environmental justice issues in environmental impact reports. (California Public Resources Code § 71110 et seq.) The California Environmental Protection Agency is obligated to "[p]romote enforcement of all health and environmental statutes within its jurisdiction in a manner that ensures the fair treatment of people of all races, cultures, and income levels, including minority populations and low-income populations of the state." (California Public Resources Code § 71110(b).)

Thus, the SEIS/EIR must (1) identify disproportionate, adverse environmental and health effects on minority and low income populations and (2) present mitigation measures to alleviate the unfair effects of its project alternatives upon minority and low income populations.

Response:

The Draft EIS/EIR and Supplement to the Draft EIS/EIR addressed environmental justice pursuant to federal and state law in Section 4.4.3, Environmental Justice. Supporting technical data and analyses are provided in Appendix F of the Draft EIS/EIR and Appendix S-D of the Supplement to the Draft EIS/EIR.

SAL00017-6

Comment:

2. Alternative D Unfairly and Disproportionately Burdens Minority Schools.

The Southern California Association of Governments concluded in its 2001 Regional Transportation Plan, "...limiting further expansion of LAX is the best possible Plan outcome from an environmental justice perspective. This is due to the relatively high concentration of low-income and minority populations in the vicinity of LAX."

3. Comments and Responses

The SEIS/EIR admits the following:

"Effects on public schools associated with aircraft noise exposure would fall on schools that are located predominantly within minority and/or low-income communities... [U]nder Alternative D, three public schools would be newly exposed to 65 CNEL or greater aircraft noise levels or exposed to an increase of 1.5 dBA or greater within the 65 CNEL contour by 2015. These schools (Beulah Payne Elementary School, Hillcrest Continuation School, and Inglewood High School) are all within minority and/or low-income areas and are within the Inglewood Unified School District. Furthermore, based on a supplemental analysis of classroom disruption ..., three public schools (Beulah Payne Elementary School, Inglewood High School, and Morningside High School) would be exposed to noise levels that could be disruptive to classroom activities which are similarly located within minority and/or low-income areas and are within the Inglewood Unified School District. Therefore, Alternative D would have a disproportionate effect on minority and/or low-income communities with regard to schools that are newly exposed to aircraft noise and schools that are exposed to high single event noise levels." (SEIS/EIR, Environmental Justice, Section 4.4.3, p. 4-324.)

Given the acknowledged burden placed on the schools which are impacted by Alternative D, options that address the situation need to be set forth in the EIS/EIR.

Response:

As indicated in Chapter 3, Alternatives, of the Supplement to the Draft EIS/EIR, Alternative D was prepared in response to public and agency comments, including SCAG's comments, on the Draft EIS/EIR, particularly comments that advocated a more regional approach to accommodating regional air travel demand. Alternative D has been designed with passenger and cargo activity levels similar to the scenario adopted by SCAG for LAX. This level of activity is also equivalent to what would occur if the project were not approved, as represented by the No Action/No Project Alternative. Therefore, Alternative D does represent what SCAG suggests is a best possible plan outcome from an environmental justice perspective. Regarding other options or alternatives, please see Response to Comment SAL00017-15.

SAL00017-7

Comment:

- a. Significant impacts of increased noise on education in Inglewood Unified School District schools.

As with the alternatives proposed in the Original EIS/EIR, Alternative D would have a significant adverse impact on the education of students in the Inglewood Unified School District. Table S17 of the Supplemental Aircraft Noise Technical Report of the SEIS/EIR presents data which provides an indication of the time that the increased airplane overflights under Alternative D will take out of each school day. When considering these numbers, it is important to note that, not only does the interruption lasts at least six seconds (SEIS/EIR, Noise, Section 4.1.6.1.5.4.2, p. 4-66), but there is anticipation time as the deafening noise immediately approaches, as well as time spent settling back into instruction after the disruption has receded.

For example, Table S17 suggests Beulah Payne Elementary School will lose a total of 12.1 minutes of instructional time each day once Alternative D is implemented. What real impact will this 12.1 minutes have on actual instruction? Approximately 40 times per day, instruction, reading and/or test taking will be stopped or interrupted in the classrooms at this school.¹

Under Alternative D, at Inglewood High School and Morningside High School, the impact is worse - instruction will be interrupted at least 45 times per day.

Moreover, Oak Street Elementary School suffered from an unimaginable 140 interruptions of instruction per day - - over 17 per hour - - in 1996. Children in classes have consistently had to disengage and reengage to classroom instruction, or simply failed to hear the teacher, every few minutes during each and every class, every day of school. This is, of course, a conservative extrapolation - - the actual number of classroom interruptions is probably far higher. This already inordinate number of classroom interruptions increases under Alternative D.

3. Comments and Responses

A total of 33.9% of the students in the Inglewood Unified School District are "English Learner" students, who are not proficient in English. (Education Data Partnership ("Ed-Data"), "Fiscal, Demographic, and Performance Data on California's K-12 Schools," <http://www.ed-data.k12.ca.us>.) Additionally, 68.8% of students at Beulah Payne Elementary School and 57% of the students at Oak Street Elementary School do not speak English as their first language. (Id.)

These noise interference numbers are substantially similar to those suggested by Table S31, Supplemental Aircraft Noise Technical Report, Section 6.2.2, p. 151.

In surveys of Inglewood Unified School District teachers and staff, the vast majority stated that the current airplane noise levels substantially interfere with their teaching; that students are frequently distracted by the aircraft noise; that the schools' outdoor activities are frequently disrupted by the aircraft noise; and that aircraft noise is a "significant problem" at their schools. (Gerson/Overstreet Architects, Draft Final Report: Noise Impact Analysis Study and Mitigation Measures, December 5, 2000, Original EIS/EIR Response Exhibit 1.) These educational impacts will only worsen with implementation of Alternative D.

1 Assuming overflights occur at a constant rate over a 24 hour day (which, of course, they do not - rather they occur more frequently during the time of instruction): 12.1 minutes = 726 seconds; 726 seconds divided by 6 second intervals = 121 occurrences; 121 occurrences divided by 24 hours = 5 occurrences per hour; 8 hours of instruction during the day = 40 occurrences per day during the time of instruction.

Response:

Numerous research literature was reviewed on the effects of the ability of children to learn. This topic has been the subject of studies at a limited number of airports during the past two decades. Each study focuses on how children within a specific environment are limited in their ability to comprehend information by the presence of aircraft noise at their schools. None of these studies has established a recommended standard or thresholds of significance on which to base projections of future effect. Even the noise metric appropriate for evaluations of learning impacts is in dispute, with some studies focusing on cumulative metrics and others focusing on single events above thresholds. In the absence of a definitive noise threshold resulting from this research at other airports, LAWA has adopted two metrics for acceptance in this evaluation, to be supplemented later by an additional study as part of the environmental monitoring program for the EIR portion of the environmental evaluations since none of the reviews cited a reliable statistical relationship between the amount of noise exposure present and the degree of learning difficulty experienced by children at affected schools. The methodology used to determine the relationship between levels of noise and children's ability to learn will be one of the first elements to be developed by educational and psychoacoustical specialists retained by LAWA to conduct the study in MM-LU-3. The specific schools selected for inclusion in the study will likely be selected from among those now impacted by aircraft noise and those that are not known to be adversely effected by aircraft noise.

Please see Appendix S-C1, Supplemental Aircraft Noise Technical Report of the Supplement to the Draft EIS/EIR for a listing of tables that include Alternative D impacts. Newly exposed schools to the above referenced single event threshold would be considered significantly impacted and incorporated into the ANMP to reduce interior noise levels to the applicable threshold noise level. However, they would not be eligible if they are subject to an existing aviation easement and have been provided with noise mitigation funds. For more information on thresholds of significance please see Section 4.1.4.1.1, of Section 4.1, Noise, of the Supplement to the Draft EIS/EIR and Subtopical Response TR-LU-5.2, regarding thresholds used in the Draft EIS/EIR and Supplement to Draft EIS/EIR to identify significant aircraft noise impacts. Additionally, the commentor is correct in identifying that the average duration of flight event will increase because the average landing overflight above impacted schools will be lower. Please see Section 4.1.6.1.5.4.2, School Disruption, of Section 4.1, Noise of the Supplement to the Draft EIS/EIR.

The Aircraft Time Above 75 decibels is based over a 24-hour period, not over a 8 hour school day. Thus the total time above 75 dB during school hours would be much less. Please see the following portions of the Supplement to the Draft EIS/EIR: Appendix S-C, Supplemental Aircraft Noise Technical Report, and Technical Report S-1, Supplemental Land Use Technical Report, regarding extensive evaluation of single-event noise impacts on school disruption. The more detailed analysis of single event noise relative to school disruption that was completed in conjunction with the Supplement to the

3. Comments and Responses

Draft EIS evaluated the impacts at individual schools in the local area. As indicated in Table S31 of Appendix S-C1, the average number of minutes per average school day that Beulah Payne Elementary School would be exposed to aircraft noise levels exceeding 84 dBA (i.e., the exterior noise threshold of significance that would produce interior noise levels of 55 dBA) would range from 0 minutes under Alternatives B and 48 seconds under Alternative D. Inglewood High School would be exposed to aircraft noise levels exceeding 84 dBA (i.e., the exterior noise threshold of significance that would produce interior noise levels of 55 dBA) would range from 0 minutes under Alternatives A, B and D and 1.4 minutes under Alternative C. Oak Street Elementary School would be exposed to aircraft noise levels exceeding 84 dBA (i.e., the exterior noise threshold of significance that would produce interior noise levels of 55 dBA) would range from 4.6 minutes under Alternatives C and 8.6 minutes under Alternative D.

There is no standard or criterion for determining what increases in exposure to high noise levels is significant. Although Oak Street Elementary School would be exposed to an increase in the number of events and minutes of exposure to the 55 dBA Lmax threshold, it is unclear whether the increase would be "significant." Under Alternative D, the school would still be exposed to less than 10 minutes of the school day. Although this increase might not be trivial, there is no way of determining whether this impact is "significant" in terms of learning disruption. This exact issue will be addressed in the study conducted under MM-LU-3.

Please see Responses to Comments AL00035-23 and AL00035-23 -36 on the schools in Inglewood Unified School District would be significantly impacted by cumulative and/or single event noise levels. In addition, please see Topical Response TR-LU-3 regarding the Aircraft Noise Mitigation Program.

SAL00017-8

Comment:

b. Significant impacts of increased noise on students, teachers, staff and administration.

As noted by the World Health Organization, noise interference with speech comprehension results in a large number of personal disabilities, handicaps and behavioral changes. Children in the process of language and reading acquisition are noted to be particularly vulnerable. Problems with behavior, concentration, fatigue, uncertainty and lack of self-confidence, irritation, misunderstandings and a decrease in work capacity have been reported by researchers. (World Health Organization, Environmental Health Information, Guidelines for Community Noise, "Adverse Health Effects of Noise," Section 3, April 2001, Original EIS/EIR Response Exhibit 2.)

A study conducted in 1976 in Highline School District looked at the relationship between school test scores for school grades 3-7 and 5-10 for children attending schools exposed to high levels of aircraft noise and other children attending quiet schools. (Maser, A. L., Sorensen, P.H., Kryter, K.D., and Lukas, J.S. Effects of Intrusive Noise on Classroom Behavior: Data From a Successful Lawsuit. West. Psychol. Assoc. San Francisco. April 1978, Original EIS/EIR Response Exhibit 3.) While high academic-aptitude students in schools exposed to aircraft noise scored as well in standardized tests as their counter-parts in quiet schools, middle and especially low academic-aptitude students in noisy schools showed progressive deterioration in tests with continued school attendance relative to the students of equal aptitude in quiet schools. (Id.)

A study of the impact of various levels of freeway noise on reading test scores highlighted the cumulative adverse effect of noise exposure on school children. (Lukas, J.S., DuPree, R.B. and Swing, J.W. Effects Of Noise On Academic Achievement And Classroom Behavior. FHWA/CA/DOHS-81/01 Office of Noise Control, California Dept. Of Health Services, Sacramento. 1981, Exhibit 16.) An apparent degradation in reading achievement with classroom noise that was noted for third-graders, was accelerated by the sixth grade. (Id.)

Response:

Comment noted. The Supplement to the Draft EIS/EIR addressed the effects of single event aircraft noise relative to school disruption associated with the No Action/No Project Alternative and all four build alternatives in Section 4.1, Noise, and Section 4.2, Land Use, with supporting technical data and analysis provided in Appendix S-C1 and Technical Report S-1.

SAL00017-9

Comment:

Other research has demonstrated the link between chronic exposure to aircraft noise and many adverse effects including learning, motivational deficits, a significant decrease in total quality of life, increase in psychophysiological stress and susceptibility to helplessness. (Gary Evans and Lorraine Maxwell, "Chronic Noise Exposure and Reading Deficits. The Mediating Effects of Language Acquisition." *Environment and Behavior*, Vol. 29 No. 5, September 1997 [learning deficits], Original EIS/EIR Response Exhibit 4; Cohen S., Krantz, D.S., Evans G.W., Stokols D., and Kelly S., "Aircraft noise and children: Longitudinal and cross-sectional evidence on adaptation to noise and the effectiveness of noise abatement." *J. Pers. Soc. Psychol.* 40: 331- 345, 1981 [learning deficits], Exhibit 17; Bullinger, M., Hygge, S., Evans, G.W., Meis, M. and von Mackensen, S., "The Psychological Cost of Aircraft Noise for Children," *Zentralblatt fur Hygiene und Umweltmedizin*, 202:127-138, 1977 [quality of life decrease], Original EIS/EIR Response Exhibit 5; Gary W. Evans, Monika Bullinger and Staffan Hygge, "Chronic Noise Exposure and Physiological Response: A Prospective Study of Children Living Under Environmental Stress." *Psychological Science*, Vol. 9, No. 1, January 1998 [psychophysiological stress], Original EIS/EIR Response Exhibit 6; World Health Organization, Guidelines, supra. [helplessness].)

Response:

Please see Response to Comment AL00017-52. The types of noise-related health effects identified in the above studies are consistent with the information presented in the Draft EIS/EIR and Technical Report 14b. The studies, however, do not provide any scientific evidence or other basis for determining the nature, extent, or significance of noise-related health effects due to any of the Master Plan alternatives. However, the Supplement to the Draft EIS/EIR addressed the effects of single event aircraft noise relative to nighttime awakenings and school disruption associated with the No Action/No Project Alternative and all four build alternatives in Section 4.1, Noise, and Section 4.2, Land Use, with supporting technical data and analyses provided in Appendix S-C1 and Technical Report S-1. Regarding school disruption, mitigation is provided under Mitigation Measures MM-LU-3 and MM-LU-4 in the form of study of aircraft noise levels that result in classroom disruption and sound insulation for schools determined by the study or interim noise measurements to be significantly impacted. Schools in the Inglewood Unified School District are subject to the aviation easements, as well as prior noise mitigation payments, and so are not eligible for further mitigation.

Please see Section 4.1, Noise, and Section 4.2, Land Use, of this Final EIS/EIR for a description of the various mitigation measures, derived from those contained within the Supplement to the Draft EIS/EIR, proposed to address significant noise impacts on sensitive surrounding land uses.

SAL00017-10

Comment:

A 1980 study showed elevated blood pressure of children attending schools under the LAX flight paths compared to children in quiet schools. (Cohen S., Krantz, D.S., Evans G.W. and Stokols D., "Physiological, motivational, and cognitive effects of aircraft noise on children: Moving from the laboratory to the field." *American Psychologist*, 35: 231-243, 1980, Exhibit 18.)

Response:

Please see Response to Comment AL00017-52 regarding the health effects of aircraft noise.

SAL00017-11

Comment:

The SEIS/EIR does not suggest that conditions resulting from implementation of Alternative D will result in different circumstances than those discussed in the above-referenced studies. Again, the SEIS/EIR fails to provide for any remediation for the known impacts of Alternative D on Inglewood Unified School District students.

3. Comments and Responses

Response:

The content of this comment is essentially the same as comment AL00034-14; please see Response to Comment AL00034-14.

SAL00017-12

Comment:

c. Significant impacts of increased pollution on students, teachers, staff and administration.

As noted by the United States Environmental Protection Agency ("USEPA"), exposure to ambient criteria and toxic pollutants resulting from anthropogenic emissions can result in a wide variety of health impacts. (USEPA, The Benefits and Costs of the Clean Air Act, 1970 to 1990. Prepared for U.S. Congress, October 1997, Original EIS/EIR Response Exhibit 7.) Short-term health impacts can include eye, nose, and throat irritation; losses in hand-eye coordination (compensatory tracking); vigilance (detection of infrequent events); visual system sensitivity; and increased asthma attacks. (Seinfeld, John H., Atmospheric Chemistry and Physics of Air Pollution. New York, John Wiley & Sons, 1986.) Long-term exposures can result in increased mortality, susceptibility to pulmonary bacterial infection, irritation of the alveoli, emphysema, chronic bronchitis, reduced pulmonary function, losses in IQ, and cancer. (Id. and USEPA, Benefits, supra.)

Furthermore, there is good reason to believe that children could be more vulnerable to these effects. Because of growing concerns regarding children's increased susceptibility to environmental contaminants, the California Legislature passed the Children's Environmental Health Protection Act (SB 25), which requires the California Environmental Protection Agency ("Cal/EPA") to specifically consider children in setting Ambient Air Quality Standards and developing criteria for Toxic Air Contaminants ("TACs"). The law will require Cal/EPA to specifically evaluate available information on children's increased susceptibility to each of the TACs, and develop a list of up to five TACs that potentially have disproportionate impacts on infants and children.

As stated by Cal/EPA, children are considered to be at increased risk because of the rapid growth and development of their nervous, immune and reproductive systems, and because their organs and tissues are rapidly maturing. (Cal/EPA, Air Pollution and Children's Health. Fact Sheet by Office of Environmental Health Hazard Assessment, March 2001, Original EIS/EIR Response Exhibit 8.) In addition, children experience greater exposure to ambient pollutants relative to their body weight, and children's specific activity patterns may contribute to an increased exposure to toxicants resulting from increased exercise and sporting activities. (Id.) Asthma has also been identified as a major problem in children, and some of the chemical emissions from LAX have been identified by Cal/EPA as resulting in an exacerbation of asthma (e.g., formaldehyde and acrolein). (Id.)

Furthermore, recent studies suggest that particulate matter ("PM") may exacerbate asthma and cause coughs and other respiratory symptoms in children. (Id.) Recent studies also suggest that prolonged exposure to PM may also affect the growth and functioning of children's lungs. (Id.) Researchers found that as children grow up in smoggier areas, there is a notable lag in lung function growth. (Id.)

Response:

The content of this comment is identical to comment SAL00018-12; please refer to Response to Comment SAL00018-12.

SAL00017-13

Comment:

Because of the anticipated environmental and related health impact of noise and pollution on the schools, students could potentially fall behind in their schooling, one class grade or more. Several students could have an impaired ability to retain information as a result of the impact. These students may not be able to grasp as much as other students and would not be able to process more advanced concepts taught in high school that build upon what they were supposed to, but did not, learn in elementary school. More children would have asthma and allergies than they would without the implementation of Alternative D. Children may also have an increased risk of heart attacks and death.

Children in Inglewood Unified School District schools may have permanent learning disabilities that limit their career choices and quality of life. Furthermore, they may have shorter lifespans and worse general physical health than other children at other non-impact schools. Inglewood Unified School District students may have lifelong psychological weaknesses that would affect every aspect of their lives.

Response:

The content of this comment is essentially the same as comment AL00034-17; please refer to Response to Comment AL00034-17.

SAL00017-14

Comment:

These adverse health impacts are real. These are the impacts that will disproportionately and significantly affect minority and low income communities.

Response:

Comment noted. Please see Topical Response TR-HRA-3 regarding human health impacts.

SAL00017-15

Comment:

3. The SEIS/EIR Violates CEQA by Failing to Consider Alternatives that Equitably Distributes Burden Among Populations.

Because of the significant and unmitigatable impact of all of the proposed alternatives, including Alternative D, on minority and low impact communities, other alternatives must be explored.

California Public Resources Code § 21002 states, in pertinent part:

"The Legislature finds and declares that it is the policy of the state that public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects, and that the procedures required by this division are intended to assist public agencies in systematically identifying both the significant effects of proposed projects and the feasible alternatives or feasible mitigation measures which will avoid or substantially lessen such significant effects."

California law requires the SEIS/EIR to consider feasible alternatives that would substantially lessen the disproportionate and significant environmental effects of the project on minority and low-income communities. LAWA failed to do so.

Response:

All LAX Master Plan alternatives were selected in accordance with the requirements identified in the California Environmental Quality Act (CEQA) regulations, and the National Environmental Policy Act (NEPA). Please see Chapter 3, Alternatives, of the Draft EIS/EIR and Supplement to the Draft EIS/EIR for a detailed discussion of the alternatives selection process. As indicated in Chapter 3, Alternatives, of the Supplement to the Draft EIS/EIR, Alternative D was formulated as a direct response to the strongly expressed desire of many citizens, as indicated in comments on the Draft EIS/EIR, that LAWA limit activity at LAX in favor of a more regional approach to airport planning in Southern California. This desire was in large part based on the goal of more equitably distributing environmental impacts associated with air travel, and reducing potential future effects on communities surrounding LAX, including disproportionate adverse effects on minority and low-income communities. Alternative D has substantially reduced environmental effects compared to earlier alternatives, in direct support of the primary goal of an alternatives analysis under CEQA. Alternative D has the fewest overall impacts of the build alternatives and less impact on minority and low-income communities. As described on page 4-175, in Section 4.4.3, Environmental Justice, of the Supplement to the Draft EIS/EIR, relating to aircraft noise, implementation of Alternative D would result in fewer overall individuals exposed to high noise levels than would occur if the project were not approved, as represented by the No Action/No Project Alternative.

3. Comments and Responses

It should also be noted that the airport's effects on communities to the east are largely due to the airport's long-standing runway orientation, which distributes much of the aircraft noise over the ocean, but consequently affects communities to the east more than those to the north and south. Accordingly, increases in aircraft activity at LAX, due to its physical layout, preclude a completely equitable distribution of impacts among the communities surrounding LAX. However, all feasible mitigation measures to address disproportionately high and adverse effects on minority and low-income populations have been identified and are presented along with offsetting benefits in Section 4.4.3, Environmental Justice (subsection 4.4.3.7), of this Final EIS/EIR.

See pages 1-3 of Appendix S-D of the Supplement to the Draft EIS/EIR for a discussion of regional environmental justice issues as analyzed in the Southern California Association of Governments (SCAG) Regional Transportation Plan and Regional Aviation Plan, including issues associated with airport improvement projects and LAX. These documents indicate that limiting expansion at LAX is the best possible outcome from an environmental justice perspective given the high concentration of minority and low-income populations in the LAX vicinity. Alternative D was added to the Supplement to the Draft EIS/EIR as a build alternative designed to serve a level of future (2015) activity comparable to the No Action/No Project Alternative. Alternative D is consistent with the policy framework of the SCAG 2001 RTP, which calls for no expansion of LAX, and instead, shifting the accommodation of future aviation demand to other airports in the region.

Also see Topical Response TR-EJ-3 regarding environmental justice and regional context and Topical Response TR-RC-1 regarding the LAX Master Plan role in the regional approach to meeting air service demand.

SAL00017-16

Comment:

4. The SEIS/EIR Violates CEQA By Failing to Provide Mitigation Measures for the Significant Environmental Justice Impacts.

The SEIS/EIR is required to mitigate the environmental justice burden imposed by Alternative D to the extent feasible. (California Public Resources Code §§ 21002, 21002.1.) The SEIS/EIR, however, fails to describe any mitigation measures to alleviate its impacts on schools. Instead, it proclaims that it will only provide mitigation measures in those schools not deemed to be Title 21 compliant. (See Environmental Justice, Section 4.4.3.5.1.2, p. 4-329; Supplemental Aircraft Noise Technical Report, Section 6.2.3, p. 154.) This rationale is flawed for two reasons: (1) it over-estimates the effect of the Settlement Agreement (See Part Two infra); and (2) it fails to address the independent obligations of CEQA.

Feasible mitigation programs exist that would address the noise issues in minority and low income schools. Sound insulation can alleviate noise impacts inside classrooms. To the extent that the significant noise impacts in Inglewood Unified School District schools are unmitigatable, the SEIS/EIR should address the option of relocating those schools.

The same mitigation analysis must be conducted for air quality and other significant impacts of the proposed project upon minority and low-income populations.

To the extent feasible, LAWA is obligated to mitigate its impacts on the Inglewood Unified School District. (14 California Code of Regulations § 15126.4.) The SEIS/EIR fails to do so. The failure to include such mitigation measures in the body of the SEIS/EIR violates CEQA. (Id.) Accordingly, this SEIS/EIR is fatally inadequate and must, before further action is taken, be revised to comply with CEQA.

Response:

The Supplement to the Draft EIS/EIR addressed environmental justice in Section 4.4.3, Environmental Justice, with mitigation measures presented in subsection 4.4.3.7. The mitigation measures outlined in this subsection, as summarized from other Chapter 4 sections of the Supplement to the Draft EIS/EIR, included mitigation measures that addressed impacts on schools (see MM-LU-1, MM-LU-3, and MM-LU-4 most specifically).

Mitigation for aircraft noise effects on schools, as presented in Section 4.1, Noise, and Section 4.2, Land Use, of the Draft EIS/EIR and Supplement to the Draft EIS/EIR, would only apply to those significantly impacted schools without aviation easements. Please see Response to Comment AL00035-23 regarding aviation easements, prior noise mitigation payments, and other provisions of the "Settlement Agreement" which resolve land use incompatibility and aircraft noise mitigation issues associated with airport operations and the Inglewood Unified School District. For further discussion of aircraft noise effects on schools within the Inglewood Unified School District, please see Response to Comment AL00035-36.

Regarding mitigation for other issues, such as air quality, all feasible mitigation has been incorporated into the Final EIS/EIR, see Chapter 5, Environmental Action Program. Furthermore, it is accepted that the project would have significantly high adverse and disproportionate effects on minority and low-income populations, therefore, in addition to the mitigation measures, off-setting benefits are included in Section 4.4.3, Environmental Justice, of the Final EIR. These benefits include educational components.

SAL00017-17

Comment:

PART TWO

THE SEIS/EIR IMPROPERLY RELIES UPON AND OVER ESTIMATES THE EFFECT OF THE SETTLEMENT AGREEMENT

The Original EIS/EIR states in one volume:

"In the mid-1970's, the City of Los Angeles ... [settled] a noise lawsuit. Under the terms of the settlements, each school in the public ... systems that had participated in the lawsuit agreed to allow an aviation easement, deeming the school to be compatible with the airport under Title 21." (EIS/EIR, Land Use, Section 4.2, pp. 4-95, 4-96.)

In a separate volume, the Original EIS/EIR states:

"As presented in Technical Report 1, Land Use, four public schools would be exposed to significantly high levels of noise by 2015 within the City of Inglewood. For those impacted schools not already considered compatible pursuant to California Code of Regulations, Title 21, mitigation in the form of sound insulation or acquisition and relocation would be provided." (Original EIS/EIR, Schools Technical Report, Section 17, p. 11.)

"As presented in Technical Report 1, Land Use, eight public schools would be exposed to significantly high levels of noise by 2015 within the Inglewood Unified School District and Lennox Elementary School District. For those impacted schools not already considered compatible pursuant to California Code of Regulations, Title 21, mitigation in the form of sound insulation or acquisition and relocation would be provided." (Original EIS/EIR, Schools Technical Report, Section 17, p. 15.)

The SEIS/EIR picks up on these points when discussing mitigation of noise impacts on schools. (See, for example, Environmental Justice, Section 4.4.3.5.1.2, p. 4-329; Supplemental Aircraft Noise Technical Report, Section 6.2.3, p. 154.)

Thus, the SEIS/EIR both addresses and dismisses further consideration of the impacts upon Inglewood Unified School District schools solely based upon the existence of the 1970's Settlement Agreement. (Amended Judgment and Final Order in Condemnation, Original EIS/EIR Response Exhibit 10; the operative "Judgment and Final Order" is actually entitled Amended Judgment and Final Order in Condemnation, and referred to herein as "Settlement Agreement.") It is apparent LAWA has no intention of providing mitigation in any form to Inglewood Unified School District schools as part of Alternative D. As set forth below, this deficient approach (1) fails to even consider the entirety of the terms of the Settlement Agreement; (2) fails to consider other surcharges which would be caused by an expansion not provided for by the express grant of the aviation easement in the Settlement Agreement; and (3) inappropriately avoids and dismisses a proper CEQA analysis.

3. Comments and Responses

Response:

Please see Response to Comments AL00035-23, AL00035-24, AL00035-25, AL00035-27 and AL00035-28 regarding the effect of the "Settlement Agreement" on schools within the Inglewood Unified School District, and Response to Comment AL00035-36 for a discussion of Inglewood Unified School District schools that would be impacted by significant noise levels from LAX operations under Alternative D.

SAL00017-18

Comment:

1. The SEIS/EIR Fails to Consider All Possible Surcharges on the Avigation Easements.

As with the Original EIS/EIR (Original EIS/EIR, Land Use, Section 4.2, p. 4-95, fn. 72.), when discussing the historically high noise levels affecting the Inglewood Unified School District, the SEIS/EIR refers to and relies solely upon the Settlement Agreement which granted LAWA an avigation easement over Inglewood Unified School District schools. (SEIS/EIR, Supplemental Aircraft Noise Technical Report, Section 6.2.3, p. 154.) The SEIS/EIR concludes:

"LAWA has established agreement with most public and a few private schools in the airport environs related to the amount of cumulative noise that may be generated from airport operations over each. Where those cumulative noise levels are exceeded (measured in decibels of CNEL), addition of the facility to the list of sound insulation eligibility may be warranted." (Id.)

This conclusion is incomplete and misstates the Settlement Agreement (discussed further in Part II.2 and II.3 infra). The Settlement Agreement provides that the purpose of the air easements granted to LAWA are for "noise, vibrations and fumes" over the schools. (Settlement Agreement, page 3, lines 18-21.) The Settlement Agreement further provides:

"Vibration and fume levels are not quantitatively described for the purpose of the distribution of the air easements but it is agreed that those levels of vibration and fumes which accompany the agreed-to CNEL values shall not be a burden of the easements." (Settlement Agreement, page 11, lines 1-5.)

In other words, LAWA may only contend that the avigation easement is not surcharged if "levels" of vibration and noise are the same as in 1970. What the Settlement Agreement does not discuss, does not preclude, and leaves open is whether a surcharge may occur when the frequency of vibrations and fumes is increased from the frequency of vibrations and fumes occurring in 1970.

Paragraphs 4.a and 7 of the Settlement Agreement make clear it was the intent of the parties not to further burden the avigation easements by an increase or "deviation" in frequency of flight operations over Inglewood Unified School District schools. Rather such deviations were only permitted if "temporary and not permanent." (Settlement Agreement, page 13, line 14.)

Response:

Please see Responses to Comments AL00035-23, AL00035-25, AL00035-27 and AL00035-28 regarding possible surcharges on avigation easements. Please also see Topical Response TR-N-8 regarding noise-based vibration effects and Response to Comment PC00045-4 regarding fumes.

SAL00017-19

Comment:

2. The Impacts of the Alternate D Will Constitute a Surcharge on the Avigation Easements.

Under California law, the extent of an easement is determined by the terms of its grant. (California Civil Code § 806.) As stated by the California Supreme Court, an owner of an easement may not increase the use of the easement in any manner that imposes a new or greater burden on the servient tenement without the consent of the servient owner. (Colegrove W. Co. v. City of Hollywood (1907) 151 Cal. 425, 429.) Further, "...it is well settled that 'both parties have the right to insist that so long as the easement is enjoyed it shall remain substantially the same as it was at the time the right accrued, entirely regardless of the question as to the relative benefit and damage that would ensue to the parties by

reason of a change in the mode and manner of its enjoyment. [Citation omitted.]" (Whalen v. Ruiz (1953) 40 Cal.2d 294, 302.)

In fact, "California courts have set their faces firmly against ... increases in the burden upon the servient tenement." (Wall v. Rudolph (1961) 198 Cal.App.2d 684, 694.) Accordingly, "[t]he requirement that the easement involve only a limited use or enjoyment of the servient land is a corollary of the nonpossessory character of the interest. If a conveyance purported to transfer to A an unlimited use or enjoyment of [a parcel of land], it would be in effect a conveyance of ownership to A [of the parcel of land], not of an easement." (Id., at p. 697; emphasis in original.)

The aviation easement granted by the Inglewood Unified School District to LAWA was based upon criteria which have been far exceeded. For example, the number of take-offs and landings identified in Exhibit F in 1970 (used as two of the three elements to establish the CNEL contours) has dramatically increased as of 2003. In 1970, the total of take-offs and landing events per day was 1,061. (Settlement Agreement, Exhibit F, Figures 6, 7.) The total number of take-offs and landing events per day in 2003 is over 1,700, an increase in flight frequency of over 62%. (Los Angeles World Airports, Traffic Comparison, May 28, 2003.) This will increase even further to 2,148 under Alternative D, that is, over 100% more than anticipated by the aviation easement. (SEIS/EIR, Executive Summary, Table ES-1.)

Moreover, the aviation easement anticipated an increase in aircraft operations at LAX up to 40,000,000 passengers annually. (Settlement Agreement, Exhibit F, paragraph B.) LAX is currently operating at over 51,000,000 passengers annually. (Los Angeles World Airports, Traffic Comparison, May 28, 2003.) Alternative D predicts an increase in aircraft operations to accommodate at least 78,900,000 passengers annually, once again, almost 100% more than anticipated by the Settlement Agreement. (SEIS/EIR, Executive Summary, Table ES-1.) In addition, the amount and frequency of airplane traffic will also necessarily increase under Alternative D to accommodate the predicted increase in cargo tons per year by 50% over today's traffic alone. (Id.)

Perhaps most significant, however, is the decrease in altitude of air traffic over Inglewood Unified School District schools proposed by Alternative D due to the eastward extension of runway 24L and its direct impact on "levels" of noise, vibration and fumes. (See, SEIS/EIR, Noise, Sections 4.1.6.1.5.3 and 4.1.6.1.5.4.2, pp. 4-64 and 4-66, respectively.)

Thus, the increase in frequency of air traffic through the aviation easement proposed by Alternative D will constitute a material surcharge upon the easement. This increased frequency results in an increase in not only the number of noise events, but in the number of vibration and fume events as well.

This burden on the easement will, at the very least, require the Inglewood Unified School District's consent, and realistically also require further mitigation in the form of additional sound attenuation measures at each of the affected school sites.

Therefore, the SEIS/EIR must further consider, and LAWA must mitigate, the impact upon the existing or future incompatible land use resulting from implementation of Alternative D, as the Judgment and Final Order will not, as suggested, conclusively control the question given the anticipated substantial surcharge upon the aviation easement and resulting burden to the servient tenement, Inglewood Unified School District schools.

Response:

Please see Responses to Comments AL00035-23, AL00035-25, AL00035-27, AL00035-28, AL00035-29, AL00035-36, and SAL00017-18 regarding the potential effect of Alternative D on aviation easements.

The commentor contends that there would be a decrease in the altitude of air traffic over Inglewood Unified School District schools based on the extension of Runway 24L approximately 1,280 feet eastward under Alternative D. However the altitude of landings using Runway 6R/24L after its extension would remain the same as current operations, since this eastward extension is to provide greater takeoff length for aircraft departing to the west, over the ocean. The landing threshold for aircraft landing from the east would remain in its current location through displacement.

3. Comments and Responses

SAL00017-20

Comment:

3. The Existence of the Settlement Agreement is Irrelevant to Whether LAWA Must Comply With CEQA.

The existence of an aviation easement alone does not render a school "Compatible" under Title 21. Throughout the SEIS/EIR, LAWA implies that those schools which entered into aviation easements with LAWA are automatically deemed "compatible" uses, and therefore do not require mitigation. The regulatory definitions of "compatible" and "incompatible" uses do not support this contention.

The definition of incompatible land uses includes:

"[P]ublic and private schools of standard construction for which an aviation easement for noise has not been acquired by the airport proprietor or that do not have adequate acoustic performance to ensure an interior CNEL of 45 dB or less in all classrooms due to aircraft noise." (Emphasis added.) (21 California Code of Regulations 5014(b).)

The definition stated in the disjunctive is not of "compatible" land uses, but of "incompatible" land uses. Thus, public schools with an interior CNEL of 45 dB are plainly "incompatible" land uses, with or without an aviation easement. The accepted rules of statutory construction simply do not allow any other interpretation or extrapolation to be made by LAWA.

Under the basic tenets of statutory construction, courts will,

"ascertain the intent of the drafters so as to effectuate the purpose of the law [by]... first examin[ing] the words themselves, giving them their usual and ordinary meaning and construing them in context. When statutory language is clear and unambiguous, 'there is no need for construction and courts should not indulge in it.' [Citations omitted.]" (Esberg v. Union Oil Co.(2002) Cal.4th 262, 268.)

In this case, the plain meaning of the regulation does not present any ambiguity. The use of the word "or" in a regulation indicates an intention to use it disjunctively so as to designate alternative or separate categories. (Piet v. U.S. (1959) 176 F. Supp. 576, 583.)

Therefore, those schools that do not have adequate sound insulation to ensure an interior CNEL of 45 dB or less, are incompatible uses for purposes of Title 21 and are entitled to mitigation irrespective of whether LAWA holds aviation easements for those schools.

Even if LAWA successfully maintains Alternative D is not a surcharge on the aviation easement granted by Inglewood Unified School District, and, despite the foregoing, is nonetheless "compliant" with Title 21, LAWA must still identify the need for and then provide for the implementation of mitigation measures. Under California law:

"Any one may waive the advantage of a law intended solely for his benefit. But a law established for a public reason cannot be contravened by private agreement." (California Civil Code § 3513.)

The California Environmental Quality Act ("CEQA") is a state environmental law applicable to public agency decisions to authorize projects that could have an adverse impact on the environment. The purpose of the CEQA Environmental Impact Report requirement is to provide the information needed to make informed decisions in the selection and authorization of projects. (California Public Resources Code §§ 21001(g), 21002, 21061; 14 California Code of Regulations § 15121.) Without question, CEQA and its requirements are "established for a public reason." Therefore, under both sound principles of law as well as fundamental considerations of fairness and justice, the existence of the aviation easement (a private agreement between two public agencies) cannot "waive" the requirement of mitigation of the significant impacts upon students and teachers associated with Alternative D.

Thus, appropriate project alternatives, significant impacts and related mitigation measures must be analyzed in the SEIS/EIR. (California Public Resources Code §§ 21002.1, 21100.) In this instance, the SEIS/EIR must identify measures that would mitigate the impacts of Alternative D on Inglewood Unified

School District in general and impacted school facilities in particular. (Id.) Without this analysis, the selection process is flawed and an informed decision cannot be made.

The Settlement Agreement between the City of Los Angeles and various school districts does not affect this state mandated analysis. The SEIS/EIR claims that the Settlement Agreement operates to mitigate significant impacts upon schools and students. (Environmental Justice, Section 4.4.3.5.1.2, p. 4-329; Supplemental Aircraft Noise Technical Report, Section 6.2.3, p. 154; See also, EIS/EIR, Land Use, Section 4.2.) This claim is in direct contradiction to the requirements of CEQA (14 California Code of Regulations § 15126.4) and Civil Code §3513.

CEQA requires LAWA to conduct and publicly disclose its analysis of impacts upon affected schools and of measures that can mitigate those impacts, if any. (Id.) Thus, the SEIS/EIR must be revised to conduct a thorough analysis of impacts upon schools and of measures that can be taken to mitigate those impacts. (Id.)

Response:

Please see Response to Comments AL00035-29 and AL00035-36 regarding the extensive analyses of significant impacts pertaining to noise and land use compatibility presented in the Draft EIS/EIR and the Supplement to the Draft EIS/EIR. See also Response to Comment AL00035-28 regarding use of avigation easements for land use compatibility. With respect to the commentor's claim that Civil Code Section 3513 invalidates the avigation easements awarded by the Court, this is a legal argument which is not supported by the Amended Judgment and Final Order of the Court (referred to by the commentor as the "Settlement Agreement" establishing the avigation easements to which the Inglewood Unified District Schools are subject. This document is described and incorporated by reference in Response to Comment AL00035-23.

The commentor's proposed legal interpretation of Title 21, Section 5014, not only is inconsistent with LAWA's, the commentor's interpretation would not necessarily result in any of the District's schools with avigation easements becoming incompatible uses. For example, according to the Supplement to the Draft EIS/EIR, none of the District's schools are reasonably projected to have interior classroom noise in excess of 45 dB CNEL under Alternative D, based on the exterior CNEL noise levels at the Inglewood District schools and the Noise Level Reduction (NLR) of 29 dB applied therein. The 29 dB is based on the average NLR measured at nine schools in the Inglewood Unified School District in 2000. See Appendix S-C1, Supplemental Aircraft Noise Technical Report, Section 6.2.1. For schools with or without easements to have interior noise in excess of 45 dB CNEL, and so fall under the Districts' proposed definition of incompatible uses, the projected exterior CNEL would need to be greater than 74 CNEL. None of the schools within the Inglewood Unified School District would be exposed to more than 74 CNEL under any of the alternatives evaluated in the Draft EIS/EIR and Supplement to the Draft EIS/EIR.

SAL00017-21

Comment:

PART THREE

THE NOISE ANALYSIS OF THE SEIS/EIR IS INADEQUATE2

1. The SEIS/EIR Under-predicts Noise Impacts to Inglewood Unified School District Facilities by Omission.

There appears to be no specific mention of the following Inglewood Unified School District educational facilities within the SEIS/EIR:

- Inglewood Adult School, located at 106 East Manchester Blvd. Given its proximity to Inglewood High School (which is identified as a noise impacted school, within the SEIS/EIR) this lack of reference to Inglewood Adult School appears to be an oversight.

- City Honors School, which is located on the Morningside High School Campus.

3. Comments and Responses

- The following schools are not mentioned, This may be because they are not impacted, but the Inglewood Unified School District would request some acknowledgement of the existence of these schools within the Final EIS/EIR to provide reassurance that these schools have not merely been overlooked in the analysis:

Bennett/Kew Elementary School, located at 1170 South Cherry Avenue.

La Tijera Elementary School, located at 1415 North Tijera Boulevard.

Parent Elementary School, located at 5354 West 64th Street.

2 For the purpose of these comments, the use of the terms "Decibel", "dB" and "dBA" are all intended to mean A-weighted decibels.

Response:

Multiple educational facilities located on the same parcel were generally identified as a single school. However, impacts on noise-sensitive parcels within the Inglewood Unified School District that would result from the Master Plan alternatives were clearly listed by the predominant use, address, assessors parcel number and grid id, in Technical Report 1, Land Use Technical Report of the Draft EIS/EIR, Section 4.2, Land Use, and Technical Report S-1, Supplemental Land Use Technical Report of the Supplement to the Draft EIS/EIR. The omission of the school names presented by the commentor would not change the conclusions regarding noise impacts on the District's facilities. Inglewood Adult School was not referenced separately from the Inglewood High School since they share the same parcel. Similarly, the City Honors School was not identified in the analysis as it shares the same site as the Morningside High School Campus. Although Inglewood High School would be newly exposed to high single event and cumulative noise levels under all the Master Plan build alternatives and Morningside High School would be newly exposed to high single event noise levels under the No Action/No Project Alternative and Alternatives A, B, C, and D, under the "Settlement Agreement," providing, among other matters, aviation easements and prior noise mitigation payment, these schools are not eligible for further aircraft noise mitigation. See Response to Comment AL00035-36 for a decryption of the "Settlement Agreement." The Bennett/Kew Elementary School, La Tijera Elementary School, and Parent Elementary School were not mentioned as they are all outside of the land use study area, as shown on Figure 4.2-1 of the Draft EIS/EIR and therefore would not be subject to significant noise impacts as a result of the project. See Subtopical Response TR-N-2.3 regarding the evaluation of noise impacts beyond 65 CNEL noise levels.

SAL00017-22

Comment:

2. The SEIS/EIR Under-Predicts Noise Impacts on Inglewood Unified School District Facilities by Relying on Noise Modeling Results Which Are Acknowledged Within the Report to under-Predict Actual Aircraft Noise Levels.

As discussed in the Supplemental Aircraft Noise Technical Report (page 15) the INM used for all noise predictions in the SEIS/EIR under-predicts aircraft noise in comparison to real measured noise levels. The study's under-prediction of noise levels is likely to lead to an under-prediction of the number of schools at which the 2015 aircraft noise levels exceed certain noise thresholds of significance. The Inglewood Unified School District recommends that the Final EIS/EIR include detailed analysis of the likely real noise impact upon Inglewood Unified School District schools.

Response:

Comment noted. Noise is modeled by computer to enable the comparison of different cases. The relative differences between cases is representative of the difference in anticipated impact of the alternatives. Noise measurements are used to define mitigation areas and cannot be used to forecast noise levels for any condition other than that which was measured. For further information on this topic, please see Topical Response TR-N-1 regarding noise modeling approach. Noise impacts and mitigation measures are addressed in Section 4.1, Noise, and Section 4.2, Land Use, of the Draft EIS/EIR and Supplement to the Draft EIS/EIR. Supporting technical data and analyses are provided in Appendix D and Technical Report 1 of the Draft EIS/EIR and Appendix S-C and Technical Report S-1 of the Supplement to the Draft EIS/EIR. Additionally, please see Responses to Comments AL00035-23

and AL00035-36 regarding mitigation. Additionally, please see Response to Comment AL00035-31 regarding the use of modeled, rather than measured, data.

SAL00017-23

Comment:

3. The "Single Event" Noise Analysis Presented in the SEIS/EIR is Incomplete.

The Inglewood Unified School District's comments on the Original EIS/EIR pointed out potential disruption to speech communication within classrooms associated with "single events," i.e., the noise associated with individual aircraft flyovers. The Inglewood Unified School District is pleased to see that single events are now considered within the SEIS/EIR. The District remains concerned, however, that the issue of the applicable threshold(s) of significance has not been resolved within the SEIS/EIR.

Mitigation measure MM-LU-4, which incorporates specific noise mitigation measures for schools, is "subject to modification" based upon the results of further study. Details of the proposed 'further study' are not, however, provided for our comment.

Response:

Schools significantly impacted by aircraft noise impacts that result in classroom disruption will receive sound insulation to reduce interior noise levels to the applicable threshold noise level, unless the school is subject to an existing aviation easement. Based on review of numerous studies and research related to school disruption from aircraft noise, LAWA developed three appropriate thresholds of significance to analyze the significant aircraft noise impacts on schools for the four build alternatives. The development and application of these thresholds relative to the four build alternatives are discussed in Section 4.1, Noise of the Supplement to the Draft EIS/EIR and Section 6.2.1, of Appendix S-C1, Supplemental Aircraft Noise Technical Report. Because current studies of the relationship between aircraft noise and the ability of children to have not resulted in a statistically reliable model of the relative effect of changes in aircraft noise levels in learning, MM-LU-3 provides for further comprehensive study of the any such measurable relationship. One element of the further comprehensive study will evaluate thresholds of significance for classroom disruption by both specific and sustained aircraft noise events. Please see Responses to Comments AL00035-36 and SAL00017-32 and SAL00017-33. Please see Response to Comment SAL00013-111 regarding the selection of experts for peer review. The methodology for selecting experts and peer reviewers has not yet been established.

SAL00017-24

Comment:

4. The Limited 'Single Event' Noise Analysis Presented in the SEIS/EIR Substantially Under-predicts Impacts to Inglewood Unified School District Facilities in a Number of Ways.

a. The indoor classroom Lmax thresholds are set too high.

The Supplemental Aircraft Noise Technical Report proposes a 55 dBA Lmax threshold of significance for teaching classes. According to Page 149 of this report, this threshold was derived from Table 3.3 of a 1992 FICON publication, using a speaker-to-listener distance of 20 feet and assuming a raised voice level. Reference to the FICON 1992 publication shows that the table in question was reproduced from the 1973 EPA publication, "Public Health and Welfare Criteria for Noise," ("EPA Report") as Figure 6.1 of the EPA Report.

The EPA Report qualifies the data in a number of important ways. The qualifications include the following:

- Figure 6.1 published by EPA in 1973 was for an outdoor noise environment. Page 6-7 of the EPA Report states that the data "is not valid to assess the intrusion of the outdoor levels on the reception of speech indoors because of the reverberant build up of sound by reflections from the walls of the room...The data in the pertinent literature suggests that, for most instances, a reasonable value for the design of rooms where oral communication is important is somewhere in the range 40-45 dBA."

3. Comments and Responses

- Page 6-7 of the EPA Report goes on to state, "Lower noise levels would be required if the talker has imprecise speech (poor articulation) or if the speaker and listener speak different dialects." Considering the fact that (1) the speaker in the classroom is occasionally the student, and (2) the student's first language is often not the same as that of the teacher, these qualifications are certainly applicable in Inglewood Unified School District schools.

- Page 6-7 of the EPA Report also states that the data in its Figure 6.1 represents conditions for young adults and that "adequate speech communication with children requires lower noise levels than are required for adults". This qualification also applies to most Inglewood Unified School District schools.

- Pages 6-7 to 6-8 of the EPA Report also state, "Persons with hearing losses require more favorable speech-to-noise ratios than do those with normal hearing." Given that all pupils will not all have perfect hearing at all times, due in great part, but not exclusively, to frequent childhood ear infections, this qualification is also pertinent.

The EPA qualifications of the data were not contemplated in the SEIS/EIR analysis. Appropriate consideration of these qualifications would result in a lower threshold for the application in question.

On the above basis, the Inglewood Unified School District believes the 55 dBA Lmax indoor criterion used in the SEIS/EIR to be incorrectly derived. A lower criteria based upon consideration of all relevant factors, including: talker-to-listener distances greater than 20 feet, noise effects in indoor environments, the need for a higher signal-to-noise ratio for children, children's propensity to temporary hearing loss, and children with limited English proficiency should be utilized by LAWA.

Response:

Comment noted. Appendix S-C1, Supplemental Aircraft Noise Technical Report, Table 3.3, Distance at which ordinary speech can be understood (as a function of A-weighted sound levels of masking noise in the outdoor environment), of the 1992 FICON report, Federal Agency Review of Selected Airport Noise Analysis Issues, is the same as Figure 6-1, Distance at which ordinary speech can be understood (as a function of A-weighted sound levels of masking noise in the outdoor environment), in the 1973 EPA Publication, Public Health and Welfare Criteria for Noise, July 27, 1973. Section 3.2.2.3, Speech and Communication, of the 1992 FICON report does indicate that Table 3.3 should provide general guidance as to the overall level of speech interference and cannot be used for specific events. As a result, FICON does recommend that a Leq metric be used to provide information about the number, level, or duration of intrusive events for special land uses such as schools. Additionally, FICON recommends the use of ANSI standards and Time Above analysis and uses of the Lmax metric, all of which were incorporated into the single event school analysis addressed in Section 4.1, Noise, and Section 4.2, Land Use, with supporting technical data and analyses provided in Appendix S-C1, Supplemental Aircraft Noise Technical Report, and Technical Report S-1 of the Supplement to the Draft EIS/EIR.

Numerous research literature was reviewed on the effects of the ability of children to learn. This topic has been the subject of studies at a limited number of airports during the past two decades. Each study focuses on how children within a specific environment are limited in their ability to comprehend information by the presence of aircraft noise at their schools. None of these studies has established a recommended standard or thresholds of significance on which to base projections of future effect. Even the noise metric appropriate for evaluations of learning impacts is in dispute, with some studies focusing on cumulative metrics and others focusing on single events above thresholds. In the absence of a definitive noise threshold resulting from this research at other airports, LAWA has adopted two metrics for acceptance in this evaluation, to be supplemented later by an additional study as part of the environmental monitoring program for the EIR portion of the environmental evaluations since none of the reviews cited a reliable statistical relationship between the amount of noise exposure present and the degree of learning difficulty experienced by children at affected schools. The methodology used to determine the relationship between levels of noise and children's ability to learn will be one of the first elements (MM-LU-3) to be developed by educational and psychoacoustical specialists retained by LAWA to conduct the study. The specific schools selected for inclusion in the study will likely be selected from among those now impacted by aircraft noise and those that are not known to be adversely effected by aircraft noise. Such a study of the effects of aircraft noise levels on classroom learning may also include, as a comparison, noise levels at schools located at a distance from LAX that are unaffected by aircraft noise impacts.

Additionally, please see Response to Comments AL00035-36, SAL00017-23, SAL00017-32, and SAL00017-33 for explanation that current studies on the relationship between aircraft noise and the ability of children to learn have not established a statistically reliable model to project the relative effect of changes in aircraft noise levels in learning.

SAL00017-25

Comment:

b. Classroom interior noise levels based upon assumed 29 dBA out-to-in aircraft noise reduction do not adequately protect a large enough proportion of classroom users in the Inglewood Unified School District.

According to the Supplemental Aircraft Noise Technical Report, the 29 dBA out-to-in noise reduction for aircraft noise intrusion to classrooms is the average result of sample measurements conducted at "several schools" by LAWA. (p. 149.) Insufficient details were provided in the SEIS/EIR to assess whether the sampling was applicable to Inglewood Unified School District classrooms. Furthermore, since the 29 dBA is an average result, several classrooms in the study must have lower sound attenuation levels. It is therefore likely that sound insulation for some Inglewood Unified School District classrooms would be lower than 29 dBA.

Deriving an indoor noise impact threshold using the 29 dBA average would not adequately protect the occupants of those classrooms with worse than average sound isolation. For example, as is common in Southern California, the Inglewood Unified School District utilizes 'bungalow/' 'modular' type classrooms. These would not generally be expected to provide such a high level of out-to-in noise reduction for aircraft noise. The noise threshold for mitigation should be designed to protect actually impacted classrooms, not just the 'average' case.

Response:

The aircraft noise levels experienced by students inside a classroom depends on the noise level reduction (NLR) achieved by the building design, which depends on the sound-reducing characteristics of physical construction such as windows, doors, and walls. The NLR is the difference pre-insulation between aircraft noise levels inside and outside of a school resulting from an aircraft noise event. As part of its school acoustic treatment program at LAX, LAWA conducted exterior and interior noise measurements at nine schools in Inglewood. The average difference between outside and inside noise levels at these schools was approximately 29 decibels. See 14 Cal. Code Regs. § 15144 (the requirements related to forecasting are limited to what can reasonably be expected under the circumstances).

CalTrans endorses use of averages and construction assumptions for NRL calculations as follows:

"For many land uses, interior noise levels resulting from exterior noise sources are equally, if not more, important than exterior noise levels as a determinant of acceptability. Furthermore, interior noise level criteria together with data and assumptions regarding the noise level reduction (NLR) provided by the structure can be combined to indirectly indicate a maximum acceptable level of exterior noise."

CalTrans ALUP Handbook, pp 7-34, 7-35.

The average NLR utilized in the Supplement to the Draft EIS/EIR falls within the range of NLRs proposed by CalTrans for schools of standard construction. CalTrans proposes 25-35 dB for schools with standard construction with windows closed. CalTrans Handbook, p. 7-37. This range of NLR proposed by CalTrans is based on standard construction methods without special control provisions, id., such as the District's Noise Mitigation Obligations ordered by the Court, as described in the "Settlement Agreement."

Modeling is frequently undertaken to estimate future environmental impacts. As explained above, LAWA has selected a reasonable NLR value to apply to all schools. Mitigation of future impacts will be based on actual measured NLR values at schools eligible for sound insulation. No schools subject to an aviation easement would be eligible for mitigation.

3. Comments and Responses

SAL00017-26

Comment:

c. The SEIS/EIR's proposed 84 dBA Lmax outdoor single event noise threshold is too high to assess single event noise impact upon classrooms, leading to a severe under-reporting of existing and future noise impacts.

The World Health Organization ("WHO") states that for speech to be intelligible when listening to complicated messages, such as in schools, interfering noise should not exceed 35 dBA. (World Health Organization, Guidelines, supra.) Assuming the classrooms in question operate with closed windows and doors (which would assume the existence of air-conditioning in the classrooms) and have been provided with sound attenuation to achieve a minimum noise level reduction of 25 dB (as required under the Land Use Compatibility Guidelines of the Federal Aviation Regulations for schools exposed to aircraft noise in the CNEL 65 to 70 range), this would suggest that occurrence of outdoor noise levels exceeding 60 dBA, which is much lower than the 84 dBA threshold, would result in speech interference within classrooms.

Even using the upper limit of the EPA's suggested range (see item 4 a., above) of 45 dBA as being a threshold above which interference with typical speech becomes noticeable indoors, and again assuming 25 dBA out-to-in sound insulation, such a conservative analysis would suggest speech disturbance would be noticeable when outdoor noise levels exceed 70 dBA. Again this is a much lower threshold than 84 dBA.

Table S17 of the Supplemental Aircraft Noise Technical Report presents results for time above 75 dBA outdoors. Reviewing the range of thresholds for speech interference discussed above, it is highly likely that aircraft noise levels exceeding 75 dBA at a school result in speech interference within classrooms. (As discussed above, the appropriate threshold is probably lower than 75 dBA.) Table 1 below, presents "time above" data in minutes, projected for the year 2015 unless otherwise indicated, for Inglewood Unified School District schools extracted from Table S17 of the Supplemental Aircraft Noise Technical Report.

Table 1 - Aircraft Noise Time above 75 dBA in Minutes, for the year 2015 unless otherwise stated.
[see original document]

The results presented in Table 1 suggest that the cumulative duration of speech interference in classrooms per day for all of the above Inglewood Unified School District schools will increase from "1996 baseline" levels under nearly every project alternative scenario. Given the amount of speech disturbance at 1996 levels indicated by the conservative analysis presented above, any further increase in cumulative duration of speech disturbance is of serious and immediate concern. The Supplemental Aircraft Noise Technical Report's reliance on analysis using a time above 84 dBA outdoor noise level clearly understates the existing and future aircraft noise disturbance at Inglewood Unified School District facilities.

When speech interference occurs in the classroom, students suffer a loss of learning time. Other possible outcomes include students failing to understand important information from the teacher, loss of concentration during study, or interference with standardized testing. (See Part One, Section 2b., supra.) The predicted increase in the duration of speech interference in Inglewood Unified School District classrooms gives rise to serious noise impacts that do not receive adequate attention in the SEIS/EIR.

Response:

As stated on page 139, Section 6, Single Event Noise Analysis in Appendix S-C1, Supplemental Aircraft Noise Technical Report, of the Supplement to the Draft EIS/EIR while the Court of Appeal ruled that the effects of single events should be addressed, it did not mandate specific standards for the determination of the significance of those impacts, leaving the determination of precisely what types of impacts and the establishment of thresholds of significance to the project sponsor, based on the sponsor's own assessment of what is locally meaningful. Therefore, LAWA has conducted its own evaluation of the anticipated effects of its proposed development actions on the single event noise levels in the environs of LAX to meet requirements set forth for CEQA evaluations by the California Court of Appeal. First,

based on the anticipated expansion of cargo facilities and the forecast growth in nighttime operations under the various development alternatives, as well as public comments received during the review of the Draft EIS/EIR, the potential for the public to be awakened at night was selected for single event evaluation. The second category selected for evaluation, also based on public comment and on continuing national and international research, is the ability of children to learn while exposed to high noise levels of aircraft noise events. LAWA applied the following metrics to compare single event noise levels of the future alternatives with those of existing conditions for school hours of 8:00 a.m. to 4:00 p.m.:

- 55 dB maximum noise level (Lmax);
- 65 dB Lmax; and
- 35 dB hourly equivalent noise level (Leq(h)).

The 55 dB and 65 dB Lmax standards are based on an August 1992 report by the Federal Interagency Committee On Noise (FICON). The 35 dB Leq(h) standard is based on recently published guidelines by the American National Standards Institute (ANSI) and is comparable with WHO standards. WHO's classroom guideline is 35 dBA Laeq. For further information regarding the thresholds of significance for classroom disruption, please see Section 6.2.1 of Appendix S-C1, Supplemental Aircraft Noise Technical Report of the Supplement to the Draft EIS/EIR. Please see Response to Comment AL00035-33. Please also see Response to Comment SAL00017-25 regarding the 29 dB noise level reduction. Additionally, please see MM-LU-3, regarding conducting a study of the relationship between aircraft noise levels and the ability of children to learn.

Please see Response to Comment AL00035-34 regarding the "time above" information provided by the commenter. As noted therein, the Aircraft Time Above 75 decibels is based over a 24-hour period, rather than over an eight hour school day. Thus the total time above 75 dB during school hours would be much less. Appendix S-C1, Supplemental Aircraft Noise Technical Report and Section 4.1, Noise of the Supplement to the Draft EIS/EIR extensively address single-event noise impacts on school disruption.

SAL00017-27

Comment:

d. The main body of the SEIS/EIR should consider significantly increased cumulative duration to excessive noise levels as a significant noise impact.

The Supplemental Aircraft Noise Technical Report introduces three thresholds of significance for single event impacts upon classrooms (55 dBA Lmax, 65 dBA Lmax and 35 dBA Leq (1 hour)). It states, "Each school listed on the tables may, for CEQA purposes, be considered single event impacted if its noise level exceeds any of the three thresholds of significance..." (SEIS/EIR, Supplemental Aircraft Noise Technical Report, Section 6.2.2, p. 150.) The main body of the SEIS/EIR, however, appears to only consider new exposure to levels above these thresholds (as opposed to all levels in excess of these thresholds) as the threshold of significance. This is in clear contrast to the pronouncements in the Supplemental Aircraft Noise Technical Report. No justification has been provided in the SEIS/EIR for its failure to acknowledge these impacts.

This can be illustrated by the example of Oak Street Elementary School. According to the Supplemental Aircraft Noise Technical Report, the classrooms at this school are exposed to instantaneous indoor noise levels exceeding 55 dBA for a cumulative duration of 2.7 minutes per day (comprising of 45.9 individual noisy events) based upon the 1996 baseline. Under Alternative D, in 2015, this cumulative duration would increase to 8.6 minutes per day (comprising of 98.3 individual noisy events). This is a more than 300% increase in cumulative daily exposure to classroom noise levels above 55 dBA, yet the main body of the SEIS/EIR, which uses new exposure to any event louder than 55 dBA levels as the threshold of impact for single events, fails to acknowledge a noise impact at this school.

The Supplemental Aircraft Noise Technical Report, in Table S33, also includes analysis of the increases in the cumulative duration above the threshold of 35 dBA Leq in classrooms. Under Alternative D, the following schools are all predicted to suffer increases to the cumulative duration in 2015 compared to the 1996 baseline:

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Kelso Elementary School
Oak Elementary School
Beulah Payne Elementary School
Clyde Woodworth Elementary School
Monroe Middle School
Hillcrest High School
Inglewood High School
Morningside High School

However, since only the latter two schools are newly exposed to levels above 35 dBA Leq, an impact has not been declared for the other schools. The somewhat arbitrary nature of the newly exposed requirement for a significant impact is illustrated by the fact that Morningside High School is considered as significantly impacted, whereas immediately adjacent schools Clyde Woodworth Elementary School and Monroe Middle School are not.

It should also be noted that all the schools listed above are, according to the SEIS/EIR, already (based upon the 1996 baseline) exposed to noise levels above the 35 dBA Leq threshold for at least 30 minutes per school day. Given the substantial amount of existing speech disturbance, any increase in cumulative duration of speech disturbance is considered troubling and again, use of the newly exposed requirement leads to an understatement of the noise impact associated with all of the project alternatives considered.

Response:

Numerous research literature was reviewed on the effects of the ability of children to learn. This topic has been the subject of studies at a limited number of airports during the past two decades. Each study focuses on how children within a specific environment are limited in their ability to comprehend information by the presence of aircraft noise at their schools. None of these studies has established a recommended standard or thresholds of significance on which to base projections of future effect. Even the noise metric appropriate for evaluations of learning impacts is in dispute, with some studies focusing on cumulative metrics and others focusing on single events above thresholds. In the absence of a definitive noise threshold resulting from this research at other airports, LAWA has adopted two metrics for acceptance in this evaluation, to be supplemented later by an additional study as part of the environmental monitoring program for the EIR portion of the environmental evaluations since none of the reviews cited a reliable statistical relationship between the amount of noise exposure present and the degree of learning difficulty experienced by children at affected schools. The methodology used to determine the relationship between levels of noise and children's ability to learn will be one of the first elements to be developed by educational and psychoacoustical specialists retained by LAWA to conduct the study in MM-LU-3. The specific schools selected for inclusion in the study will likely be selected from among those now impacted by aircraft noise and those that are not known to be adversely effected by aircraft noise.

Please see Appendix S-C1, Supplemental Aircraft Noise Technical Report of the Supplement to the Draft EIS/EIR for a listing of tables that include Alternative D impacts. Schools must be newly exposed to high interior single event noise to be considered significantly impacted. The newly exposed requirement is consistent with (a) the analysis throughout the EIS/EIR, and (b) CEQA requirements. Schools newly exposed to the above referenced single event threshold would be considered significantly impacted and incorporated into the ANMP to reduce interior noise levels to the applicable threshold noise level. Under CEQA, an EIR must identify and focus on "all significant effects on the environment of the proposed project." Pub. Res. Code § 21100(b)(1) (emphasis added); see also CEQA Guidelines, § 15126.2(a) ("In assessing the impact of a proposed project on the environment, the lead agency should normally limit its examination to changes in the existing physical conditions in the affected area as they exist at the time the notice of preparation is published"). However, they would not be eligible if they are subject to an existing aviation easement and have been provided with noise mitigation funds. The purpose of CEQA is to address potential impacts of a proposed project, not pre-existing environmental conditions that are already identified. Schools that are already exposed to classroom disruption under the defined thresholds for the 1996 Baseline and Year 2000 conditions are identified in Table S9, Listing of Schools Exposed to High Single Event Noise Levels of S-1, Supplemental Land Use Technical Report of the Supplement to the Draft EIS/EIR. For more information on thresholds of significance please see Section 4.1.4.1.1, of Section 4.1, Noise, of the Supplement to the Draft EIS/EIR and Subtopical Response TR-LU-5.2, regarding thresholds used in the Draft EIS/EIR and Supplement to Draft EIS/EIR to identify significant aircraft noise impacts.

Additionally, the commentor is correct in identifying that the average duration of flight event will increase because the average landing overflight above impacted schools will be lower. Please see Section 4.1.6.1.5.4.2, School Disruption, of Section 4.1, Noise of the Supplement to the Draft EIS/EIR.

There is no standard or criterion for determining what increases in exposure to high noise levels is significant. Although Oak Street Elementary School would be exposed to an increase in the number of events and minutes of exposure to the 55 dBA Lmax threshold, it is unclear whether the increase would be "significant." Under Alternative D, the school would still be exposed to less than 10 minutes of the school day. Although this increase might not be trivial, there is no way of determining whether this impact is "significant" in terms of learning disruption. This exact issue will be addressed in the study conducted under MM-LU-3. The standard resulting from the study may be in Lmax, Leq(h), or some other noise metric as yet undefined, such as increases in the number of events of exposure or the time of exposure.

Please see Responses to Comments AL00035-23, AL00035-36 on the schools in Inglewood Unified School District would be significantly impacted by cumulative and/or single event noise levels. Please also see Response to Comment AL00017-26 regarding increases of significant single event noise levels over baseline conditions.

SAL00017-28

Comment:

5. The Project Alternatives Included in the EIS/EIR Do Not Appear to Satisfy CEQA or NEPA Requirements.

According to Title 14 California Code of Regulations, Chapter 3, Guidelines for Implementation of CEQA:

"An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project." (15 California Code of Regulations § 15126.6(a).)

Significant noise impacts are predicted for Inglewood Unified School District schools under each alternative considered, including the "No Action/ No Project" alternative. No alternative has been considered that would avoid or substantially lessen the noise impact upon Inglewood schools as required by CEQA.

According to the Council for Environmental Quality, a NEPA analysis:

"...shall inform decision makers and the public of the reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment... [including]... reasonable alternatives not within the jurisdiction of the lead agency."

In this context, a proper NEPA analysis should include at least one alternative whereby a significant noise impact was avoided in Inglewood schools by diverting the proposed increased heavy jet traffic to other airports.

Response:

This comment is essentially the same as comment AL00035-37; please refer to Response to Comment AL00035-37.

SAL00017-29

Comment:

6. The Analysis of Temporary Aircraft Noise Impacts Is Inadequate.

Table S4.1-5 of the main body of the SEIS/EIR shows that in the year 2008, under Alternative D, Beulah Payne Elementary School will be exposed to higher daily aircraft noise levels (67.2 dBA, compared to a

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1996 baseline level of 58.6 dBA). It appears that there will be elevated aircraft impacts during portions of the construction phase.

This is acknowledged within the Supplemental Aircraft Noise Technical Report (see p. 26, for example), but the main body of the SEIS/EIR does not appear to provide any analysis of temporary aircraft noise impact on the other Inglewood Unified School District schools, a discussion of how long they might last, or a recommendation for any mitigation measures. As with all significant adverse impacts, these construction impacts must be described and analyzed and mitigation measures presented.

Response:

Please see Responses to Comments AL00035-23, AL00035-25, AL00035-33 and AL00035-36 for a discussion of noise impacts on schools within the Inglewood Unified School District and the "Settlement Agreement."

As described on page 26 of Technical Report S-C1, Supplemental Aircraft Noise Technical Report, of the Supplement to the Draft EIS/EIR, temporary aircraft noise impacts associated with the relocation of runway 7R/25L would last approximately one year. A comparison of Figure S5 in the Supplemental Aircraft Noise Technical Report with Figure S1 in Technical Report S-1, Land Use Technical Report, of the Supplement to the Draft EIS/EIR indicates that the majority of areas that would experience temporary aircraft noise impacts are located within the current ANMP boundaries or would be eligible for mitigation under the revised ANMP boundaries (see Topical Response TR-LU-3 for a description of changes to the ANMP that would occur with the approval of the LAX Master Plan). Therefore temporary aircraft noise impacts during construction have been accounted for with appropriate mitigation provided. In addition, Beulah Payne and other schools in the Inglewood Unified School District do not qualify for the mitigation measures established in the Supplement to the Draft EIS/EIR and refined in this Final EIS/EIR, since aviation easements, noise mitigation payments, and other provisions of the "Settlement Agreement" have resolved land use incompatibility and noise mitigation issues.

SAL00017-30

Comment:

7. Inadequate/Mislabeled Data in Supplemental Aircraft Noise Technical Report.

The Supplemental Aircraft Noise Technical Report, which presents the specific noise calculation results relevant to Inglewood Unified School District schools, provides data labeled as 'DNL' in Table S14. It is unclear whether this data is actually CNEL data that has been mislabeled. Since the project thresholds of significance are set in terms of CNEL rather than DNL, providing DNL data prevents the reader from looking at predicted CNEL impacts on specific Inglewood Unified School District schools.

Response:

Table S14 uses the DNL metric. Table S14 is not mislabeled. For the CNEL metric please see Table S13 in Appendix S-C1, Supplemental Aircraft Technical Noise Report of the Supplement to the Draft EIS/EIR.

SAL00017-31

Comment:

8. Specific Noise Mitigation Measures for Inglewood Unified School District Facilities Are Not Clearly Stated in the SEIS/EIR.

According to Title 14 California Code of Regulations, Chapter 3, Guidelines for Implementation of CEQA:

"An EIR shall describe feasible measures which could minimize significant adverse impacts...the discussion of mitigation measures shall distinguish between the measures which are proposed by project proponents to be included in the project and other measures proposed by the lead, responsible or trustee agency or other persons which are not included but the lead agency determines could reasonably be expected to reduce adverse impacts if required as conditions of approving the project.

This discussion shall identify mitigation measures for each significant environmental effect identified in the EIR." (14 California Code of Regulations § 15126.4.)

Mitigation measure MM-LU-4, which incorporates noise mitigation measures for schools, is "subject to modification" based upon the results of further study. Details of the proposed "further study" are not, however, provided for review. The proposed noise mitigation measures (further study excluded, because study alone will not do anything to mitigate the predicted noise impact) are not therefore clearly stated in the report.

Response:

Information regarding significant noise impacts is provided in Section 4.1, Noise, Section 4.2, Land Use, Appendix S-C1, Supplemental Aircraft Noise Technical Report, and Technical Report S-1, Supplemental Land Use Technical Report, of the Supplement to the Draft EIS/EIR.

Schools without aviation easements with significant single event noise impacts may be eligible for mitigation in the form of interior sound insulation to the applicable threshold noise level. Approval of the LAX Master Plan also would trigger implementation of mitigation measures MM-LU-3 and MM-LU-4 to address aircraft noise impacts on schools. Please see Responses to Comments AL00035-33 and AL00035-36 and SAL00017-23, SAL00017-32 and SAL00017-33. The specific methodology of the further comprehensive study described in MM-LU-3 to identify the relationship between aircraft noise levels and the ability of children to learn has not yet been established. Please see Response to Comment SAL00013-111 for information regarding the design of the study and the selection of experts for peer review.

SAL00017-32

Comment:

- a. The SEIS/EIR's analysis of the health effects of noise on students is flawed.
- i. The SEIS/EIR improperly relies on a flawed FICON document.

The SEIS/EIR relies heavily on noise level standards from a document prepared by the Federal Interagency Committee on Noise ("FICON") entitled "Federal Agency Review of Selected Airport Noise Analysis Issues." This document is misrepresented in the report and should not be relied upon. The misrepresentation is to describe this document as a "study detailing the degree of speech understanding at various noise levels...." (SEIS/EIR, Noise, Section 4.1.2.1.2, p. 4-12.)

First, FICON is an interagency task force consisting of representatives from various government agencies. It does not consist of experts on noise or noise impacts on children who have appropriate scientific training and experience to critically evaluate and summarize a scientific body of literature.

Second, there are many individuals on FICON with clear conflicts of interest in assessing the scientific literature. The majority of FICON representatives work for federal agencies that are major producers of noise (e.g., Federal Aviation Administration ("FAA"), the U. S. military, National Aeronautics and Space Administration ("NASA")).

Third, the entire FICON document devotes five pages to the topic of speech communication. No scientific analysis could "detail the degree of speech understanding" in such a limited manner. The uncritical acceptance of the FICON document reflects a serious lack of understanding and knowledge of the scientific literature on the effects of noise on children's learning and speech perception.

Fourth, some important data the FICON document relies upon are outdated and in some cases inaccurate. For example, Table 3.3 in the FICON document which is reprinted from a 30 year old Environmental Protection Agency ("EPA") document ("EPA Report") is widely rejected in the scientific community in its applicability to children's learning. Data from adults listening to a trained speaker conversing in the outdoors were used to develop this Table. It has long been known that children need a larger signal to noise ratio to comprehend speech than an adult, and noise effects in interior environments must take into account sound intensity and reverberation time (time for sound to decay). (American National Standards Institute, "Acoustical performance criteria design requirements and guidelines for schools.", ANSI S12.60-2002, Exhibit 19; World Health Organization, Environmental

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Health Information, Guidelines for Community Noise, 2000; Nelson, P. & Soli, S., "Acoustical barriers to learning: Children at risk in every classroom." *Language, Speech, and Hearing Services*, 31: 356-361, 2000; Picard, M., & Bradley, J.S., "Revisiting speech interference in classrooms." *Audiology*, 40: 221-244, 2001) The FICON document and the SEIS/EIR which relies primarily on the FICON document is replete with errors of this sort.

Fifth, the FICON document omits abundant research on airport noise and deficits in reading acquisition. More than 20 studies around the world (Evans, G.W. & Lepore, S.J., "Nonauditory effects of noise on children." *Children's Environments*, 10: 31-51, 1993; Kryter, K.D., "The handbook of hearing and the effects of noise." San Diego, Academic Press, 1994, Exhibit 20; World Health Organization, Environmental Health Information, Guidelines for Community Noise, 2001) including a dose response relationship (Green, K., Pasternack, B. & Shore, R., "Effects of aircraft noise on reading ability of school age children." *Archives of Environmental Health*, 37: 24-31, 1982, Exhibit 21) interventions to reduce noise (Bronzaft, A., "The effect of a noise abatement program on reading ability." *Journal of Environmental Psychology*, 1: 215-222, 1981) and most convincingly, a prospective, longitudinal study (i.e. the same children are compared before and after the opening of a major new airport) (Hygge, S., Evans, G.W., @ Bullinger, M., "A prospective study of some effects of aircraft noise on cognitive performance in school children." *Psychological Science*, 13: 469-474, 2002, Exhibit 22), show significant deficits in reading from transportation related noise exposure.

Response:

Comment noted. Numerous research literature was reviewed on the effects of noise on the ability of children to learn. This topic has been the subject of studies at a limited number of airports during the past two decades. Each study focuses on how children within a specific environment are limited in their ability to comprehend information by the presence of aircraft noise at their schools. None of these studies has established a recommended standard or thresholds of significance on which to base projections of future effect. Even the noise metric appropriate for evaluations of learning impacts is in dispute, with some studies focusing on cumulative metrics and others focusing on single events above thresholds. In the absence of a definitive noise threshold resulting from this research at other airports, LAWA has adopted two metrics for use in this evaluation, to be supplemented later by an additional study as part of the environmental monitoring program for the EIR portion of the environmental evaluations, since none of the reviews cited a reliable statistical relationship between the amount of noise exposure present and the degree of learning difficulty experienced by children at affected schools. The methodology used to determine the relationship between levels of noise and children's ability to learn will be one of the first elements to be developed by educational and psychoacoustical specialists retained by LAWA to conduct the study. The specific schools selected for inclusion in the study will likely be selected from among those now impacted by aircraft noise and, for comparative purposes, schools that are known to be not be adversely effected by aircraft noise. It is acknowledged that airport noise exposure has impacts on children's learning. However, the literature identified by the commentor does not provide a recommended standard or threshold of significance. While the World Health Organization does provide noise related guidelines, FICAN and FICON guidelines were used since they are accepted by FAA. The 35 decibel interior Leq(h) standard from ANSI is similar to the levels WHO identified in its classroom disruption guidelines. The WHO guidelines were developed as goals to be sought, rather than as standards that should be achieved by any governmental body. Please see Section 4.1.2.1.1 Awakenings and 4.1.2.1.2 Classroom Disruption of Section 4.1 Noise, and Section 6. Single Event Noise Analysis of Appendix S-C1, Supplemental Aircraft Noise Technical Report of the Supplement to the Draft EIS/EIR for a better description of single event methodology. Additionally, the following metrics were assessed and based on windows closed: 55 Interior dBA, 65 Interior dBA and 35 Leq(h). Please see Section 6.2.1 Threshold of Significance of Appendix S-C1, Supplemental Aircraft Noise Technical Report of the Supplement to the Draft EIS/EIR. Please see Response to Comment SAL00017-23 and SAL00017-33. The Nelson, P. & Soli, S., "Acoustical barriers to learning: Children at risk in every classroom." study identifies that poor listening conditions can impact children's learning abilities, but does not limit noise reduction to external sources only; it also identifies HVAC systems as a source of noise. The 2001 Picard, M., & Bradley, J.S., study finds that acoustical treatment standards should be different by age group and vulnerability of the students.

FICAN developed a position paper in September 2000, see "FICAN Position on Research into Effects of Aircraft Noise on Classroom Learning," that used the 1982, Green, K, Pasternack, B & Shore, R "Effects of aircraft noise on reading ability of school age children" as a reference. However, the recommendations that came out of the FICAN 2000 position paper include that further work should be done to 1) establish whether school day Leq is the appropriate measure for determining the effect of

aircraft noise on classroom learning 2) whether SEL the best predictor of interruption, and 3) initiate before and after noise evaluations to determine the effectiveness of noise mitigation. It further provided FICAN's support of the development of an ANSI standard for classroom acoustics. These are exactly the subjects that are envisioned for the proposed study to be conducted under implementation of MM-LU-3.

The 1981 Bronzaft study found that schools that were exposed to train noise had lower reading scores. However, once the schoolroom was acoustically treated the reading scores were improved to a point where they no longer differed. Pending completion of a further comprehensive study to determine the relationship between aircraft noise and the ability of children to learn and to establish reliable standards to project significant noise impacts that would disrupt learning, LAWA would implement mitigation measure MM-LU-1 to mitigate land uses that would be rendered incompatible by noise impacts. Significantly impacted schools by single event levels will be incorporated into the ANMP, and will receive sound insulation to reduce interior noise levels to the applicable threshold noise level unless those schools that are significantly impacted by high noise levels, are subject to any applicable exclusions or satisfaction of mitigation obligations based on the Avigation Easements, the District's Noise Mitigation Obligations and other elements of the "Settlement Agreement" between the City of Los Angeles and the school districts. While the 2002 Hygge, S., Evans, G.W., and Bullinger, M., study does show significant deficits in reading from transportation related noise exposure to classroom learning, it also indicates that future research needs to address the importance of both developmental timing and the duration of noise exposure in determining the effect of noise on reading and cognitive development. Additionally, the study found that research needs to sample a wider range of noise levels in order to generate a dose response function for reading.

The basis for using the FICON report and ANSI standards to develop the single event school analysis thresholds of significance are addressed in Section 6.2.1, Threshold of Significance, of Appendix S-C1, and Section 4.1.2.1.2, Classroom Disruption, of the Section 4.1, Noise of the Supplement to the Draft EIS/EIR. Additionally, the FAA accepts FICON and ANSI standards. For more information on thresholds please see Section 6, Single Event Noise Analysis, of Appendix S-C1, Supplemental Aircraft Noise Technical Report of the Supplement to the Draft EIS/EIR. For additional information on single event mitigation measures please see Section 4.1.8 Mitigation Measures of Section 4.2, Land Use of the Supplement to the Draft EIS/EIR.

SAL00017-33

Comment:

- ii. The SEIS/EIR Ignores the Scientifically Confirmed and Well Established Link Between Noise Exposure and Children's Learning.

The SEIS/EIR relies heavily on FICON's flawed logic in developing its basic arguments. The SEIS/EIR states that "there is no reliable statistical relationship between the amount of aircraft noise exposure present and the degree of learning difficulty experienced by children at affected schools..." (SEIS/EIR, Noise, Section 4.1.2.1.2, p. 4-11.) First unless the SEIS/EIR consulting team includes individuals trained in statistics and research design methodology, this claim is suspect prima facie. Second, because there is very little data (consisting of one airport study (Green, K., Pastemack, B. & Shore, R. "Effects of aircraft noise on reading ability of school age children." supra) and one road traffic study (Lukas, J.S., DuPree, R.B. and Swing, J.W. Effects Of Noise On Academic Achievement And Classroom Behavior, supra.) to be exact, not zero as stated by FICON and uncritically repeated in the SEIS/EIR) showing a dose-response relationship between noise levels and learning deficits, the report presumes therefore there is no evidence to support a link between noise exposure and learning difficulties. This is patently false.

There are multiple sources of evidence to demonstrate a relationship between airport noise exposure and significant deficits in children's learning. Many studies show that aircraft noise is significantly related to deficits in reading acquisition (see reviews in Evans, G.W. & Lepore, S.J., "Nonauditory effects of noise on children." *Children's Environments*, 10: 31-51, 1993, Exhibit 23; Kryter, K.D. "The handbook of hearing and the effects of noise." supra; World Health Organization, Guidelines, 2001, supra.). Not one of these studies is cited in the FICON document or the SEIS/EIR. This is a glaring omission in an SEIS/EIR that is mandated by state and federal law to consider potential health and welfare costs and

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benefits of a proposed project. The focus on speech and communication should be at least matched by an analysis of the noise and reading acquisition literature.

In contrast to the FICON document, the SEIS/EIR briefly notes a more recent American National Standards Institute ("ANSI") classroom standard criterion established in "Acoustical Performance Criteria, Design Requirements, and Guidelines for Schools" supra (hereinafter referred to as "ANSI Report"). This document recommends lower levels of acceptable noise intensity in classrooms than FICON. The SEIS/EIR omits discussion of the World Health Organization ("WHO") noise criterion document, "Adverse Health Effects of Noise," Section 3, April 2001, (hereinafter referred to as the "WHO Report"), which predates the ANSI study by a few years. The WHO and ANSI standards converge on 35 dBA for an interior noise standard for elementary school classrooms. What is particularly important to understand is that unlike the FICON document, the ANSI and WHO reports were developed by scientists knowledgeable about noise and its human impacts. These reports are much more detailed and provide a thorough discussion and analysis of the evidence. In the case of the WHO Report, it represents a consensus statement of leading noise researchers in the world on the current level of knowledge about noise and its impacts and provides recommendations of acceptable noise standards to protect the public. Unlike the FICON document, the WHO and ANSI reports were also widely distributed to scientists in draft form for critical feedback, and then went through multiple iterations of revisions. There was substantially scientific peer review of the WHO and ANSI reports. This did not occur for the FICON document.

Response:

Comment noted. Numerous research literature was reviewed on the effects of the ability of children to learn. This topic has been the subject of studies at a limited number of airports during the past two decades. Each study focuses on how children within a specific environment are limited in their ability to comprehend information by the presence of aircraft noise at their schools. None of these studies has established a recommended standard or threshold of significance on which to base projections of future effect. Even the noise metric appropriate for evaluations of learning impacts is in dispute, with some studies focusing on cumulative metrics and others focusing on single events above thresholds.

It is acknowledged that airport noise exposure has impacts. However, the literature identified by the commentor does not provide a recommended standard or threshold of significance. FICAN developed a position paper in September 2000, see "FICAN Position on Research into Effects of Aircraft Noise on Classroom Learning," that used the 1982, Green, K, Pasternack, B & Shore, R "Effects of aircraft noise on reading ability of school age children" as a reference. However, the recommendations that came out of the FICAN 2000 position paper include that further work should be done to 1) establish whether school day Leq is the appropriate measure for determining the effect of aircraft noise on classroom learning 2) whether SEL the best predictor of interruption, and 3) initiate before and after noise evaluations to determine the effectiveness of noise mitigation. It further provided FICAN's support of the development of an ANSI standard for classroom acoustics.

The Lukas, J.S., Dupree, R.B and Swing, J.W. "Effects of noise on academic achievement and classroom behavior" used the C-weighted ambient noise levels to correlate reading scores with freeway noise. Aircraft noise evaluations are based on the A-weighted scale of noise definition. The results of the Lukas, et. al. study do not apply to the evaluations of aircraft noise effect.

In the absence of a definitive noise threshold resulting from this research at other airports, LAWA has adopted two metrics for acceptance in this evaluation, to be supplemented later by an additional study as part of the environmental monitoring program for the EIR portion of the environmental evaluations since none of the reviews cited a reliable statistical relationship between the amount of noise exposure present and the degree of learning difficulty experienced by children at affected schools. The methodology used to determine the relationship between levels of noise and children's ability to learn will be one of the first elements to be developed by educational and psychoacoustical specialists retained by LAWA to conduct the study. The specific schools selected for inclusion in the study will likely be selected from among those now impacted by aircraft noise and those that are not known to be adversely effected by aircraft noise. Such a study of the effects of aircraft noise levels on classroom learning may also include, as a comparison, noise levels at schools located at a distance from LAX that are unaffected by aircraft noise impacts.

The commentor misinterprets WHO's classroom guidelines as 35 dBA. It is 35 Leq dBA average for an eight hour period rather than an instantaneous decibel level. The noise levels have been normalized

for the school hours of 8:00 a.m. to 4:00 p.m. While the World Health Organization does provide noise related guidelines, FICAN and FICON guidelines were used since they are accepted by FAA. The 35 decibel interior Leq(h) standard from ANSI is similar to what WHO identified in its classroom disruption guidelines. The WHO guidelines indicated in the chart were developed as goals to be sought, rather than as standards that should be achieved by any governmental body. Please see Section 4.1.2.1.1 Awakenings and 4.1.2.1.2 Classroom Disruption of Section 4.1 Noise, and Section 6. Single Event Noise Analysis of Appendix S-C1, Supplemental Aircraft Noise Technical Report of the Supplement to the Draft EIS/EIR for a better description of single event methodology. The commentor misinterprets WHO's classroom guidelines as 35 dBA. It is 35 Leq dBA average for an eight hour period rather than an instantaneous decibel level. The noise levels have been normalized for the school hours of 8:00 a.m. to 4:00 p.m. Additionally, the following metrics were assessed and based on windows closed. 55 Interior dBA, 65 Interior dBA and 35 Leq(h) based on ANSI standards that are comparable to WHO standards. Please see Section 6.2.1 Threshold of Significance of Appendix S-C1, Supplemental Aircraft Noise Technical Report of the Supplement to the Draft EIS/EIR. Please see Response to Comment SAL00017-23 and SAL00017-32.

SAL00017-34

Comment:

iii. The SEIS/EIR Entirely Neglects the Substantiated Link Between Noise and Other Adverse Learning and Health Effects on Children.

The SEIS/EIR also does not consider evidence of other adverse learning and health effects on children chronically exposed to aircraft noise. These are widely available in the scientific literature. Children chronically exposed to noise suffer from motivational deficits. They persist less in achievement related contexts. Both laboratory (Glass, D.C. "Behavior patterns, stress, and coronary heart disease." Hillsdale, NJ: Erlbaum, 1977,) and field studies of noise (Bullinger, M., Hygge, S., Evans, G.W., Meis, M. and von Mackensen, S., "The Psychological Cost of Aircraft Noise for Children.," *supra*.; Evans, G.W., Hygge, S. & Bullinger, M., "Chronic noise and psychological stress." *Psychological Science*, 6: 333-338, 1995, Exhibit 24) show that children are less likely to continue efforts in problem solving if they have been exposed to uncontrollable noise. These motivational deficiencies are believed to be caused by the uncontrollable nature of ambient noise exposure.

Constant exposure to a noxious, uncontrollable stressor like noise produces learned helplessness (Peterson, C., Maier, S. & Seligman, M.E.P., "Learned helplessness." NY: Oxford Press, 1993). Individuals learn that regardless of their efforts to cope with an adverse environmental condition, they cannot do anything about it. The outcomes of their behaviors are noncontingent on their behaviors. It is worth noting that the most common way learned helplessness is produced in human laboratory studies, is to expose individuals to uncontrollable noise. There is very strong evidence from human experiments that exposure to uncontrollable noise can produce significant decrements in task persistence. Field studies with children indicate parallel trends from chronic exposure to aircraft noise (See for reviews Cohen, S., "Aftereffects of stress on human performance and social behavior: A review of research and theory." *Psychological Bulletin*, 88: 82-108, 1980, Exhibit 25; Evans, G.W., "Environmental stress and health." In A. Baum, T. Revenson & J.E. Singer (Eds.), *Handbook of Health Psychology*. Mahwah, NJ: Erlbaum, 2001, Exhibit 26; Glass, D.C., & Singer, J.E., "Urban stress: experiments on noise and social stressors." NY: Academic Press, 1972; Peterson, C., Maier, S. & Seligman, M.E.P. "Learned helplessness.," *supra*.)

Additionally, there are several studies documenting links between chronic noise exposure in children and elevated blood pressure. There are no dose response data, but several studies with different research designs (cross-sectional, intervention, longitudinal) show that airport noise exposure is associated with higher blood pressure in children. (See for reviews Evans, G.W. "Environmental stress and health." *supra*; Ising, H. Babisch, W., & Kruppa, B., "Acute and chronic noise stress as cardiovascular risk factors." *Noise and Health*, 4: 37-48, 1999; World Health Organization, *Environmental Health Information, Guidelines for Community Noise*, 2001, *supra*.) A smaller number of studies also find evidence of elevated stress hormones from exposure to airport noise (Evans, G.W., Bullinger, M. and Hygge, S., "Chronic Noise Exposure and Physiological Response: A Prospective Study of Children Living Under Environmental Stress." *Psychological Science*, Vol.9, No. 1, January 1998, Exhibit 27; Ising, H., et al. "Acute and chronic noise stress as cardiovascular risk factors.," *supra*.) It is well know that children with higher blood pressure will tend to have higher blood pressure as adults.

3. Comments and Responses

Response:

Please see Response to Comment AL00017-52. The types of noise-related health effects identified in the above studies are consistent with the information presented in the Draft EIS/EIR and Technical Report 14b. The studies, however, do not provide any scientific evidence or other basis for determining the nature, extent, or significance of noise-related health effects due to any of the Master Plan alternatives. However, as explained in Response to Comment AL00035-36, the Supplement to the Draft EIS/EIR addressed the effects of single event or cumulative aircraft noise relative to school disruption associated with the No Action/No Project Alternative and all four build alternatives in Section 4.1, Noise, and Section 4.2, Land Use, with supporting technical data and analyses provided in Appendix S-C1 and Technical Report S-1. Mitigation is provided under Mitigation Measures MM-LU-3 and MM-LU-4 in the form of study of aircraft noise levels that result in classroom disruption and sound insulation for schools determined by the study or interim noise measurements to be significantly impacted. Schools in the Inglewood Unified School District are subject to the aviation easements, as well as prior noise mitigation payments, and so are not eligible for further mitigation.

SAL00017-35

Comment:

b. The SEIS/EIR's Proposed Noise Study is Inadequate.

i. LAWA May Not Postpone Its Proposed Noise Study Absent a Commitment by LAWA to Mitigate.

The California Environmental Quality Act requires that, whenever feasible, all impacts must be mitigated for any project that is carried out by or approved by a public agency. California Public Resources Code §§ 21002, 21002.1(b). Thus, significant effects on the environment must be either eliminated or substantially minimized where feasible. (*Berkeley Keep Jets Over the Bay Committee v. Board of Port Commissioners* (2001) 91 Cal.App.4th 1344, 1355.)

According the SEIS/EIR, LAWA will initiate a study of the relationship between aircraft noise levels and the ability of children to learn. (SEIS/EIR, Land Use, Section 4.2, p. 4-210.) Based upon this study, LAWA will set a new threshold of significance for classroom disruption. (Id.)

Nonetheless, the SEIS/EIR is vague, inconclusive and inconsistent with respect to actual mitigation. The SEIS/EIR makes no clear statement or commitment to mitigate the impacts even after establishing the new threshold of significance discussed above.

According to California law, LAWA must make a binding "commitment" to achieve a desired level of mitigation. (*Sacramento Old City Association v. City Council of Sacramento* (1991) 229 Cal.App.3d 1011, 1028.) One manner in doing so is to effectuate "specific performance criteria articulated at the time of project approval." (Id. at 1029.) Without either a binding commitment or a performance standard, the CEQA analysis is flawed.

For example, the SEIS/EIR states that "any schools found to exceed a newly established threshold of significance for classroom disruption shall be incorporated into the ANMP administered by LAWA." (SEIS/EIR, Land Use, Section 4.2, p. 4-210.) According to the SEIS/EIR, the ANMP performance standard is as high as 45 CNEL. (SEIS/EIR, Land Use, Section 4.2, p. 4-198.) Since the new threshold of significance will in all likelihood be lower than 45 CNEL, reliance on the ANMP performance standard would render the new threshold immaterial for mitigation purposes.

Also, conflicting language in the SEIS/EIR, creates ambiguity as to whether LAWA will provide substantial mitigation. The SEIS/EIR states that mitigation measures would "mitigate schools that are impacted by significant single event levels through further study of the relationship between the learning and aircraft noise exposure levels, and the subsequent sound insulation of schools where impacts are shown to be significant." (SEIS/EIR, Noise, Section 4.1, p. 4-80.) The Supplemental Aircraft Noise Technical Report, however, hedges by associating eligibility for mitigation with the CNEL levels in the Settlement Agreement. (Section 6.2.3, p. 154.) Additionally, it states that "the potential for additions to the sound insulation program for schools will be revisited as part of LAWA's continuing environmental management responsibilities." (Id.)

The SEIS/EIR does not state whether LAWA will mitigate to levels below significance (i.e. below the new threshold of significance). Nor does the SEIS/EIR provide a "standard of performance" for noise mitigation. It also does not clarify whether this mitigation will occur in schools it believes are otherwise "compatible" under Title 21. (See, e.g., SEIS/EIR, Environmental Justice, Section 4.4.3.5.1.2, p. 4-329.)

Although the SEIS/EIR acknowledges the impact of aircraft noise on children's learning, it does not commit to mitigation. The SEIS/EIR's inconclusive approach circumvents the mitigation analysis called for by CEQA.

Response:

Please see Response to Comment SAL00017-23. Pending completion of a further comprehensive study to determine the relationship between aircraft noise and the ability of children to learn and to establish reliable standards to project significant noise impacts that would disrupt learning, LAWA would implement mitigation measure MM-LU-1. Schools without aviation easements with significant single event aircraft noise impacts will be incorporated into the ANMP and so would be entitled to interior sound insulation to below the applicable significance thresholds for single event noise.

SAL00017-36

Comment:

- ii. A Deferred Noise Analysis Is Inappropriate.

Possible impacts must be studied as early as possible to avoid deferment of formulation of mitigation measures. (See, *Sundstrom v. County of Mendocino* (1988) 202 Cal. App. 3d 296, 307.) In general, "an environmental assessment, including a statement of the mitigation measures, may not be deferred until a future study or project." (*Rio Vista Farm Bureau Center v. County of Solano* (1992) 5 Cal.App.4th 351.)

There is substantial evidence currently before LAWA that significant impacts of aircraft noise on children's learning will occur. Despite this, LAWA is deferring the assessment of this impact. CEQA requires environmental review at the earliest feasible stage in the planning process. California Public Resources Code Section 21003.1; *Sundstrom v. County of Mendocino*, 202 Cal. App. 3d 296, 307.

In this case, there is no justifiable reason for delaying the study or not initiating the study at an earlier date. In September of 2001, in response to the Original EIS/EIR, the Inglewood Unified School District analyzed an abundance of studies and academic research regarding the relationship between aircraft noise and children's learning, 'learned helplessness' and high blood pressure. LAWA does not present a satisfactory reason for its failure to conduct or initiate its proposed study at that time, nearly two years prior to release of the Supplement, or any time since then. Thus, the SEIS/EIR fails in its obligation to conduct the study at the earliest feasible stage in the process.

Also, as a result, the SEIS/EIR fails to meet the requirement of "completeness and a good faith effort at full disclosure." (*Berkeley Keep Jets Over the Bay Committee v. Board of Port Commissioners* (2001) 91 Cal.App.4th 1344, 1355.)

Response:

Comment noted. Please see Response to Comment SAL00017-23, SAL00017-32, SAL00017-33 and SAL00017-35 regarding LAWA's commitment to mitigation.

SAL00017-37

Comment:

- iii. Failure to Conduct a Study Prior to Publishing the SEIR/EIR Is Against Public Policy.

The oversight in failing to conduct a noise study in and of itself may seem inconsequential, however, in face of overarching public policy considerations, it is significant. Public policy dictates that, "in the absence of overriding circumstances, the CEQA process demands that mitigation measures be timely set forth, that environmental information be complete and relevant, and that environmental decisions be made in an accountable arena." (*Gentry v. City of Murrieta* (1995) 36 Cal.App.4th 1359, 1393-1394.)

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Otherwise, the process diminishes the influence of decisionmaking in CEQA by not allowing the public to review the environmental impacts and provide comments to the lead agency. "Public and agency review" has been called the "strongest assurance of the adequacy of the EIR. [Citations]" (Sundstrom v. County of Mendocino (1988) 202 Cal. App. 3d 296, 308.) Absent this public review, LAWA is not accountable to mitigation measures for a significant impact caused by aircraft noise on children's learning.

Moreover, CEQA's very purpose "is to inform the public and its responsible officials of the environmental consequences of their decisions before they are made. Thus, the EIR 'protects not only the environment but also informed self-government.[Citations.]" (Berkeley Keep Jets Over the Bay Committee v. Board of Port Commissioners (2001) 91 Cal.App.4th 1344, 1354.) The lack of early disclosure and public review completely disregards and undermines the CEQA process.

Response:

Comment noted. As stated in Section 6.2, School Single Event Analysis, of Appendix S-C1, Supplemental Aircraft Noise Technical Report of the Supplement to the Draft EIS/EIR, the impact of aircraft noise on the learning environment has been the subject of studies at a limited number of airports during the past two decades. Each study focuses on how children within a specific environment are limited in their ability to comprehend information by the presence of aircraft noise at their schools. None of these studies has established a recommended standard or thresholds of significance on which to base projections of future effect. Even the noise metric appropriate for evaluations of learning impacts is in dispute, with some studies focusing on cumulative metrics and others focusing on single events above thresholds. Since there is no recommended standard or threshold of significance LAWA will develop a statistically reliable predictive model of the relative effect of changes in aircraft noise levels on learning. Through MM-LU-3, LAWA has already committed to initiate this potentially lengthy, difficult and expensive study. The basis for using the FICON report and ANSI standards to develop the single event school analysis thresholds of significance are addressed in Section 6.2.1, Threshold of Significance, of Appendix S-C1, and Section 4.1.2.1.2, Classroom Disruption, of the Section 4.1, Noise of the Supplement to the Draft EIS/EIR. Additionally, the FAA accepts FICON and ANSI standards. In the absence of a definitive noise threshold resulting from this research at other airports, LAWA has adopted two metrics for acceptance in this evaluation, to be supplemented later by an additional study as part of the environmental monitoring program for the EIR portion of the environmental evaluations. The Supplement to the Draft EIS/EIR addressed single-event impacts and mitigation measures associated with Alternative D in Section 4.1, Noise, and Section 4.2, Land Use. Supporting technical data and analyses are provided in Appendix S-C and Technical Report S-1 of the Supplement to the Draft EIS/EIR. Additionally, please see Response to Comment AL00035-36, SAL00013-23, SAL00013-32, SAL00013-33 regarding mitigation measures

SAL00017-38

Comment:

iv. The Proposed Noise Study Must Meet Stringent Scientific Standards to be Valid.

LAWA proposes to commission a study to determine a dose-response relationship between aircraft noise exposure and learning deficits in children. (SEIS/EIR, Land Use, Section 4.2, p. 4-210.) This is a worthy scientific endeavor that will entail a large, complex, and lengthy process that will cost an enormous sum of money. The proposed study will require considerable expertise, experience, and knowledge in formulating, conducting, analyzing and interpreting complex data. As currently described in the SEIS/EIR, it is impossible to evaluate the potential merits of the proposed study because major elements of the most basic scientific information are not presented about the study.

No scientific research proposal can be evaluated for its potential merit without a careful, even handed and critical review of the existing literature bearing on the topic. The current document provides an incomplete, outdated, and highly biased overview of the literature. It relies too heavily on one summary review (FICON). Furthermore no conceptual arguments are developed linking the literature overview with the proposed study. In scientific research, investigators must build a conceptual and methodological rationale for any proposed study. The current document does not do this.

The SEIS/EIR needs to include a statistical power analysis to estimate the number of participants to be included in the proposed study. Standard scientific review criteria for empirical research proposals call

for statistical estimates of effect sizes from existing literature and their incorporation into research proposals. This power analysis would need to address the overall sample size for establishing a dose response function between noise and each learning outcome of interest. Furthermore, critical subsample power estimates would need to be incorporated such as ESL and non-ESL children, children suffering permanent and temporary hearing loss (a very common occurrence among elementary school children because of ear infections) and grade levels given likely age differences in susceptibility to adverse noise impacts on reading acquisition as well as speech perception. For example, according to ANSI:

"Limitations in vocabulary and in the ability to 'fill in the blanks' when partial communication occurs in difficult listening situations have been shown to reduce intelligibility for children with limited English Proficiency, again despite normal intelligibility in quiet environments. These children may require 2 to 5 dB more favorable signal-to-noise ratios in difficult listening situations to achieve the same level of intelligibility as children with normal English proficiency. (Citations omitted.) (ANSI, "Acoustical Performance Criteria, Design Requirements, and Guidelines for Schools.")

In addition, ANSI estimates that hearing impairments caused by ear infections are,

"estimated incidence as high as 25% to 30% among kindergarten and first grade children..... Signal to noise ratio improvements of 3 dB to 5 dB together with increases in absolute speech sound levels of 10 dB to 30 dB are necessary for children with these impairments to achieve the same level of speech intelligibility in classrooms with high background noise." (ANSI, "Acoustical Performance Criteria, Design Requirements, and Guidelines for Schools.")

The research design of the proposed study would also need to address in detail how duration of exposure (e.g., months in residence) and home noise exposure would be incorporated into a study of schools varying in aircraft noise exposure.

Given a thorough statistical power analysis is needed to ensure that the appropriate number of participants are included overall and in critical subgroups in order to provide the necessary sensitivity to detect potential adverse effects, a thorough sampling plan also needs to be developed. The following issues must be addressed in the SEIS/EIR with respect to the proposed study: How and where will participants be sampled and what special sampling techniques will be used to ensure adequate representation of critical subgroups (e.g., ESL)? Will children with temporary or permanent hearing loss be included in the study and how will these classifications be determined? Will data be collected in one or multiple school districts and if the latter, how will differences in reading curricula be handled? Will data be collected only once, yielding a cross-sectional study or will a panel design be developed to monitor children's learning trajectories over time? If the latter research design is incorporated, at what ages would children be monitored and how often would data be collected? If a longitudinal design is incorporated, how will attrition be dealt with both in the research design and in data analysis?

No information is provided in the SEIS/EIR about the manner in which the proposed study would be conducted and what measures of learning would be incorporated. Is the primary focus on chronic or acute noise? This has dramatic implications for interpretation of the data and bears significantly on procedural conduct of the study itself. For example, reliance on archival records of standardized tests confounds chronic and acute noise exposure since the tests are taken during airport operational periods.

Outcome measures (e.g., reading acquisition, speech perception) need to be described, including at a minimum their basic psychometric properties (e.g., reliability, validity) and their appropriateness for use in a culturally diverse, multi-language sample.

How exactly will noise exposure be estimated and what metrics will be used? The SEIS/EIR glosses over critical distinctions in noise metrics such as L_{max}, Leq, CNEL, and time above peaks. The authors of the proposed study need to say what metric(s) they would use and provide a rationale, discussing in depth the strengths and weaknesses of each alternative. How will reverberation time be monitored and incorporated into data analyses and interpretation. In interior settings, reverberation time influences speech intelligibility. The very difficult issue of exposure estimation also requires discussion. Where and when will noise exposure be measured? Children learn in the classroom, on the playground, and at home. A narrow focus on school noise level changes ignores the potential influence of changes in home noise levels caused by expanded airport operation.

3. Comments and Responses

There is no data analytic plan included in the study proposal detailing precisely how the results would be analyzed. Such a plan at a minimum would describe what statistical techniques would be used and how controls for factors with known covariation with noise and learning would be dealt with in the analyses. For example, how will the proposed study statistically or methodologically handle the comingling of income, ethnicity, noise exposure, and learning?

It is basic scientific practice to address the kinds of issues briefly summarized above in research proposals to obtain funding to conduct research. Scientific review panels for the National Science Foundation or the National Institutes of Health routinely consider and evaluate the scientific merits of proposals using such criteria. This is widely understood and supported by scientists. Major foundations that support scientific research subscribe to similar scientific review criteria as well. Written proposals that address the types of issues and questions raised above are typical, routine practice engaged in by scientists prior to conducting research.

Because the SEIS/EIR ties the proposed study to some critical policy decisions, it is critical to provide some additional material to the document under review. In particular, regulatory bodies and the public need to know more about how the results would be used to determine mitigation measures. For example, what indices of deficit would be considered significant and trigger mitigation? If reading acquisition is delayed on average by six months and for even longer for ESL children, would LAWA consider this sufficient to incorporate mitigation? What percentage of loss in speech perception is considered sufficient to warrant mitigation? Parallel questions need to be discussed for all health and welfare outcomes judged pertinent to the study design.

There is precedent in California and federal environmental regulatory procedures to incorporate a margin of safety in standards to protect vulnerable subgroups of the population. For example air pollution standards both in California and at the federal-level mandate protection for asthmatic children. (See Cal/EPA, Staff Report: Public Hearing to Consider Amendments to the Ambient Air Quality Standards for Particulate Matter and Sulfates. Air Resources Board and Office of Environmental Health Hazard Assessment, May 2002, <http://www.arb.ca.gov/research/aags/std-rs/pm-final/pm-final.htm>; see also, USEPA, Review of the National Ambient Air Quality Standards for Particulate Matter: Policy Assessment of Scientific and Technical Information. Office of Air Quality Planning and Standards, June 2001, <http://www.epa.gov/ttn/oarpg/tl/reports/pmstdrft.pdf>.) How will determinations be made of which groups of children are vulnerable and in need of additional protection from elevated noise levels at school and in their homes? What margin of safety will be incorporated to protect these vulnerable subgroups, once determined?

Decisions about criteria for mitigation and protection of vulnerable subgroups in the population are both scientific and political. Since one of the major reasons for the proposed study in the SEIS/EIR is to determine mitigation procedures, government bodies with regulatory responsibility, as well as the public, must have the opportunity for discussion and review of the criteria that will be used to determine such critical policy decisions. The present document is silent on these issues therefore precluding regulatory and public scrutiny as mandated in CEQA and NEPA.

Response:

Comment noted. Please see Response to Comment SAL00013-111 regarding the selection of experts for peer review. The methodology for selecting experts and peer reviewers has not been established. The methodology used to determine the relationship between levels of noise and children's ability to learn will be one of the first elements to be developed by educational and psychoacoustical specialists retained by LAWA to conduct the study. The specific schools selected for inclusion in the study will likely be selected from among those now impacted by aircraft noise and those that are not known, to be adversely affected by aircraft noise.

SAL00017-39

Comment:

PART FOUR

THE EMISSIONS, MODELING, MITIGATION MEASURES AND HEALTH IMPACT ANALYSIS OF THE SEIS/EIR IS INADEQUATE

CEQA requires the EIS/EIR to "identify and focus on" significant environmental effects of proposed projects. (14 California Code of Regulations § 15126.2.) "Direct and indirect significant effects of the project on the environment shall be clearly identified and described, giving due consideration to both the short-term and long-term effects." (Id.) The EIS/EIR also must describe "feasible measures which could minimize significant adverse impacts." (14 California Code of Regulations § 15126.4.) The EIS/EIR fails to adequately do so.

1. The Emissions Estimations in the SEIS/EIR Violate CEQA.

The emissions estimates in the SEIS/EIR for jet aircraft and storage and handling of fuels may be underestimated. Correction of this underestimation will result in increased pollutant concentrations that may result in exceedances of the National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) as well as increases in off-site cancer risks and noncancer hazard indices for off-site populations.

Response:

Please see Topical Response TR-AQ-2 regarding toxic air pollutants and Topical Response TR-AQ-3 regarding air pollution increase

SAL00017-40

Comment:

a. Jet Aircraft Emission Estimates May Be Underestimated As the Methodology Used to Estimate Particulate Emissions from Jet Aircraft Is Unclear and May Be Flawed.

To estimate particulate matter less than 10 microns (PM10) emission rates from aircraft for the EIS/EIR, Los Angeles World Airports (LAWA) used information from three sources: 1) fourth edition of AP-42; 2) Whitefield and Hagen Study; and 3) the 1994 California FIP Docket (Original EIS/EIR, Technical Report 4, Attachment H). The emission rate data from these studies are combined; the combined data are plotted for each of the four aircraft operating modes. Based on these plots, a relationship between fuel usage and PM10 emission rate is interpolated.

A review of the data shows the first and second studies to be in approximate agreement; the FIP Docket provides an alternate data set. As there is approximately an order of magnitude more FIP Docket data, the data from this study dominate the results. If the FIP Docket data were removed from the combined data set, it is clear that the relationship between fuel usage and the PM10 emission rates would change and the estimated total PM10 emissions from aircraft would also change.

Based on the information presented in the EIS/EIR it is unclear how the FIP Docket data are used in the PM10 emission rate analysis. It appears that a relationship between PM10 emissions and fuel usage is derived from a graphical representation of a relationship between particulate mass concentration and smoke number (i.e., from a plot of an equation relating PM concentration and smoke number).

There are two issues with this derivation. First, it is not clear how a relationship between fuel usage and PM10 emissions is derived from a plot of particulate mass concentration versus smoke number. Second, because the particulate mass concentration versus smoke number data appear to be simply a plot of some unknown equation, the number of data points taken from this graph seems to be arbitrary. Since the number of points taken from this graph is approximately 10 times greater than the number of data points available from the other two studies, it appears that LAWA may have arbitrarily weighted the combined data set heavily towards the FIP Docket data and away from the AP-42 and Whitefield and Hagen data.

Aircraft emissions of PM10 are potentially underestimated. An increase in PM10 emissions will result in an increase in off-site concentrations of PM10. As noted below, the potential noncancer health impacts associated with these PM10 emissions have not been quantified in the EIS/EIR. Inclusion of additional PM10 emissions may result in exceedance of the noncancer hazard index for off-site populations.

At a minimum, LAWA needs to clarify the approach used to develop the FIP Docket data; conduct a sensitivity analysis to determine the importance of the FIP Docket data to their results; and, if

3. Comments and Responses

necessary, remove arbitrary weighing of FIP Docket data over other data sets, correct the PM10 emission rates, and remodel off-site PM10 concentrations.

Response:

Please see Response to Comment AR00003-53 regarding PM emission factors.

The FIP derived emission indices for particulate matter are based on known air flow rates through a series of CFM engines. These engines have been used in many of the Boeing 737 aircraft and are available for a variety of other aircraft as well. The mass of air entering the engine is approximately equivalent to the mass of exhaust gas exiting the engine (fuel flow through an engine is typically much less than one (1) percent of the total mass flow through an engine, so it can be ignored for these estimates). The particulate mass flow rate for the approach mode used in the LAX Master Plan (0.1295 g/kg fuel burned) was corroborated by a recent European measurement of jet exhaust (Eichkorn, et al. 2002) which listed soot emissions at 130 mg/kg (0.130 g/kg).

Since the completion of the Draft EIS/EIR and Supplement to the Draft EIS/EIR, other researchers have developed a method for estimating particulate matter from aircraft (Wayson, et al. 2003). The method proposed is being considered by the FAA as a way of providing PM emission estimates from aircraft for environmental documents. This method is very similar to the approach used to estimate particulate matter from aircraft for the LAX Master Plan. Specifically, the method proposed by Wayson, et al. (2003) provides a first order approximation of particulate matter emissions based on smoke number and fuel flow.

Eichkorn, S., K.-H. Wohlfrom, F Arnold, R. Busen, 2002. "Massive positive and negative chemiions in the exhaust of an aircraft jet engine at ground-level: mass distribution measurements and implications for aerosol formation," *Atmospheric Environment*, 36: 1821-1825.

Wayson, R.L., G.G. Fleming, B. Kim, J. Draper, 2003. "Derivation of A First Order Approximation of Particulate Matter from Aircraft," *Proceedings of the 96th Annual Meeting and Exhibition of the Air & Waste Management Association*, San Diego, CA, (June 22-26).

SAL00017-41

Comment:

b. Potentially significant evaporative emissions of toxic air contaminants resulting from the storage and handling of organic liquids may not have been quantified.

LAWA does not include volatile organic compound (VOC) emissions from organic liquid storage and transfer in their Industrial Source Complex Short Term 3 (ISCST3) modeling of toxic air pollutant emissions. They assume that: 1) storage emissions are almost exclusively from Jet A fuel; 2) emissions of Jet A vapor do not contain significant quantities of the toxic air pollutants modeled; and 3) limited future operations of gasoline fueling would include vapor recovery and therefore result in minimal emissions of air toxics.

There are three problems with this exclusion of VOC emissions. First, diesel fuel and gasoline are used at the airport. LAWA should provide data to show that storage and resulting emissions of these fuels are insignificant. Second, LAWA should provide justification for the assumption of no toxic air pollutants in Jet A vapor. Third, LAWA should provide some screening calculations to validate their assumption that gasoline fueling would result in insignificant emissions of air toxics (especially benzene).

Toxic air emissions from storage and handling of organic liquids may have been underestimated. An increase in toxic air emissions will result in increases in off-site cancer risks and noncancer hazard indices for off-site populations.

At a minimum, LAWA needs to quantitatively demonstrate that emissions of toxics from storage and handling of diesel fuel and gasoline are insignificant; and provide a speciated chemical list for Jet A fuel.

Response:

Please see Response to Comment AL00034-41 regarding toxic air pollutants.

SAL00017-42

Comment:

2. The Modeling Approach of the EIS/EIR Violates CEQA.

The modeling approach presented in the EIS/EIR has several significant flaws that result in underestimation of both criteria and toxic pollutants impacts on nearby receptors. The analysis of the emission impacts is inadequate, the methodology used to estimate plume rise is flawed, the assumption of no downwash is not justified, the meteorological data used in the modeling is inadequate, the conversion of sulfur dioxide to sulfate is not addressed, and finally, secondary formation of toxic pollutants and deposition effects are ignored. These flaws result in an underestimate of ambient pollutant concentrations. Correcting these flaws will result in an increase in pollutant concentrations and may result in exceedances of the NAAQS and CAAQS as well as increases in off-site cancer risks and noncancer hazard indices for off-site populations.

Response:

The content of this comment is essentially the same as Comment AL00034-42. Please see Response to Comment AL00034-42.

SAL00017-43

Comment:

a. The methodology used to estimate plume rise from jet aircraft is questionable and requires further justification.

LAWA determines the plume rise of hot exhaust gas from jet aircraft engines based on a heat balance to determine the heat flux and the equivalent exit velocity that would result (Original EIS/EIR, Technical Report 4, p. 19). To calculate this exit velocity, they make four critical assumptions. First, the jet engine exhaust gas temperature is fixed and unrelated to the heat flux. Second, as the exhaust gas from the jet engine begins to slow (in the horizontal plane) and begins to move vertically upward as a plume, the diameter of the plume (in the vertical plane) may be estimated by the wingspan of the jet.

Third, the temperature of the plume is equal to the jet engine exhaust gas temperature. As there are no ambient heat sources, this implies that the movement of the exhaust gas is adiabatic, isothermal, and there is no rapid expansion of exhaust gas. Finally, the temperature of ambient air is assumed to be 293 Kelvin (K). Calculated exit velocity, plume temperature, and plume diameter were then input into ISCST3 to determine plume rise.

There are three problems with this approach. First, the temperature of the plume is assumed equal to the temperature of the exhaust gas. Given isothermal movement, this is only true if the total mass per second of air leaving the jet engines equals the mass per second of air moving up in the plume. LAWA should check their calculations to be sure that this is true, otherwise the plume rise calculations may be in error.

Second, the implied assumptions of isothermal movement and slow expansion of exhaust gas are physically unrealistic. It is likely that exhaust gas will expand rapidly when exiting the jet engine and cooler, ambient air will be entrained into exhaust gas as it moves away from the jet engine. Both of these effects will tend to lower the temperature in the plume. LAWA should perform a sensitivity analysis to determine the quantitative influence of these phenomena on the resulting plume rise.

Finally, the temperature of the ambient air should be consistent with the average temperature data used in the ISCST3 model runs. LAWA should average the temperatures in the meteorological data set used in the model runs to determine the correct average ambient temperature.

Plume rise may be overestimated. If so, concentrations of NO₂, PM₁₀, and air toxics resulting from aircraft emissions may be underestimated. Increases in concentrations of these pollutants may result in exceedances of the NAAQS and CAAQS as well as increases in off-site cancer risks and noncancer hazard indices for receptor populations.

3. Comments and Responses

At a minimum LAWA needs to check their calculations to ensure conservation of mass; conduct a sensitivity study to determine the quantitative influence of rapid expansion of exhaust gas and entrainment of ambient air on plume temperature; and calculate the plume rise with the correct average ambient temperature.

Response:

The content of this comment is essentially the same as Comment AL00034-44. Please see Response to Comment AL00034-44.

SAL00017-44

Comment:

b. The assumption that building downwash is negligible requires further justification.

LAWA believes that building downwash will not be significant based on their assumption that the nearest receptor is too far off-site (Original EIS/EIR, Technical Report 4, p 24). LAWA should validate this assumption by modeling the most conservative source-receptor geometry, with building downwash included, to ensure this statement is correct. These results should be presented in Technical Report 4.

Off-site impact from airport emissions may be underestimated. If so, concentrations of criteria pollutants and air toxics resulting from airport emissions may be underestimated. Increases in concentrations of these pollutants may result in exceedances of the NAAQS and CAAQS as well as increases in off-site cancer risks and noncancer hazard indices for receptor populations.

LAWA needs to conduct a sensitivity study to show that building downwash effects are negligible.

Response:

The content of this comment is identical to comment AL00034-45; please refer to Response to Comment AL00034-45.

SAL00017-45

Comment:

c. The meteorological data set used may be inadequate relative to EPA and SCAQMD recommendations.

LAWA used the most recent meteorological data collected at LAX. These data consist of hourly surface and upper air data from the LAX meteorological observation station operated by the SCAQMD for the 12-month period beginning March 1, 1996 and ending February 28, 1997.

As recommended by EPA, "five years of representative meteorological data should be used when estimating concentrations with an air quality model. (USEPA, Guideline on Air Quality Models (Revised). Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711, EPA-450/2-78-027, 1986, August 1995 update.) Consecutive years from the most recent, readily available 5-year period are preferred." SCAQMD recommends the use of the 1981 dataset. Accordingly, LAWA should conduct their air modeling with either the most recent five years of data from the LAX station, selecting the most conservative year results as representative of maximum long-term pollutant concentrations resulting from emissions associated with LAX or use the 1981 dataset. Furthermore, this five-year data set or 1981 dataset should be used to estimate average temperature (plume rise), mixing heights (EDMS), and wind speed (volume source height) used in other calculations and analyses.

Pollutant ambient air concentrations may be underestimated. If so, concentrations of criteria pollutants and air toxics resulting from emissions associated with expansion of LAX may be underestimated. Furthermore, the location of the maximum off-site impacts may also change. Increases in concentrations of these pollutants may result in exceedances of the NAAQS and CAAQS as well as increases in off-site cancer risks and noncancer hazard indices for receptor populations.

At a minimum LAWA needs to (1) conduct a sensitivity study to determine which year of LAX meteorological data is the most conservative or use the SCAQMD designated 1981 year of data; (2) if different from the meteorological data used in their analysis, redo all air modeling with the correct meteorological data; and (3) use the most conservative meteorological data set to estimate meteorological data used in other calculations and analyses.

Response:

The content of this comment is identical to comment AL00034-46; please refer to Response to Comment AL00034-46.

SAL00017-46

Comment:

d. Atmospheric conversion of sulfur dioxide to sulfate may be significant and is not addressed.

LAWA has ignored production of sulfate from sulfur dioxide (SO₂) due to the complexity of sulfate-formation mechanisms. LAWA assumes that all sulfur emitted by sources remains in the atmosphere as SO₂. This assumption is not conservative; the California Ambient Air Quality Standard (CAAQS) for sulfate is more than six times lower than the CAAQS for SO₂ (6.2 parts per billion by volume (ppbv) compared to 40 ppbv).

Formation chemistry for conversion of nitrogen oxides (NO_x) to nitrogen dioxide (2) is equally complex, if not more so. The Tier 2 Ambient Ratio Method (ARM) recommended by USEPA in the Guideline on Air Quality Models for converting total NO_x to NO₂ values may be modified to estimate formation of sulfate from SO₂. (USEPA, Guideline on Air Quality Models, supra.) LAWA could gather the most recent years of data on the annual average SO₂-to-sulfate ratio near LAX and use this data to estimate the formation of sulfate.

The concentration of sulfate in ambient air is underestimated. Increases in concentrations of sulfate may result in an exceedance of the CAAQS for sulfate. As exposure to sulfate causes respiratory irritation, underestimating the ambient sulfate concentration may significantly underestimate the numbers and types of respiratory illnesses that may be observed in nearby populations, particularly young children who may be especially sensitive to respiratory irritants.

At a minimum LAWA needs to develop an approach to model sulfate chemistry and estimate sulfate concentrations.

Response:

The content of this comment is identical to comment AL00034-47; please refer to Response to Comment AL00034-47.

SAL00017-47

Comment:

e. Secondary formation of toxic air pollutants may be significant and is not addressed.

LAWA has ignored the production of several toxic air pollutants formed in the atmosphere due to reactions among other pollutants (i.e., formed by secondary reactions). As outlined in the EPA's guidance on Air Dispersion Modeling of Toxic Pollutants in Urban Areas, these pollutants should be included in any air toxic analysis. (United States Environmental Protection Agency (USEPA), Draft Air Dispersion Modeling of Toxic Pollutants in Urban Areas - Guidance, Methodology and Example Applications. Emissions, Monitoring and Analysis Division (MD-14), Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711, EPA-454/R-99-021, July 1999, Original EIS/EIR Response Exhibit 12.) The pollutants formed by secondary reactions include formaldehyde, acetaldehyde and acrolein.

For example, formaldehyde may be formed in the atmosphere through photolysis or oxidation of other, directly-emitted hydrocarbon species:

3. Comments and Responses

1a. $\text{CH}_4 + \text{OH}$ [goes to] $\text{CH}_3\text{O}_2 + \text{H}_2\text{O}$
oxidation of methane

1b. $\text{CH}_3\text{O}_2 + \text{NO}$ [goes to] $\text{NO}_2 + \text{CH}_3\text{O}$
photolysis of acetaldehyde

2. $\text{CH}_3\text{O} + \text{O}_2$ [goes to] $\text{HCHO} + \text{HO}_2$
formation of formaldehyde

An estimate of concentrations based on secondary reactions is needed and should be added to the ISCST3 output. LAWA should use EPA's OZIPR screening model to estimate the secondary formation of these pollutants. (USEPA, Draft Air Dispersion Modeling, supra.) Case studies provided in EPA's guidance document show secondary formaldehyde as the major component of total atmospheric formaldehyde (a ratio of 4 to 1 over primary formaldehyde).

If the total ambient formaldehyde concentration attributable to the project were increased by a factor of 5 to account for secondary formation, the contribution from formaldehyde to total absolute cancer and noncancer risks would increase by the roughly the same factor for all years/alternatives. The absolute contributions of formaldehyde to total cancer and noncancer risks in different years/alternatives are not presented in the SEIS/EIR (see comment 4[f]).

The concentrations of formaldehyde, acetaldehyde and acrolein in ambient air are underestimated. Increases in concentrations of these pollutants may result in increases in off-site cancer risks and noncancer hazard indices for receptor populations. At a minimum LAWA needs to model formaldehyde, acetaldehyde and acrolein chemistry.

Response:

Please see Topical Response TR-AQ-2 regarding secondary pollutant formation.

SAL00017-48

Comment:

f. The exclusion of deposition effects from the multipath risk analysis is not justified.

LAWA has neglected to include deposition effects and associated multipathway risk analysis based on conclusions presented in the deposition report, included as Attachment Y to Original EIS/EIR Technical Report 4. In this report, LAWA claims that a direct correlation between airport operations and deposition could not be determined.

Nonetheless, LAWA goes on to state, "The limited monitoring duration [less than two weeks] and time of year, while required to meet project schedule requirements, were not optimal for dry deposition monitoring. The limited nature [italics added] of this study did not allow for the determination of summertime maximum deposition rates or provide data necessary to perform a mass balance analysis" (Original EIS/EIR, Technical Report 4, Attachment Y). LAWA is stating that the study was too short to make any definitive conclusions and further deposition sampling will be required before the deposition impact of airport emissions on off-site soils can be quantified. In other words, the study is incomplete.

If the study is limited and incomplete, there is no rational reason why LAWA should exclude deposition effects and the associated multipathway risk analysis. Furthermore, the deposition sampling locations selected for this study appear to be outside of the maximum particulate matter plume predicted by LAWA's ISCST3 modeling, further undercutting the already limited nature of this deposition study. Therefore, pending a more complete deposition study, LAWA should include deposition effects and a multipathway risk analysis in the EIS/EIR.

Deposition effects have been improperly excluded from consideration. Soil concentrations of pollutants sorbed to particulate matter have been underestimated. Increases in soil concentrations of these pollutants may result in increases in off-site cancer risks and noncancer hazard indices for receptor populations.

At a minimum LAWA needs to estimate concentrations of pollutants sorbed to particulate matter in soil based on emissions occurring over the duration of the project; and based on these soil concentrations, run a multipathway risk analysis to determine the health impacts of these soil concentrations.

Response:

The content of this comment is identical to comment AL00034-49; please refer to Response to Comment AL00034-49.

SAL00017-49

Comment:

3. The Mitigation Measures Proposed By The SEIS/EIR Violate CEQA.

a. The mitigation measures proposed in the SEIS/EIR have not met all requirements outlined in the SCAQMD CEQA Handbook.

The mitigation measures proposed in the SEIS/EIR have not met all requirements outlined in the SCAQMD CEQA Handbook. Before mitigation measures may be applied to total project emissions they must meet several criteria. The mitigation measures proposed in the SEIS/EIR have not demonstrated compliance with three of these criteria.

Several proposed mitigation measures do not meet the required criteria. Therefore, mitigated emission estimates may be too low. Increases in emissions of mitigated pollutants may result in exceedances of the NAAQS and CAAQS as well as increases in off-site cancer risks and noncancer hazard indices for receptor populations. Furthermore, without mitigation measures, the proposed project under Alternatives A, B, and C will result in exceedances of regulatory thresholds for criteria and/or toxic pollutants (SEIS/EIR Table 4.24.1-3).

At a minimum LAWA needs to (1) develop a matrix showing each mitigation measure and how it meets each of the three missing criteria identified above; and (2) improve documentation of the effectiveness of the selected mitigation measures used to reduce pollutant emissions.

Response:

All mitigation measures proposed for implementation meet all six of the criteria outlined in the 1993 SCAQMD CEQA Handbook (pages 11-2 - 11-3). All mitigation: 1) coincides with the environmental impact; 2) will be implemented through use of adequate resources; 3) is legally enforceable; 4) will be monitored and enforced; 5) will be accomplished within a reasonable timeframe; and 6) imposed as permit conditions will be enforced.

Very conservative assumptions regarding emission reduction credit was assumed for both construction and on-airport air quality mitigation measures. No mitigation "credit" was taken for measures required by regulations or City of Los Angeles ordinances.

SAL00017-50

Comment:

b. Mitigation measures, except those specific to construction activities, should be applied towards the No Action/No Project alternative in addition to Alternatives A, B, C, and D.

Mitigation measures are defined in SEIS/EIR Section 4.6.8, including Table S.4.6-18. With the exception of those measures specific to construction activities, the identified measures may be implemented under the No Action/No Project alternative as well as Alternatives A, B, C, and D. For example, the following mitigation measures identified in Table S.4.6-18 are generally applicable to all alternatives including No Action/No Project:

Airside

Convert GSE to electric power

3. Comments and Responses

Clean Vehicle Fleets

Promote commercial vehicles/trucks/vans using terminal areas to install SULEV/ZEV engines

Promote "best-engine" technology for rental cars using on-airport RAC facilities. Consolidate nonrental car shuttles using SULEV/ZEV technology

Energy Conservation

Cover any parking structures that receive direct sunlight to reduce volatile emissions from vehicle gasoline tanks and install solar panels on these roofs where feasible to supply electricity or hot water

Highways and Roadways

Link ITS with off-airport parking facilities, with ability to direct/divert trips to these facilities

Expand ITS/ATCS, concentrating on I- and I- corridors, extending into South Bay and Westside surface street corridors

Link LAX traffic management system with airport cargo facilities, with ability to reroute cargo trips to/from these facilities

Develop a program to minimize the use of conventional-fueled fleet vehicles during smog alerts

Landside

Contract with commercial landscapers who operate lowest emitting equipment

Parking

Provide free parking with preferential parking locations for ULEV/SULEV/ZEV in all (including employee) LAX lots; provide free charging stations for ZEV; include public outreach

Pay-on-foot (before getting into car) to minimize idle time at parking check out; include public outreach

Implement on-site circulation plan in parking lots

Promote employee rideshare opportunities

Encourage employee telecommuting

Provide video-conference facilities

Transit and Intermodal

Establish network of strategically placed, off-airport intermodal check-in terminals serviced by LAX-dedicated clean-fuel buses; provide low-priced parking to LAX users of off-airport intermodal terminal facilities; include public outreach

As noted in Part Four, Section (g), *infra*, the logical basis for evaluation of project significance under Alternatives A, B, C, or D in a future year (e.g., 2015) is the No Action/No Project alternative in the same future year. For such a comparison, it is appropriate that non-construction mitigation measures be applied towards both the build and no-build alternatives, as it is possible if not likely that these measures will be implemented regardless of which alternative is pursued. Application of non-construction mitigation measures to only the build alternatives, as is currently done, would incorrectly favor the build alternatives over the no-build alternative.

Response:

Please see Response to Comment SAL00018-53 regarding mitigation measures.

SAL00017-51

Comment:

4. The Health Risk Analysis of the EIS/EIR Violate CEQA.

The flaws in the health risk analysis conducted for the EIS/EIR result in underestimated acute, cancer, and noncancer health impacts. Estimated cumulative cancer risks to school children are underestimated, cumulative cancer risks and noncancer hazards are incorrectly calculated, the significance threshold for noncancer health effects is too high, potential health impacts associated with exposure to lead are improperly calculated, potential health impact from jet engine particulate emissions are ignored, noncancer health risks to school children are underestimated, and acute health impact are not evaluated. These flaws result in an underestimation of the health impacts to receptors of concern.

Response:

The content of this comment is identical to comment SAL00018-54; please refer to Response to Comment SAL00018-54.

SAL00017-52

Comment:

- a. Estimated cumulative cancer risks to school children have been underestimated due to underestimates in the total number of years children spend in school.

The Human Health Risk Assessment (HHRA) estimated the potential incremental cancer risks for children attending schools by identifying the school with the highest projected concentrations of toxic air pollutants, and determining the total length of time that children would likely be at school. Approximately 20 schools were identified as being within one mile of LAX; Oak Street Elementary School was identified as one of the schools where the highest concentrations of Toxic Air Pollutants (TAPs) released from LAX were predicted.

Children ages 6 to 12 years old were evaluated in the HHRA, since "this age range includes the youngest school ages and it is sufficiently long for analysis of chronic exposures and risks" (Original EIS/EIR, Technical Report 14a, Attachment B, p. 42). Accordingly, children in school were assumed to be exposed to emissions from LAX for six years.

However, given that children will, in fact, be in school from ages 5 to 18 years (kindergarten through 12th grade), and that the future development of schools within the impacted area is unknown, it is very likely that children could be exposed to emissions from LAX for a 13-year period (corresponding to kindergarten through 12th grade). As estimates of cancer risk are directly proportional to the total time that an individual is exposed over the course of the lifetime, the assumption that school children are only exposed for six years is misleading, and results in an underestimate of the potential incremental cancer risks posed by children attending school.

Cancer risks for school children are underestimated in the EIS/EIR. Cancer risks should be recalculated for the school children to account for the potential that children could be exposed to emissions from LAX during their entire pre-school through high school years.

Response:

The content of this comment is essentially the same as comment AL00034-51; please refer to Response to Comment AL00034-51.

3. Comments and Responses

SAL00017-53

Comment:

b. Significant flaws in the methods used to calculate cumulative cancer risks and noncancer hazards undermine the conclusions of the EIS/EIR and obscure actual health risks posed by the various alternatives.

The HHRA repeatedly touts the benefits of all build alternatives, stating that with mitigation, "all of the build alternatives would have lower (more favorable) human health impacts than those associated with the No Action/No Project Alternative" (Original EIS/EIR, p. 4-999). Many of the tables and text describing the incremental cancer risks and noncancer hazards actually present negative risks, indicating not only a reduction in risks below those associated with baseline conditions, but a "beneficial impact on LAX-associated cancer risks" (or noncancer hazards) (Original EIS/EIR, Technical Report 14a, p. 51). Such statements are not only misleading, they are technically inaccurate.

For example, some of the projected increase in cancer risk for some chemicals for Alternative D 2015 pre-mitigation conditions (SEIS/EIR, Technical Report 9a, Table S8) (e.g., diesel particulates, formaldehyde, benzene) is claimed to be offset by a projected decrease in cancer risk for other chemicals (arsenic, beryllium, and chromium).

The fundamental flaw in this logic is the assumption that a decrease in the concentration of one carcinogenic compound can offset the increase the concentration of another carcinogen. If the implementation of a given alternative results in lower concentrations of diesel exhaust than would occur under the baseline conditions, then the incremental contribution of diesel to the total cancer risk drops to zero. However, a net reduction in diesel is not "credited" against the likelihood that increases in other chemicals may cause cancer in exposed individuals.

To illustrate this point, assume two chemicals exist, say 1,3-butadiene and benzene, and the baseline cancer risks are 10×10^{-6} for each chemical. If the projected cancer risk under Alternative A is 13×10^{-6} for 1,3-butadiene and zero for benzene, the projected incremental cancer risk is $+3 \times 10^{-6}$ for 1,3-butadiene and the projected incremental cancer risk from benzene would be presented as -10×10^{-6} (indicating that the concentrations of benzene under Alternative A drop below the baseline concentrations), the cumulative risk from both compounds is NOT -7×10^{-6} , as would be presented in this HHRA, it is 13×10^{-6} . Independent of any projected improvement in diesel risks, 1,3-butadiene is still projected to cause an increase in cancer risk of $+3 \times 10^{-6}$.

In other words, if the projected incremental cancer risk posed by 1,3-butadiene is $+3 \times 10^{-6}$ and the projected incremental cancer risk from diesel is presented as -14×10^{-6} (indicating that the concentrations of diesel under the alternative drop below the baseline concentrations), the cumulative risk from both compounds is NOT -11×10^{-6} , as presented in this HHRA, it is $+3 \times 10^{-6}$. Independent of any projected improvement in diesel concentrations, 1,3-butadiene is still projected to cause an increase in cancer risk of 3×10^{-6} . (Data values taken from Original EIS/EIR, Technical Report 14a, Table 13, Alternative A, Adult Resident.)

Potential health impacts have been improperly summed. This fundamental flaw permeates the HHRA, and results in underestimates of the potential health impacts of all alternatives. As currently presented, it is impossible to evaluate each of the alternatives to determine which alternatives may pose a significant health threat, or to ascertain whether the proposed mitigation measures will be sufficient to reduce the health risks to insignificant levels.

The Inglewood Unified School District recommends that LAWA correct these errors and recalculate the risks for all alternatives.

Response:

The content of this comment is essentially the same as comment AL00034-52; please refer to Response to Comment AL00034-52.

SAL00017-54

Comment:

c. The basis for significance threshold for noncancer health effects is unclear and five times greater than the threshold typically used by regulatory agencies.

A significant impact relative to human health is defined in the Original EIS/EIR as a build alternative that would result in a total incremental chronic hazard index (HI) greater than 5 for any target organ system at any receptor location (Original EIS/EIR, p 4-1009). The basis for this significance threshold is unclear, is inconsistent with statements made in the Human Health Risk Assessment Technical Report, and is considerably less protective than acceptable thresholds established by regulatory agencies under various regulatory programs.

As described in the Original EIS/EIR, noncancer risk estimates are calculated by dividing the estimated exposure by the "reference dose," often referred to as the acceptable exposure level (Original EIS/EIR, Technical Report 14a, p 28). The ratio of the exposure to the reference dose is termed the hazard quotient (HQ). To assess the overall potential for noncarcinogenic effects posed by more than one chemical, the HQs for each chemical are summed, and the resulting value is referred to as the Hazard Index (HI).

As stated in the Original EIS/EIR, "a HQ greater than one indicates an exposure greater than that considered safe" (Original EIS/EIR, Technical Report 14a, p. 28). This conclusion is consistent with thresholds established by USEPA and Cal/EPA under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), and California's Toxic Hot Spots program (AB2588), respectively. Similarly, an overall HI of no greater than one is the threshold that is used by Cal/EPA in determining whether conditions at a site could potentially result in unacceptable adverse noncancer health effects. Sites for which the multichemical HI is greater than one typically trigger further investigation, and often remediation.

The significance threshold used in this EIS/EIR to evaluate the potential for adverse noncancer health effects is five times higher (i.e., five times less protective) than noncancer thresholds typically used by regulatory agencies under various state and federal regulatory programs. It is unclear how and why a different and less protective standard is being used to evaluate the potential health impacts associated with the various build alternatives. If the more standard noncancer HI threshold of one were used to evaluate the significance of the various alternatives, the conclusions of each of the build alternatives, and the corresponding need for mitigation, would be different than is currently presented.

For example, under Alternative B in 2015, "people living in an area immediately east of the north runways might be exposed to TAPs from LAX sufficiently to produce a hazard index above [5]. People living in a larger area extending east-northeast from the LAX theme building over 6 miles would be exposed to sufficient concentrations of TAPs to produce an incremental hazard index between 1 and 5" (Original EIS/EIR, p. 4-1014). Thus, the number of people subjected to unhealthy levels of toxic chemicals may be greatly understated by the EIS/EIR.

The effect that establishing the threshold hazard index at 1 would have on the conclusions of the Alternative D analysis is unclear. The Inglewood Unified School District has commented elsewhere that the manner in which incremental risks under the project build alternatives are calculated and expressed in the EIS/EIR is inappropriate (i.e., use of negative risks, selection of 1996 as baseline, methodology for calculating baseline risks). If Alternative D risks were redefined and recalculated as suggested, and if the threshold index were established at 1 per standard practice, then estimated noncancer risks may exceed the significance threshold.

LAWA should rewrite the discussion of noncancer risks, and clearly identify those alternatives that would be considered significant based on the more appropriate noncancer significance threshold of one.

Response:

The content of this comment is essentially the same as comment AL00033-341; please refer to Response to Comment AL00033-341.

3. Comments and Responses

SAL00017-55

Comment:

d. The EIS/EIR fails to consider and evaluate the potential health impacts associated with exposure to lead.

As described in the EIS/EIR, lead "may be released in significant quantities from LAX" (Original EIS/EIR, Technical Report 14a, Attachment B, p. 19). The potential impacts associated with exposure to lead are typically evaluated by using models developed by both USEPA and Cal/EPA to predict the blood-lead level that would result from a given exposure.

Because children are especially sensitive to the neurological effects of low levels of lead exposure, these models are used to estimate the blood-lead levels in children. The results from the model are then compared to the low blood-lead levels that have been demonstrated to result in subtle neurological damage in children, as established by the Center for Disease Control (CDC). The models are easy to use, have been used for more than eight years, and are considered the industry standard for evaluating lead exposures and determining whether such exposures could result in unacceptable health impacts.

Although the EIS/EIR notes that LAX may release significant quantities of lead, the EIS/EIR does not evaluate the impacts of such releases in accordance with the standard industry practice. Instead, the EIS/EIR compares the predicted concentrations of lead to the Ambient Air Quality Standard, and concludes that, because the concentrations are below the Ambient Air Quality Standard, lead is not a toxic air pollutant (TAP) of concern for the LAX Master Plan (Original EIS/EIR, Technical Report 14a, Attachment B, p. 12).

Such treatment of lead significantly diminishes the public health significance of this TAP, and does not allow for a fair determination as to the public health impacts that may result from the various build alternatives. Any risk assessment submitted to either Cal/EPA or the USEPA would be instantly rejected if conclusions about the public health significance of lead were based solely on a comparison to the Ambient Air Quality Standard.

Further, the EIS/EIR states that a cancer slope factor is not available for lead (Original EIS/EIR, Technical Report 14a, Attachment B, pp. 18-19). The Inglewood Unified School District notes that the Cal/EPA Office of Environmental Health Hazard Assessment (OEHHA) has released a cancer slope factor for lead. The cancer slope factor, although not yet a promulgated standard, is available, and is being used by OEHHA to establish the No Significant Risk Level (NSRL) for lead under California's Proposition 65.

Health impacts resulting from lead in all years/scenarios, including Alternative D, may be underestimated. Because of the heightened public awareness to the risks associated with lead exposure and the plethora of information that exists describing the adverse health effects that can result from lead exposure, lead should be evaluated in this EIS/EIR in the most comprehensive manner that is reasonably practicable. Failure to do so is scientifically unjustifiable and is inconsistent with the more rigorous evaluations conducted for other chemicals included in the HHRA.

LAWA should rerun all health risk calculations to determine the human health implications of the increases in lead emissions that will result from all build alternatives.

Response:

The content of this comment is essentially the same as comment AL00035-54; please refer to Response to Comment AL00035-54.

SAL00017-56

Comment:

e. Excluding particulate emissions from jet aircraft from the quantitative risk evaluation could significantly underestimate the potential for noncancer health impacts.

Particulate emissions from aircraft were not quantified in the HHRA because "there is insufficient information regarding the nature and toxicity of total petroleum hydrocarbon (TPH) emissions associated with aircraft and toxicity criteria for these emissions are not available" (Original EIS/EIR, Technical Report 14a, p. 81). Particulate matter, in the form of diesel exhaust, is emitted from several ground sources (predominantly trucks and buses). Emissions of diesel exhaust from these ground sources have been included in the HHRA. However, the EIR states that because aircraft use a different fuel and a substantially different combustion process than diesel engines, the particulate emissions in jet exhaust are "not considered chemically, physically, or toxicologically similar to diesel exhaust" (Original EIS/EIR, Technical Report 14a, p. 12). Accordingly, the impact of such emissions have not been quantified in the HHRA.

This is the logic set forth in the EIS/EIR for excluding jet particulate emissions from the HHRA. The argument, however, for not being able to evaluate the toxicological effects of particulate exhaust from jets is flawed. Functionally, the methods used to evaluate the noncarcinogenic toxicity of "diesel" are based entirely on the particulate matter present in diesel exhaust.

According to USEPA, the systemic (non-cancer) toxicity of diesel emissions is due to the insoluble carbon core of diesel particles; when the exhaust is filtered to remove the particulate matter, the remaining exhaust mixture does not produce long-term toxicological effects in laboratory animals. The mechanism of toxicity of the carbon core relates to the deposition of the particles deep in the lung, and the accumulation and aggregation of these particles that result from the inability of the lung's normal clearance mechanisms to effectively remove the particles from the deep regions of the lung. The accumulation of particles sets off a pathogenic sequence that may result in the presence of pulmonary inflammatory, fibrotic, or emphysematous lesions. (United States Environmental Protection Agency (USEPA), Integrated Risk Information System, On-line database maintained by USEPA, 2001.)

Because the noncancer toxicity associated with diesel exhaust is believed to be attributable entirely to the insoluble carbon core of the particulate matter, the noncancer toxicity factor would be equally applicable to other sources of particulate matter, such as jet fuel exhaust. If one can estimate the quantity of particulate matter that could be released from the exhaust of a jet engine, then use of the noncarcinogenic toxicity criteria for diesel is a scientifically defensible and appropriate method for evaluating the public health significance of the particulate emissions. Given the significant increase in the air traffic at LAX, failure to quantify potential impact associated with particulate emissions from jet aircraft could represent a significant omission from the estimated noncancer impacts.

The fact that particulate emissions from aircraft engines may be different than those from diesel engines is not adequate justification for ignoring the cancer health risks of aircraft particulate emissions entirely. It is reasonable to assume, given the lack of information to the contrary, that aircraft particulate emissions are similar to diesel emissions with respect to cancer effects. If this assumption were false, and aircraft particulates were in fact less carcinogenic than diesel exhaust, then the result would represent a conservative upper bound of the cancer risk posed by aircraft particulate matter. The existing estimate of risk posed by aircraft particulates, i.e. zero, could be considered a lower bound.

Data presented in Attachment W to Technical Report 4 of the Original EIS/EIR indicate that aircraft contribute approximately 45 percent of total LAX operational PM10 emissions within the LAX local area. If one makes the assumption that the cancer and noncancer toxicity of aircraft PM10 emissions are similar to that of diesel particulates, they would conclude that the cancer and noncancer risks posed by operational PM10 emissions may be underestimated by roughly a factor of 2 in all years/alternatives. The relative contributions of particulate matter to total cancer and noncancer risks in different years/alternatives are not presented in the SEIS/EIR (see Part Four, Section 4g., *infra*).

Health impacts from particulate matter may be underestimated. The Inglewood Unified School District recommends that LAWA recalculate all estimates of noncancer risk, and include in the evaluation the potential adverse health effects that can result from exposure to particulate emissions from jet aircraft.

Response:

The content of this comment is essentially the same as comment AL00035-55; please refer to Response to Comment AL00035-55

3. Comments and Responses

SAL00017-57

Comment:

f. Absolute cancer and noncancer risks are not presented in the EIS/EIR.

Cancer and noncancer risks are quantified solely on an incremental basis relative to 1996 risks, which themselves are not presented. The impression received is that presentation of absolute risk numbers is being avoided, presumably because they are large and may cause alarm.

Response:

The objective of the Human Health Risk Assessment presented in Section 4.24.1 of the Draft EIS/EIR and Section 4.24.1 of the Supplement to the Draft EIS/EIR was to determine the potential for increased incremental health risk, if any, associated with the implementation of Master Plan alternatives for people working at the airport and for people living, working, or attending school in communities near the airport.

Potential environmental impacts of each alternative were compared to the CEQA thresholds of significance to determine whether they would be significant or less than significant for purposes of CEQA. For purposes of determining significance under CEQA, potential impacts were compared to the 1996 baseline conditions. As part of the Supplement to the Draft EIS/EIR, in addition to 1996 baseline conditions, more current conditions (Year 2000) were evaluated for informational purposes. Methods used to update airport emissions to Year 2000 are described in detail in Appendix S-B, Existing Baseline Comparison Issues—1996 to 2000, Appendix S-E, Supplemental Air Quality Impact Analysis, and Technical Report S-4, Supplemental Air Quality Technical Report.

On a broader-scale, cumulative impacts (total cancer risks) of LAX emissions on air quality, both with and without implementation of the LAX Master Plan, were evaluated in Section 4.24.1.7 of the Draft EIS/EIR and Section 4.24.1.7 of the Supplement to the Draft EIS/EIR using data collected for and analyzed in the Multiple Air Toxics Exposure Study in the South Coast Air Basin (MATES-II) recently completed by the South Coast Air Quality Management District (SCAQMD)(1). In this study, common toxic air pollutants (TAPs) found in air in the South Coast Air Basin were measured. Sources of these TAPs were not separately assessed, and data collected reflected contributions from all sources in the Basin, including LAX. Risks estimates were not developed specifically for areas near LAX; however, a range of possible cancer risks was presented for different regions within the Basin. The Human Health Risk Assessment presented in the Draft EIS/EIR and the Supplement to the Draft EIS/EIR accepted this range of risks as representative of current conditions in the vicinity of LAX.

Cumulative impacts of the four build alternatives were evaluated by comparing possible incremental cancer risks from the Master Plan alternatives with estimates of total air pollution cancer risks from all sources conducted by the SCAQMD in the "MATES-II" study. The Draft EIS/EIR and the Supplement to the Draft EIS/EIR found that the build alternatives would reduce possible cancer risks associated with LAX operations compared to cancer risks predicted by the SCAQMD.

Cumulative impacts of the four build alternatives were evaluated for chronic and acute non-cancer health hazards using data from USEPA(2) in the Supplement to the Draft EIS/EIR. These data can be used in a general way to illustrate the possible range of relative impacts among the build alternatives, but lack resolution to make predictions of impacts for specific locations around the airport. The Supplement to the Draft EIS/EIR found that Alternatives A, B and C could cause an increase in relative non-cancer hazards for both chronic and acute exposures, for some areas near the airport. In other larger areas, changes to the airport might result in a net decrease in cumulative hazards. Impacts associated with Alternative D are predicted to reduce cumulative hazards at all locations around the airport for both chronic and acute health effects.

(1) South Coast Air Quality Management District. Multiple Air Toxics Exposure Study in the South Coast Air Basin (MATES-II), November 1999.

(2) USEPA. 1996. <http://www.epa.gov/ttn/atw/nata/roy/page9.html>

SAL00017-58

Comment:

g. The EIS/EIR does not consider child-specific noncancer toxicity criteria which have been proposed by the State of California and are intended for use in the risk assessment of California school sites. Noncancer health risks to schoolchildren may be underestimated accordingly.

Cal/EPA has issued proposed child-specific chronic reference doses (chRfDs) for six chemicals of particular concern to the health of schoolchildren: cadmium, chlordane, heptachlor, heptachlor epoxide, methoxychlor, and nickel (Cal/EPA, Development of Health Criteria for School Site Risk Assessment Pursuant to Health and Safety Code Section 901(g): Proposed Child-Specific Reference Doses (chRfDs) for School Site Risk Assessment - Cadmium, Chlordane, Heptachlor/Heptachlor Epoxide, and Nickel. Draft Report. Integrated Risk Assessment Section, Office of Environmental Health Hazard Assessment, June 2003, Exhibit 28). The proposed child-specific RfDs are generally more conservative than the US EPA RfDs used in the EIS/EIR health risk assessment, as shown in the following table.

[see original document]

The proposed chRfDs were developed by Cal/EPA specifically for the protection of schoolchildren and are intended for use in the risk assessment of California school sites. Thus, these toxicity criteria are appropriate for use in the EIS/EIR health risk analysis of noncancer impacts to offsite school children.

As the relationship between reference dose and noncancer health risk (hazard quotient) is linear, use of these chRfD values would result in an increase in the estimated noncancer health risk to school children from each of the listed chemicals, by the amount (ratio) given in the table. For example, the estimated noncancer health risk to school children posed by cadmium would be 50 times greater if the chRfD value were used.

Only one of the six listed chemicals is identified as a chemical of potential concern (COPC) in the EIS/EIR health risk assessment: cadmium. However, use of these RfD values may cause additional chemicals to be added to the group of COPCs. For example, an increase in the estimated health risk from methoxychlor by a factor of 250 may elevate this chemical to the status of potential concern.

At a minimum, the EIS/EIR health risk analysis should consider these toxicity criteria in an uncertainties section, and assess to what extent adoption of these criteria would affect the conclusions of the health risk assessment.

Response:

The comment suggests that the human health risk assessment for the Supplement to the Draft EIS/EIR may have underestimated chronic health hazards associated with emissions during LAX operations by not using/considering proposed reference doses developed by the Office of Environmental Health Hazard Assessment (OEHHA) for school children (referred to as chRfDs). Several factors indicate, however, that these criteria, which are not formally adopted, have no bearing on the analyses and conclusions of the human health risk analyses prepared for the Draft EIS/EIR or the Supplement to the Draft EIS/EIR.

First, only two chemicals considered by OEHHA for development of chRfDs are found in emissions from LAX, cadmium and nickel. Cadmium was selected as a toxic air pollutant (TAP) of concern for the human health risk assessment during preparation of the Draft EIS/EIR and the Supplement to the Draft EIS/EIR. Both cadmium and nickel are considered carcinogenic following exposure by inhalation. Since the only important exposure pathway for TAPs of concerns released from LAX is inhalation, inhalation slope factors from OEHHA, or US EPA if no criteria were available from OEHHA, were used for screening and selecting TAPs of concern. Use of cancer slope factors provides a conservative (protective) screening for both chemicals.

Second, chRfDs proposed by OEHHA are based on ingestion of cadmium and nickel in food, water or other media, not on inhalation of the metals in particulate matter in air. Health consequences of inhalation and oral exposure can vary significantly. OEHHA has developed reference exposure levels for cadmium and nickel to assess the non-cancer effects of inhalation of these metals. Cadmium was

3. Comments and Responses

selected as a TAP and the reference exposure level was used to evaluate the potential for non-cancer health effects.

Third, deposition of cadmium and nickel onto soils was assessed for the Draft EIS/EIR and was found to be negligible, even after decades of deposition. Thus, exposure pathways, such as incidental ingestion of soil by children, which would be assessed using criteria like the proposed chRfDs, are not important for assessing human health impacts from LAX operations.

Fourth, possible health hazard associated with exposure to chemicals released from LAX were very small for school children (on the order of 0.2 to 0.3 for the No Action/No Project Alternative and Alternatives A, B and C for post-mitigation conditions). Virtually all of these hazards are due to possible exposure to a single TAP of concern, acrolein, which accounts for over 97 percent of the hazard. Cadmium accounts for only about 0.007 percent of hazard estimates; increasing this contribution by a factor of 50 would not change the overall estimated hazard. Cadmium is not released during LAX operations in sufficient quantities to cause significant exposure to nearby residents or school children.

Finally, other chemicals considered by OEHHA for chRfDs, chlordane, heptachlor/heptachlor epoxide and methoxychlor, are not expected in emissions from LAX. Chlordane and heptachlor are "legacy" pesticides, once widely used but currently with no or very limited applications. Heptachlor, for example, can only be used to kill fire ants on power transformers. Chlordane has no approved applications in the US. Heptachlor epoxide is a degradation product of heptachlor and is present only where heptachlor has been used. Methoxychlor still is fairly widely used for insect control, but has not been identified in chemical inventories developed for LAX. Certainly, methoxychlor is not found in major sources, jet engine exhaust and diesel exhaust. OEHHA apparently considered these chemicals because of past use and persistence in soil. Even after many years, residues can be present and exposure is theoretically possible for children at schools built where such residual contamination is found. None of these pesticides is a TAP of concern for the Draft EIS/EIR or the Supplement to the Draft EIS/EIR.

SAL00017-59

Comment:

h. Use of 1996 as basis for determining project significance is not explained and seems illogical.

Significance of project impacts under build scenarios in future years is evaluated by comparison to 1996 "baseline" conditions and, in the SEIS/EIR, to 2000 conditions. The rationale for this is not clear. To evaluate project impacts for, e.g., Alternative D in 2015, it seems more logical to compare Alternative D 2015 conditions to No Action/No Project 2015 conditions. In this manner, the effects of the project may be directly quantified.

Response:

Please refer to Topical Responses TR-GEN-1 and TR-HRA-1 regarding environmental baseline issues.

As indicated in the Introduction to Chapter 4 of the Draft EIS/EIR, in accordance with Section 15125 of the State CEQA Guidelines, the affected environment constitutes the baseline physical conditions by which it was determined whether an impact would be significant. Two baseline conditions were used in the analysis of the LAX Master Plan alternatives. These include the environmental baseline, or the physical conditions that existed at the time the Notice of Preparation was published (in this case, physical conditions as of mid-1997 and aviation activities from the most recent, previous year, or 1996), and the Adjusted Environmental Baseline, which reflects environmental baseline conditions on the airport, and future conditions (allowing for regional growth) off-airport.

The environmental baseline used for the impacts analysis in the Draft EIS/EIR was also used for the impacts analysis in the Supplement to the Draft EIS/EIR. In so doing, the basis for the CEQA analysis in the Supplement to the Draft EIS/EIR is consistent with that of the Draft EIS/EIR, and is in accordance with the CEQA Guidelines directive that the environmental setting as of when the NOP was published will normally constitute the baseline physical conditions by which a lead agency determines whether an impact is significant. Consequently, projected future changes anticipated to result from each of the LAX Master Plan alternatives are compared to uniform baseline data, allowing for consistency of comparison (i.e., 'apples' are compared to 'apples').

For updated comparative purposes, the Supplement to the Draft EIS/EIR included a description of the more current physical environmental conditions in the vicinity of the proposed project. The physical conditions occurring at, and around, the LAX Master Plan study area in the Year 2000 were considered to be the most current environmental conditions that are meaningful and relevant to the analysis of the LAX Master Plan. The Year 2000 conditions used within the Supplement to the Draft EIS/EIR provided for a full year's worth of data for environmental conditions, including as influenced by existing airport operations.

As required by NEPA, a comparison of Alternative D to the No Action/No Project Alternative is also provided in Section 4.24.1 of the Supplement to the Draft EIS/EIR.

SAL00017-60

Comment:

i. Methodology for establishment of baseline (1996) impacts is poorly defined and highly suspect. All determinations of significance of Alternative D through comparison to 1996 baseline impacts are therefore questionable.

According to the Original EIS/EIR, 1996/baseline impacts were not estimated directly but rather were derived by adjusting model predictions under the 2005 no-build alternative:

"Baseline conditions were not separately modeled. Instead, air quality for the baseline year (1996) was estimated from results of air dispersion modeling for the No Action/No Project Alternative for horizon year 2005... Thus, emissions estimates for 1996 were derived by subtracting out emissions associated with the No Action/No Project Alternative in 2005" (Original EIS/EIR, p. 4-1007).

The Inglewood Unified School District notes that the 1996 emissions inventory is the basis for all other inventories, including the 2005 No Action/No Project Alternative inventory, and therefore assumes that the final sentence in the above citation is a misstatement. It infers that 1996/baseline chemical concentrations were derived by scaling the chemical concentrations predicted by the air dispersion model for the 2005 No Action/No Project Alternative. The EIS/EIR does not document or support this scaling operation. The Inglewood Unified School District is unaware of any way in which a modeled concentration field may be scaled other than by uniform application of a constant factor (all values in a given chemical concentration field multiplied by the same factor). Therefore, it appears that any source-specific (i.e., spatial) differences between the 1996 and 2005 inventories were lost in the scaling process.

The EIS/EIR does not explain or support the rationale for not simply estimating baseline impacts directly, by using the 1996 inventory as input to the dispersion model. The indirect method apparently employed is inferior to direct modeling of 1996 impacts, because it results in a loss of spatial resolution of chemical emissions and resulting airborne concentrations. As the 1996/baseline impacts are the basis for determination of significance of the project, the process by which these baseline impacts were estimated should be thoroughly described. From the sparse and confusing discussion provided, it appears that the 1996 impacts were roughly fudged. Therefore, the Inglewood Unified School District holds significance determinations based on these 1996 impacts to be generally questionable.

Response:

The content of this comment is identical to comment SAL00018-65; please refer to Response to Comment SAL00018-65.

SAL00017-61

Comment:

j. Alternative D post-mitigation incremental cancer risk to adult residents may be greater than 10 per million individuals.

Table S4.24.1-5 of the SEIS/EIR indicates that the post-mitigation incremental cancer risk to adult residents is 2 per million individuals, below the significance threshold of 10 per million individuals. However, given that (see other comments) 1) cancer risk posed by secondary pollution is ignored, 2)

3. Comments and Responses

cancer risk posed by aircraft particulate matter is ignored, 3) cancer risk posed by lead is ignored, and 4) the 1996 baseline cancer risk is highly suspect, the actual Alternative D post-mitigation incremental cancer risk may exceed the significance threshold of 10 per million individuals.

Response:

The human health risk assessment followed California Environmental Protection Agency and U.S. Environmental Protection Agency guidance, adapted to the airport environment. Methods used in the human health risk assessment were more likely to overestimate than underestimate possible health risks. For example, risks were calculated for individuals that are likely to be exposed at locations where toxic air pollutant emissions are predicted to be highest. Individuals are assumed to be exposed for almost all days of the year and for many years to maximize estimates of possible exposure. Toxicity information used in the human health risk assessment incorporated conservative assumptions designed to protect the more sensitive receptors, such as children, the elderly, and individuals with respiratory conditions. Resulting incremental risk estimates therefore represent upper-bound predictions of exposure and health risk.

Regarding the specific issues raised in the comment:

(1) Though secondary chemicals in air were not specifically addressed (i.e. breakdown products of common TAPs), methods used in the assessment follow the same approach used by the SCAQMD in addressing possible risks and hazards from air pollutants in the Los Angeles basin. All important sources of TAPs from the airport were addressed in the analysis, and detailed baseline emissions inventories were discussed in Technical Report 14a of the Draft EIS/EIR. Identification of potential sources of toxic air pollutants (TAPs) associated with LAX operations, including stationary sources, area sources and mobile sources is discussed in Attachment B of Technical Report 14a of the Draft EIS/EIR.

The Supplement to the Draft EIS/EIR includes a description of the most current environmental conditions that are meaningful and relevant to the analysis of the LAX Master Plan. A detailed analysis of changes in operational conditions at LAX between 1996 and 2000 is provided in Appendix S-B, Existing Baseline Comparison Issues - 1996 to 2000 of the Supplement to the Draft EIS/EIR.

(2) Regarding potential health impacts from jet engine particulate emissions, please refer to Response to Comment AL00034-55.

(3) Regarding potential health impacts associated with exposure to lead, please refer to Response to Comment AL00034-54.

(4) Regarding baseline issues, please refer to Topical Responses TR-HRA-1 and TR-GEN-1 and Response to Comment SAL00018-65

SAL00017-62

Comment:

k. Statement that acrolein noncancer risks are substantially overestimated in the EIS/EIR analysis is not supported by the arguments presented.

"Emissions estimates for acrolein are based on available data that were generated from old aircraft engines not generally in use today and using military fuel that differs from fuel used at LAX" (SEIS/EIR, Human Health Risk Assessment, p. 4-615). This statement implies that newer aircraft using civilian fuel emit less acrolein than estimated. However, the implication is not supported by any other information.

"Acrolein is not generally recognized as a significant TAP in the South Coast Air Basin. . ." (p. 4-615). Prior recognition is not relevant or required. Further, this statement is contradicted by results of the USEPA study, which suggest that "hazard indices might fall in the range of 3 to 10 for chronic exposure to acrolein..." (SEIS/EIR, Human Health Risk Assessment, p. 4-619).

"A recent study near Chicago's O'Hare Airport failed to detect acrolein in essentially all samples taken in communities near the facility..." (SEIS/EIR, Human Health Risk Assessment, p. 4-615). Without discussion of sampling and analysis methods, especially of comparison of method detection limits to levels of concern, this statement is meaningless.

"The analysis presented for acrolein in the HHRA may substantially overestimate releases, and thus may overestimate possible chronic and acute impacts to human health... " (SEIS/EIR, Human Health Risk Assessment, p. 4-615). For the reasons noted above, the Inglewood Unified School District does not believe that sufficient evidence is presented in the EIS/EIR to justify this statement that acrolein impacts are overestimated in the HHRA.

Response:

The content of this comment is essentially the same as comment AL00033-344; please refer to Response to Comment AL00033-344.

SAL00017-63

Comment:

I. Use of different receptor/grid spacing when calculating pre- and post- mitigation impacts prevents assessment of mitigation effectiveness.

"A greater number of endpoints were assessed for post-mitigation conditions than for pre- mitigation conditions to ensure that the highest post-mitigation impacts were identified. As such, post-mitigation risks and hazard estimates represent conservative estimates which are in some cases greater than pre-mitigation risks... " (SEIS/EIR, Human Health Risk Assessment, p. 4-617).

Increasing the receptor density does not ensure that the highest post-mitigation impacts are identified, it only increases the likelihood that they are identified. The additional data points likely include both lesser and greater values than would be predicted if only the smaller number of endpoints were considered. With both endpoint sets, it is possible, if not likely, that the greatest impacts (highest risk values) are not identified; however, this possibility is lower for the larger, post-mitigation endpoint set.

As noted, estimated post-mitigation risks in some cases are higher than pre-mitigation risks. This apparent increase in risk is likely an artifact caused by the larger number of endpoints used in the post-mitigation modeling. Comparison of pre- and post-mitigation impacts should be made with the same endpoint set (i.e., same group of receptors), to measure mitigation effectiveness.

Response:

Please refer to Attachment F, Air Quality Modeling Protocol for Toxic Air Pollutants, of Technical Report 14a of the Draft EIS/EIR for more information regarding dispersion model receptor/grid spacing.

All receptor locations included in the pre-mitigation analysis were also included in the post mitigation analysis. Thus, pre-mitigation impacts can be compared directly to post-mitigation impacts, point by point, to gauge the effectiveness of mitigation measures at all modeled locations. Areas of maximum concentrations of TAPs were defined in an initial screening analysis using a coarser grid. Once areas of maximum concentrations were defined additional receptor locations were added in these areas at a finer grid spacing. Discrete receptors for sensitive receptors (schools, hospitals, nursing homes, day-care facilities etc.) are included in all air dispersion modeling runs.

The Draft EIS/EIR presented the analysis of impacts for Alternatives A, B, and C under pre-mitigation conditions. The Supplement to the Draft EIS/EIR presented the analysis of impacts for Alternative D under pre-mitigation conditions and an analysis for all build alternatives under post-mitigation. Receptor locations for Alternative D were the same under pre and post mitigation conditions, allowing for a point by point comparison of pre-mitigation to post-mitigation impacts. New risk analyses in the Supplement to the Draft EIS/EIR, which superceded and replaced those in the Draft EIS/EIR, were based on the revised mitigation measures. The revised mitigation measures do not substantially reduce aircraft emissions from those estimated for unmitigated conditions. Therefore, because cancer risks and noncancer hazards are due primarily to toxic air pollutants (TAPs) in aircraft engine exhaust, cancer risks and noncancer hazards following mitigation show minimal change from unmitigated conditions as noted by the commentor.

3. Comments and Responses

SAL00017-64

Comment:

PART FIVE

THE TRAFFIC IMPACT ANALYSIS IS INADEQUATE

To address traffic impacts of the LAX Master Plan on the Inglewood Unified School District, the SEIS/EIR should identify those locations where project traffic could cause significant impacts. In this regard it is typical for a traffic study to have clearly defined performance criteria with respect to how the study area is defined and the definition of "significant impact" within that study area. While the study area has been expanded since the Original EIS/EIR, it is not clear whether the expanded area of impact within Inglewood has been selected in this manner.

For example, it would seem that major roadway facilities such as Century Boulevard, Arbor Vitae Street and Manchester Boulevard would be affected in some manner by the Master Plan. All of these roadways, directly or indirectly, serve schools within the Inglewood Unified School District, and except for Prairie Avenue/Lennox Boulevard intersection no analysis was carried out east of La Brea Avenue. The traffic study is deficient in not addressing locations in this immediately adjacent area.

Even if the impacts are less than significant, there should have been some evaluation in the SEIS/EIR showing how the study area was selected and indicating findings of significance or no significance on roadways within the Inglewood Unified School District.

Response:

Please see Topical Response TR-ST-2 regarding surface transportation analysis methodology. In particular see TR-ST-2.2 and TR-ST-2.3 regarding the facilities selected for the traffic study. As discussed in that topical response, LAX is an intermodal transfer facility. It is not a true traffic generator, such as a regional shopping mall. Therefore, it is not necessary in the Draft EIS/EIR or the Supplement to the Draft EIS/EIR to identify and analyze every intersection that may be impacted by the project.

SAL00017-65

Comment:

1. Lennox Interchange.

The addition of an interchange with I-405 at Lennox Boulevard is being proposed as a mitigation measure for Alternative D. The secondary impacts of this interchange on the Inglewood street system needs to be studied since the accompanying closure of Lennox Boulevard just east of the freeway will divert traffic to parallel streets such as Century Boulevard and Arbor Vitae Street.

Response:

The traffic model does account for the closure of Lennox Boulevard and the installation of the Lennox Boulevard Interchange in the preferred mitigation plan. Drivers who had used Lennox Boulevard to access La Cienega Boulevard do need to divert to other routes. Figure S6 of Technical Report S-2b of the Supplement to the Draft EIS/EIR shows the changes in total PM peak-hour traffic in 2015 due to the installation of the I-405 and I-105 interchanges. Intersections that were studied east of the I-405 Freeway are shown on Figure S4.3.2-1 in Chapter 4.3.2 of the Supplement to the Draft EIS/EIR. Intersections on Century Boulevard and Arbor Vitae Street easterly to Hawthorne Boulevard/La Brea Avenue were included.

SAL00017-66

Comment:

2. Other Considerations.

There are numerous other issues related to the impact of Alternative D on the City of Inglewood and hence on the Inglewood Unified School District. Alternative D expands the airport complex to the east, and although the I-405 Freeway acts somewhat as a barrier with respect to direct impacts in Inglewood, there is the potential for indirect impacts that are difficult to quantify and therefore are either not addressed or only briefly addressed in the SEIS/EIR. Some examples are:

a. Freeway Avoidance Traffic.

Most of the freeway and freeway access mitigation measures will need to be the subject of further analysis as Caltrans Project Study Reports are prepared and more detailed designs are formulated. There is no assurance that desired freeway levels of service will be achieved when both project and cumulative impacts are considered. Under such conditions, "freeway avoidance" traffic could impact local streets and some of that freeway avoidance traffic will include airport trips (primarily employee and service related trips rather than air passenger trips). Actual conditions on the Inglewood street system could therefore be worse than portrayed in the SEIS/EIR. Ideally, some provision should be made for monitoring traffic conditions to determine the magnitude of such trips, and to establish some form of "second tier" list of improvements for locations that may be impacted in this manner with trigger points for implementing improvements.

Response:

The Draft EIS/EIR and the Supplement to the Draft EIS/EIR are program level environmental documents intended to analyze the impacts of a Master Plan. It is acknowledged that further documentation may be required to address certain environmental issues in a more specific manner, as necessary and appropriate. The Lennox Boulevard Interchange would require such further documentation. Project Study Reports for the proposed freeway interchanges will need to be completed for the approval of Caltrans and the FHWA.

Figure S6 of Technical Report S-2b of the Supplement to the Draft EIS/EIR shows the changes in total PM peak-hour traffic in 2015 due to the installation of the I-405 and I-105 interchanges. Intersections that were studied east of the I-405 Freeway are shown on Figure S4.3.2-1 in Chapter 4.3.2 of the Supplement to the Draft EIS/EIR.

SAL00017-67

Comment:

b. Construction.

The SEIS/EIR discusses construction traffic routing as a mitigation measure for project construction. The Inglewood Unified School District should be involved in this process, and to the extent possible, include the Inglewood Unified School District in reviewing construction traffic routing to ensure that minimum impacts occur to schools, particularly those in close proximity to the airport.

Response:

Comment noted. LAWA welcomes the opportunity to work with the Inglewood Unified School District in the routing of construction traffic to minimize impacts to their schools.

SAL00017-68

Comment:

c. Phasing.

The phasing of transportation improvements is an important issue. Some discussion is given in the SEIS/EIR based on a conceptual phasing plan for the Master Plan. That phasing will be a complex undertaking, and should be accompanied by a detailed disclosure of impacts and mitigation measures for each phase as the details of the phasing plan emerge. Inglewood's close proximity to the airport makes it vulnerable to any situation in which unanticipated traffic impacts of a particular phase causes problems on the local street system. Such impacts could well exceed those identified for the 2008 and 2015 time frames in the SEIS/EIR.

3. Comments and Responses

Response:

The phasing plan shown in Figure S3-15 is intended to be conceptual. A more detailed phasing plan will be developed during the design stage of the project. The Off-Airport Surface Transportation Phasing Plan is presented on Table S4.3.2-13 of Chapter 4.3.2 of the Supplement to the Draft EIS/EIR. This table lists which transportation improvements are required to be completed prior to the opening of a particular project component. During construction, LAWA's Ground Transportation Construction Coordination Office will work with the Inglewood Unified School District to address construction-related concerns.

SAL00017-69

Comment:

PART SIX

THE ENROLLMENT IMPACT ANALYSIS IS MISLEADING

The SEIS/EIR discusses the impact of Alternative D on enrollment as follows:

"Due to productivity increases (i.e., the production of more economic output per worker), Alternative D would result in a decrease of approximately 2,657 on-airport employees within the school s study area by 2015. As each on-airport employee is assumed to represent one household, the number of on-airport employee households within the schools study area would, therefore, decline by approximately 2,657." (SEIS/EIR, Schools, Section 4.27, p. 4-764.)

As to student enrollment in the Inglewood Unified School District, the SEIS/EIR states:

". . . [T]he maximum enrollment decline estimate ... between 1996/1997 and 2015 would be 225 students in the Inglewood Unified School District." (SEIS/EIR, Schools, Section 4.27, p. 4- 765.)

Thus, the SEIS/EIR concludes, this decrease in student enrollment as a result of Alternative D will not result in any impact to the Inglewood Unified School District. This conclusion is wrong.

The use of the 1996/1997 year as a baseline for the purposes of determining the impact on student enrollment is not justified and renders an artificially low result. Since 1996, student enrollment in Inglewood schools has increased by over 800 students. (See, e.g., Original EIS/EIR Response Exhibit 14 to Response, page 58.) Accordingly, is the actual effect of Alternative D upon student enrollment a decrease in over 1,000 students? It is impossible to conclude based upon the very brief analysis of Inglewood Unified School District enrollment in the SEIS/EIR, but this does appear to be the logical conclusion.

Whether the decrease in students is only 225 or in reality over 1,000, the impact on the Inglewood Unified School District will be substantial. The Inglewood Unified School District relies almost exclusively on Average Daily Attendance for its revenue. A loss of 225 students may mean the loss of over \$1,050,000 per year in student generated revenue. Should the decrease in student enrollment actually be over 1,000, it would mean the loss of over \$4,700,000 in student attendance generated annual revenue.

Either of these impacts would translate into significant impacts upon budgeting, employment, maintenance and operations within the Inglewood Unified School District, must be studied further, and mitigation measures must be developed to address these impacts.

Response:

The decline in jobs over the planning period is not a product of Alternative D, but rather results from productivity increases (greater economic output per worker) that overwhelm the modest increase in net additional jobs associated with Alternative D. This effect is independent of Alternative D, and the forecast of reduced enrollment within the District associated with LAX related employment would occur with or without the project, as represented by the No Action/No Project Alternative. This does not suggest that the District would not see continued increases in enrollment and associated revenue over

the period leading to 2015 due to other influences that would far exceed the potential effects related to LAX. See Topical Response TR-GEN-1 regarding the 1996 environmental baseline.

SAL00017-70

Comment:

PART SEVEN

THE SUBSTANTIAL SHIFT IN PROJECT OBJECTIVES REQUIRES LAWA TO EXAMINE AN ADEQUATE RANGE OF PROJECT ALTERNATIVES

Following the events of September 11th terrorist attacks, the basic objectives of the project have significantly shifted to an emphasis on security and safety over expansion. Several statements have been attributed to Mayor Hahn to this effect. However, Mayor Hahn's new objectives are only addressed in one alternative, Alternative D, the only alternative admittedly focused on enhanced safety and security measures.

The 1998 amendments to the CEQA Guidelines emphasized the importance of a clearly written statement of objectives. The following language was added for the requirements of the "project description,"

"A clearly written statement of objectives will help the lead agency develop a reasonable range of alternatives to evaluate in the EIR and will aid the decision makers in preparing findings or a statement of overriding considerations, if necessary. The statement of objectives should include the underlying purpose of the project." (14 California Code of Regulations 15124(b).)

A discussion of this section by the Governor's Office of Planning and Research provides further insight into this amendment - "Clear project objectives simplify the selection process by providing a standard against which to measure possible alternatives."

The standard by which to judge the range of alternatives required in an EIR is governed by the "rule of reason." 14 California Code of Regulations 15126.6(a); *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 565. In this case, LAWA completely changed its focus and objectives for the LAX project, yet only set forth one alternative in the SEIS/EIR to address these objectives. By only addressing one alternative, LAWA has effectively limited the public from meaningful public participation and informed decision making. It precludes the option of selecting a project that addresses the safety and security concerns of LAWA with less of an accompanying environmental justice impact. The notable lack of alternatives does not permit a reasoned choice and does not withstand the CEQA's "rule of reason."

When LAWA presented a 180 degree shift in its basic and central objectives, LAWA was required to comply with CEQA by discussing a reasonable range of alternatives. LAWA's failure to do so is fatal to the SEIS/EIR.

Response:

The assertion that the basic objectives of the project significantly shifted following the events of September 11, 2001 is incorrect. As was indicated on page 2-1 of the Supplement to the Draft EIS/EIR, the purpose and need associated with the LAX Master Plan that was stated in the Draft EIS/EIR remains valid today. As was also noted on that page of the Supplement to the Draft EIS/EIR, comments submitted on the Draft EIS/EIR and several significant events occurring subsequent to publication of the Draft EIS/EIR, including but not limited to the events of September 11th, prompted the Mayor of the City of Los Angeles, LAWA, and many citizens to reassess the future development of LAX. As was more fully explained in Chapter 3 of the Supplement to the Draft EIS/EIR, the formulation of Alternative D was intended to respond to these events and public input within the overall framework of the purpose and need for the LAX Master Plan, recognizing that the manner and degree to which Alternative D responds to the project purpose and need would differ from those of the other alternatives. The fact that Alternative D includes a design emphasis on enhancing existing safety and security at LAX does not invalidate or conflict with the basic project purpose and need. Consistent with the provisions of NEPA and CEQA, the addition of Alternative D expands the range of reasonable alternatives being considered for the LAX Master Plan and, in particular, offers the ability to avoid or reduce significant impacts associated with the other build alternatives (i.e., Alternatives A, B, and C).

3. Comments and Responses

SAL00017-71

Comment:

PART EIGHT

THE EIS/EIR VIOLATES CEQA READABILITY REQUIREMENTS

California Public Resources Code § 21003 states, in pertinent part:

"The Legislature further finds and declares that it is the policy of the state that:

"(b) Documents prepared pursuant to this division be organized and written in a manner that will be meaningful and useful to decision makers and to the public...

"(f) All persons and public agencies involved in the environmental review process be responsible for carrying out the process in the most efficient, expeditious manner in order to conserve the available financial, governmental, physical and social resources with the objective that those resources may be better applied toward the mitigation of actual significant effects on the environment."

Both the Original EIS/EIR and the SEIS/EIR violate this Code section.

a. Original EIS/EIR.

The Original EIS/EIR is inaccessible. It is 12,000 pages long and costs thousands of dollars to purchase. The CD version, although less expensive, is only accessible to people with computers. Many poorer residents of the most highly impacted areas do not have that technology. Additionally, the CD version contains many glitches, so entire sections are impossible to read or print. (See, e.g., EIS/EIR, CD Version Technical Report 4.)

Response:

Comment noted. Please see Response to Comment AL00033-255 regarding the content, structure, and availability of the Draft EIS/EIR and Supplement to the Draft EIS/EIR for public review. It is unclear as to what, specifically, the commentor is referring regarding issues with the CD ROM version of the Draft EIS/EIR. However, Response to Comment AL00033-255 includes some discussion regarding the readability and printing of the electronic (e.g., CD ROM versions) version of the Draft EIS/EIR.

SAL00017-72

Comment:

Second, the Original EIS/EIR is so poorly organized that it is nearly impossible to find all of the pertinent information regarding a topic. Analysis regarding a particular topic is often spread among numerous sections of the "main document." Several of the so-called "technical reports" contain substantive narrative that is not reflected in the report itself. The "appendices" often contain other important information. The document itself provides no logical explanation as to why its contents are distributed in this manner.

For instance, as expected, the Noise section of the Original EIS/EIR contains information regarding the noise impacts of LAX expansion upon Inglewood Unified School District schools. However, the Noise Technical Report, thousands of pages later, contains crucial noise impact information that is entirely absent from the Noise section of the main document. In addition, the Noise Technical Report is not contained on the CD entitled "Technical Reports". Instead, it is on the "Appendices" CD, and is actually Appendix "D". The reason for this is entirely unclear.

The Land Use section, a thousand pages from the Noise section and several thousand pages from the Noise Technical Report, essentially states that LAWA will not mitigate noise impacts identified in the Noise section. (EIS/EIR, Land Use, Section 4.2, pp. 4-95, 4-96.) These few, critical sentences are not contained in the Noise section of the main document, nor the Noise Technical Report. This illogical

placement of this crucial language suggests an intentional decision to obscure information that would raise "red flags" in respondents.

Response:

The comment is essentially the same as Comment AL00034-62; please see Response to Comment AL00034-62.

SAL00017-73

Comment:

b. Addition of Supplement to the EIS/EIR.

The SEIS/EIR contains many of the same problems of the Original EIS/EIR. It is thousands of pages long and costs over a thousand dollars to purchase. Consistent with the Original EIS/EIR, the various Supplemental Noise Technical Reports and the Environmental Justice Technical Report are contained in the "Appendices" rather than with the "Technical Reports," as would make sense. Although the CD version of the document is less expensive, it is not accessible to those impacted citizens of Inglewood who do not have access to a computer and are not trained to utilize the complex programs required to read from the CDs.

In total, the EIS/EIR violate CEQA readability requirements, and are inaccessible to a significant portion of the population impacted by the project that is the subject of the EIS/EIR.

Response:

Comment noted. Please see Response to Comment AL00033-255 regarding the content, structure, and availability of the Draft EIS/EIR and Supplement to the Draft EIS/EIR for public review. Response to Comment AL00033-255 includes discussion regarding the readability and printing of the electronic (e.g., CD ROM version) of the Draft EIS/EIR.

SAL00017-74

Comment:

CONCLUSION

The individual and cumulative impacts of the EIS/EIR, including Alternative D, upon the education, health and safety of its students are of substantial concern to the Inglewood Unified School District. By law, LAWA must adequately consider and mitigate these impacts in its EIS/EIR. It fails to do so.

The EIS/EIR fails to adequately analyze the environmental justice, noise, health, pollution, traffic and enrollment impacts of the proposed project upon the Inglewood Unified School District. The EIS/EIR fails to propose adequate mitigation measures for these impacts. Furthermore, the EIS/EIR analysis of the cumulative impacts of the LAX expansion upon the Inglewood Unified School District is inadequate, both due to its own insufficiency and due to the inadequacy of its analyses of the underlying impacts.

For the foregoing reasons, the Inglewood Unified School District respectfully requests that LAWA revise the EIS/EIR to include alternative projects, further impact analysis and site specific mitigation information and proposals regarding the impacts on the Inglewood Unified School District.

Response:

Please see Responses to Comments SAL00017-3 through SAL00017-73 for responses to the specific concerns raised in the commentor's letter that provide the basis for the conclusion statement.

3. Comments and Responses

SAL00018 None Provided Lennox School District 11/6/2003

SAL00018-1

Comment:

Although the Lennox School District has undertaken the task of providing this Response, it believes it to be procedurally incorrect and financially unfair for a school district of extremely encumbered financial resources to be burdened with the costs of conducting the initial research and analysis required to be in the SEIS/EIR but omitted.

Response:

Comment noted.

SAL00018-2

Comment:

To the extent new facts and issues are raised in the SEIS/EIR, the Lennox School District provides its response below. To the extent that the SEIS/EIR relies upon or is consistent with the Original EIS/EIR, the Lennox School District incorporates its September 21, 2001 Response and Comments by reference herein. This Response also incorporates the exhibits from the September 21, 2001 Response, and continues numbering the exhibits from that document.

Response:

Comment noted. The Lennox School District's September 21, 2001 comment letter on the Draft EIS/EIR is identified as comment letter AL00034. For responses to these comments, please see responses to comment letter AL00034. For responses to the Lennox School District's comments on the Supplement to the Draft EIS/EIR, please see Responses to Comments below.

SAL00018-3

Comment:

Based upon its review and analysis of the Original EIS/EIR and the SEIS/EIR, the Lennox School District respectfully submits the EIS/EIR fails to satisfy the requirements of either CEQA or NEPA. Accordingly, the Lennox School District respectfully requests LAWA substantially revise its EIS/EIR to: (1) include additional alternatives that address LAWA's new paramount safety and security objectives; (2) specifically address the impacts of the Alternative D discussed herein, as well as the other alternatives contained in the Original EIS/EIR; and (3) provide for proposed mitigation at Lennox School District schools for the benefit of the disproportionately affected children in attendance.

Response:

Comment noted. Please see Responses to Comments below.

SAL00018-4

Comment:

DISCUSSION

PART ONE

THE ENVIRONMENTAL JUSTICE ANALYSIS OF THE SUPPLEMENT TO THE DRAFT EIS/EIR VIOLATES CEQA

3. Comments and Responses

All of the alternatives presented by LAWA in its EIS/EIR, including Alternative D presented in the SEIS/EIR, disproportionately impact minorities. The students of the Lennox School District receive an unfair share of the burdens of Alternative D, including educational and health impairments.

Response:

The content of this comment is identical to comment SAL00017-4; please refer to Response to Comment SAL00017-4.

SAL00018-5

Comment:

1. The SEIS/EIR Is Bound by Environmental Justice Considerations.

LAWA is mandated by federal and state law to identify and address environmental justice issues in its environmental review. Executive Order 12898 requires that each federal agency "make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse health or environmental effects of its programs, policies, and activities on minority populations and low-income populations." ("Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," Executive Order 12898, February 11, 1994, Exhibit 15.)

State law similarly requires consideration of environmental justice issues in environmental impact reports. (California Public Resources Code § 71110 et seq.) The California Environmental Protection Agency is obligated to "[p]romote enforcement of all health and environmental statutes within its jurisdiction in a manner that ensures the fair treatment of people of all races, cultures, and income levels, including minority populations and low-income populations of the state." (California Public Resources Code § 71110(b).)

Thus, the SEIS/EIR must (1) identify disproportionate, adverse environmental and health effects on minority and low income populations and (2) present mitigation measures to alleviate the unfair effects of its project alternatives upon minority and low income populations.

Response:

The Draft EIS/EIR and Supplement to the Draft EIS/EIR addressed environmental justice pursuant to federal and state law in Section 4.4.3, Environmental Justice. Supporting technical data and analyses are provided in Appendix F of the Draft EIS/EIR and Appendix S-D of the Supplement to the Draft EIS/EIR. All feasible mitigation measures to address disproportionately high and adverse effects on minority and low-income populations have been identified and are presented along with offsetting benefits in Section 4.4.3, Environmental Justice (subsection 4.4.3.7), of the Final EIS/EIR.

SAL00018-6

Comment:

2. Alternative D Unfairly and Disproportionately Burdens Minority Schools.

The Southern California Association of Governments concluded in its 2001 Regional Transportation Plan, "...limiting further expansion of LAX is the best possible Plan outcome from an environmental justice perspective. This is due to the relatively high concentration of low-income and minority populations in the vicinity of LAX." The SEIS/EIR admits the "Effects on public schools associated with aircraft noise exposure would fall on schools that are located predominantly within minority and/or low-income communities..." (SEIS/EIR, Environmental Justice, Section 4.4.3, p. 4-324.)

The Lennox School District is primarily a minority, low-income district. (Original EIS/EIR, Environmental Justice Technical Report, Figure 1 and 2, Table 3.) The student population of Lennox School District is 95.6% Latino. (Education Data Partnership ("Ed- Data"), "Fiscal, Demographic, and Performance Data on California's K-12 Schools," <http://www.ed-data.k12.ca.us>, Exhibit 16.) According to the 2000 United States census, the Lennox community is 89.8% Latino, 4.1% African American and 3.5% White Non-Hispanic. (United States Census Bureau, <http://factfinder.census.gov>.) The median annual household income is \$28,273 in Lennox. Over 30% of Lennox families are below the poverty line. (Id.) More than

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half of Lennox families are below 150% of the poverty line. (Id.) The United States Secretary of Labor has indicated that the Lennox area has one of the highest unemployment levels of the nation. (Lennox Demographic Information, Original EIS/EIR Response Exhibit 1.) An average of 95% of students in the Lennox School District are eligible for free or reduced lunches. (Id.)

Given the acknowledged burdens placed on Lennox School District schools by Alternative D, options that address the environmental justice impacts should be set forth in the SEIS/EIR.

Response:

As indicated in Chapter 3, Alternatives, of the Supplement to the Draft EIS/EIR, Alternative D was prepared in response to public and agency comments, including SCAG's comments, on the Draft EIS/EIR, particularly comments that advocated a more regional approach to accommodating regional air travel demand. Alternative D has been designed with future (2015) passenger and cargo activity levels similar to the scenario adopted by SCAG for LAX. This level of activity is also equivalent to what would occur if the project were not approved, as represented by the No Action/No Project Alternative. Therefore, Alternative D does represent what SCAG suggests is a best possible plan outcome from an environmental justice perspective. Regarding other options or alternatives, please see Response to Comment SAL00017-15.

SAL00018-7

Comment:

a. Significant impacts of increased noise on education in Lennox School District schools.

As with the alternatives proposed in the Original EIS/EIR, Alternative D would have a significant adverse impact on the education of students in the Lennox School District. Table S17 of the Supplemental Aircraft Noise Technical Report of the SEIS/EIR presents data which provides an indication of the time that the increased airplane overflights under Alternative D will take out of each school day. When considering these numbers, it is important to note that, not only does the interruption lasts at least six seconds (SEIS/EIR, Noise, Section 4.1.6.1.5.4.2, p. 4- 66), but there is anticipation time as the deafening noise immediately approaches, as well as time spent settling back into instruction after the disruption has receded.

For example, Table S17 suggests Felton Elementary School will lose a total of 45.3 minutes of instructional time each day once Alternative D is implemented. What real impact will this 45.3 minutes have on actual instruction? Approximately 151 times per day, instruction, reading and/or test taking will be stopped or interrupted in the classrooms at this school.¹

Moreover, Buford Elementary School will suffer from an unimaginable 141 interruptions of instruction per day - - over 17 per hour. Children in classes will have to consistently disengage and reengage to classroom instruction, or will simply fail to hear the teacher, every few minutes during each and every class, every day of school. This is, of course, a conservative extrapolation - - the actual number of classroom interruptions is probably far higher. This is also an increase over the baseline. These noise interference numbers are substantially similar to those suggested by Table S31, Supplemental Aircraft Noise Technical Report, Section 6.2.2, p. 151.

Furthermore, most students in Lennox schools speak English as a second language. A total of 71.2% of the students in the Lennox School District are "English Learner" students, who are not proficient in English. (Education Data Partnership ("Ed-Data"), "Fiscal, Demographic, and Performance Data on California's K-12 Schools,"supra.) In fact, 80.3% of students at Felton Elementary School and 74% of the students of Buford Elementary School do not speak English as their first language. (Id.) The numerous noise interruptions are particularly debilitating to these students. This fact is not addressed in the SEIS/EIR.

¹ Assuming overflights occur at a constant rate over a 24 hour day (which, of course, they do not - rather they occur more frequently during the time of instruction): 45.3 minutes = 2718 seconds; 2718 seconds divided by 6 second intervals = 453 occurrences; 453 occurrences divided by 24 hours = 18.8 occurrences per hour; 8 hours of instruction during the day = 151 occurrences per day during the time of instruction.

Response:

The commentor's formula misinterprets the analysis of classroom disruption. The aircraft time above 75 decibels in Table S17, Regular and Special Grid Point Assessment -Aircraft Time in Minutes above 75 dBA, Comparison of Build Alternatives to 1996 Baseline, Year 2000 conditions, and 2015 No Action/No Project Alternative of Appendix S-C1, of the Supplement to the Draft EIS/EIR is based over a 24-hour period, not over an 8-hour school day. Thus the total time above 75 dB during school hours would be much less. The commentor's formula assumes that all aircraft overflying the classroom will result in classroom interruption. Additionally, the outdoor to indoor reduction of 29 dBA is not included in Table S17. Please see Table S31, Average Daily Minutes Above Threshold, Average Number of Daily Events and Average Event Duration (in Seconds) Above 55 Interior dBA Speech Interference Levels During the Average School Day (8:00 a.m. - 4:00 p.m.), Table S32, Average Daily Minutes Above Threshold, of 65 dBA Interior Speech Communication Levels During the Average School Day (8:00 a.m. - 4:00 p.m.), and Table S33, Hourly Equivalent Noise Level at LAX Area Schools With Exceedance of ANSI 35 Leq(h) Thresholds During the Average School Day (8:00 a.m. - 4:00 p.m.) of Appendix S-C1 of the Supplement to the Draft EIS/EIR. Therefore, for a large classroom environment and based on the data identified in Table S31, Felton Elementary School will experience 49.7 noise events over above a 55 Interior dBA, lasting an average of 8.2 seconds for a total of 6.8 minutes during the average school day. Whereas, Buford Elementary School will experience 41.3 noise events over above a 55 Interior dBA, lasting an average of 5.7 seconds for a total of 3.9 minutes during the average school day. Additionally, Table S-32 shows that in Alternative D, Felton School will exceed the 65 dBA interior threshold for small group learning 0.2 minutes (12 seconds) during the average school day. Please see the following portions: Appendix S-C, Supplemental Aircraft Noise Technical Report and Appendix S-1, Supplemental Land Use Technical Report of the Supplement to the Draft EIS/EIR regarding extensive evaluation of single-event noise impacts on school disruption. Additionally, please see Subtopical Response TR-LU-3.14 regarding Existing and Proposed ANMP Program Related to Schools.

SAL00018-8

Comment:

b. Significant impacts of increased noise on students, teachers, staff and administration.

As noted by the World Health Organization, noise interference with speech comprehension results in a large number of personal disabilities, handicaps and behavioral changes. Children in the process of language and reading acquisition are noted to be particularly vulnerable. Problems with behavior, concentration, fatigue, uncertainty and lack of self-confidence, irritation, misunderstandings and a decrease in work capacity have been reported by researchers. (World Health Organization, Environmental Health Information, Guidelines for Community Noise, "Adverse Health Effects of Noise," Section 3, April 2001, Original EIS/EIR Response Exhibit 2.)

A study conducted in 1976 in Highline School District looked at the relationship between school test scores for school grades 3-7 and 5-10 for children attending schools exposed to high levels of aircraft noise and other children attending quiet schools. (Maser, A. L., Sorensen, P.H., Kryter, K.D., and Lukas, J.S. Effects of Intrusive Noise on Classroom Behavior: Data From a Successful Lawsuit. West. Psychol. Assoc. San Francisco. April 1978, Original EIS/EIR Response Exhibit 3.) While high academic-aptitude students in schools exposed to aircraft noise scored as well in standardized tests as their counter-parts in quiet schools, middle and especially low academic-aptitude students in noisy schools showed progressive deterioration in tests with continued school attendance relative to the students of equal aptitude in quiet schools. (Id.)

A study of the impact of various levels of freeway noise on reading test scores highlighted the cumulative adverse effect of noise exposure on school children. (Lukas, J.S., DuPree, R.B. and Swing, J.W. Effects Of Noise On Academic Achievement And Classroom Behavior. FHWA/CA/DOHS-81/01 Office of Noise Control, California Dept. Of Health Services, Sacramento. 1981, Exhibit 17.) An apparent degradation in reading achievement with classroom noise that was noted for third-graders, was accelerated by the sixth grade. (Id.)

Response:

Comment noted. The Supplement to the Draft EIS/EIR addressed the effects of single event aircraft noise relative to school disruption associated with the No Action/No Project Alternative and all four build

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alternatives in Section 4.1, Noise, and Section 4.2, Land Use, with supporting technical data and analysis provided in Appendix S-C1 and Technical Report S-1.

SAL00018-9

Comment:

Other research has demonstrated the link between chronic exposure to aircraft noise and many adverse effects including learning, motivational deficits, a significant decrease in total quality of life, increase in psychophysiological stress and susceptibility to helplessness. (Gary Evans and Lorraine Maxwell, "Chronic Noise Exposure and Reading Deficits. The Mediating Effects of Language Acquisition." *Environment and Behavior*, Vol. 29 No. 5, September 1997 [learning deficits], Original EIS/EIR Response Exhibit 4; Cohen S., Krantz, D.S., Evans G.W., Stokols D., and Kelly S., "Aircraft noise and children: Longitudinal and cross-sectional evidence on adaptation to noise and the effectiveness of noise abatement." *J. Pers. Soc. Psychol.* 40: 331- 345, 1981 [learning deficits], Exhibit 18; Bullinger, M., Hygge, S., Evans, G.W., Meis, M. and von Mackensen, S., "The Psychological Cost of Aircraft Noise for Children," *Zentralblatt fur Hygiene und Umweltmedizin*, 202:127-138, 1977 [quality of life decrease], Original EIS/EIR Response Exhibit 5; Gary W. Evans, Monika Bullinger and Staffan Hygge, "Chronic Noise Exposure and Physiological Response: A Prospective Study of Children Living Under Environmental Stress." *Psychological Science*, Vol. 9, No. 1, January 1998 [psychophysiological stress], Original EIS/EIR Response Exhibit 6; World Health Organization, Guidelines, supra. [helplessness].)

Response:

Please see Response to Comment AL00017-52. The types of noise-related health effects identified in the above studies are consistent with the information presented in the Draft EIS/EIR and Technical Report 14b. The studies, however, do not provide any scientific evidence or other basis for determining the nature, extent, or significance of noise-related health effects due to any of the Master Plan alternatives. However, the Supplement to the Draft EIS/EIR addressed the effects of single event aircraft noise relative to nighttime awakenings and school disruption associated with the No Action/No Project Alternative and all four build alternatives in Section 4.1, Noise, and Section 4.2, Land Use, with supporting technical data and analyses provided in Appendix S-C1 and Technical Report S-1. Regarding school disruption, mitigation is provided under Mitigation Measures MM-LU-3 and MM-LU-4 in the form of study of aircraft noise levels that result in classroom disruption and sound insulation for schools determined by the study or interim noise measurements to be significantly impacted. Schools in the Lennox School District are subject to the aviation easements, as well as prior noise mitigation payments, and so are not eligible for further mitigation. Please see Section 4.1, Noise, and Section 4.2, Land Use, of this Final EIS/EIR for a description of the various mitigation measures, derived from those contained within the Supplement to the Draft EIS/EIR, proposed to address significant noise impacts on sensitive surrounding land uses.

SAL00018-10

Comment:

A 1980 study showed elevated blood pressure of children attending schools under the LAX flight paths compared to children in quiet schools. (Cohen S., Krantz, D.S., Evans G.W. and Stokols D., "Physiological, motivational, and cognitive effects of aircraft noise on children: Moving from the laboratory to the field." *American Psychologist*, 35: 231-243. 1980, Exhibit 19.)

Response:

Please see Response to Comment AL00017-52 regarding the health effects of aircraft noise.

SAL00018-11

Comment:

The SEIS/EIR does not suggest that conditions resulting from implementation of Alternative D will result in different circumstances than those discussed in the above-referenced studies. Nevertheless, the SEIS/EIR fails to provide for any remediation for the known impacts of Alternative D on Lennox School District students.

Response:

The content of this comment is essentially the same as comment AL00034-14; please see Response to Comment AL00034-14.

SAL00018-12

Comment:

c. Significant impacts of increased pollution on students, teachers, staff and administration.

As noted by the United States Environmental Protection Agency ("USEPA"), exposure to ambient criteria and toxic pollutants resulting from anthropogenic emissions can result in a wide variety of health impacts. (USEPA, *The Benefits and Costs of the Clean Air Act, 1970 to 1990*. Prepared for U.S. Congress, October 1997, Original EIS/EIR Response Exhibit 7.) Short-term health impacts can include eye, nose, and throat irritation; losses in hand-eye coordination (compensatory tracking); vigilance (detection of infrequent events); visual system sensitivity; and increased asthma attacks. (Seinfeld, John H., *Atmospheric Chemistry and Physics of Air Pollution*. New York, John Wiley & Sons, 1986.) Long-term exposures can result in increased mortality, susceptibility to pulmonary bacterial infection, irritation of the alveoli, emphysema, chronic bronchitis, reduced pulmonary function, losses in IQ, and cancer. (Id. and USEPA, *Benefits*, supra.)

Furthermore, there is good reason to believe that children could be more vulnerable to these effects. Because of growing concerns regarding children's increased susceptibility to environmental contaminants, the California Legislature passed the Children's Environmental Health Protection Act (SB 25), which requires the California Environmental Protection Agency ("Cal/EPA") to specifically consider children in setting Ambient Air Quality Standards and developing criteria for Toxic Air Contaminants ("TACs"). The law will require Cal/EPA to specifically evaluate available information on children's increased susceptibility to each of the TACs, and develop a list of up to five TACs that potentially have disproportionate impacts on infants and children.

As stated by Cal/EPA, children are considered to be at increased risk because of the rapid growth and development of their nervous, immune and reproductive systems, and because their organs and tissues are rapidly maturing. (Cal/EPA, *Air Pollution and Children's Health*. Fact Sheet by Office of Environmental Health Hazard Assessment, March 2001, Original EIS/EIR Response Exhibit 8.) In addition, children experience greater exposure to ambient pollutants relative to their body weight, and children's specific activity patterns may contribute to an increased exposure to toxicants resulting from increased exercise and sporting activities. (Id.) Asthma has also been identified as a major problem in children, and some of the chemical emissions from LAX have

been identified by Cal/EPA as resulting in an exacerbation of asthma (e.g., formaldehyde and acrolein). (Id.)

Furthermore, recent studies suggest that particulate matter ("PM") may exacerbate asthma and cause coughs and other respiratory symptoms in children. (Id.) Recent studies also suggest that prolonged exposure to PM may also affect the growth and functioning of children's lungs. (Id.) Researchers found that as children grow up in smoggier areas, there is a notable lag in lung function growth. (Id.)

Response:

The Draft EIS/EIR and the Supplement to the Draft EIS/EIR addressed toxic emissions associated with the LAX Master Plan. The Human Health Risk Assessment presented in Section 4.24.1 of the Draft EIS/EIR and Section 4.24.1 of the Supplement to the Draft EIS/EIR evaluated risks resulting from potential exposure to toxic air pollutants (TAPs) associated with implementation of the LAX Master Plan build alternatives for residents and school children throughout the health risk study area. Children, the elderly, and individuals with respiratory conditions could be more sensitive to TAPs released from LAX than the average worker or resident. Toxicity information used to assess risks and hazards to people near LAX incorporated conservative assumptions designed to protect these more sensitive individuals (often termed "sensitive receptors" in human health risk assessments). School children were evaluated for exposure to TAPs as potentially sensitive receptors, although risks and hazards for this group were not used to assess levels of significance. Schools and school children are, however, a continuing public

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concern in all urban areas, and were included in the human health risk assessments to provide some direct information on the potential for health impacts.

Risks and hazards for school children and offsite workers, including teachers and school staff, were anticipated to be less than those for child and adult residents, who were evaluated based on the assumption that they would live near the airport for 30/70 years (i.e., from ages 0 to 30/70 years). Sensitive receptors such as children were accounted for through the use of conservative toxicity criteria designed to protect the most sensitive individuals in the population by the inclusion of margins of safety. In addition, conservative exposure assumptions were used to evaluate potential exposure. For example, the exposed residential population was assumed to be located at the point of maximum contaminant concentrations and to have continuous inhalation exposure for 24 hours per day for the entire exposure period. Estimated health risk and hazards presented in the health risk assessment are considered the worst possible due to the conservative exposure and toxicity criteria used in the evaluation. The assumption was that when child residents are protected, school children are also protected and when adult residents are protected adult workers are also protected.

The EPA report cited in the comment "The Benefits and Costs of the Clean Air Act, 1970 to 1990" was prepared to assess the effect of the Clean Air Act on the public health, economy, and environment. The analysis reviewed two regulatory scenarios. The "control scenario" reflected actual conditions resulting from the historical implementation of the 1970 and 1977 Clean Air Acts. The "no control" scenario reflected expected conditions based on the assumption that, absent the passage of the 1970 Clean Air Act, the scope, form, and stringency of air pollution control programs would have remained as they were in 1970. The "no control" scenario represented a baseline against which to measure the benefits of the effects of the Clean Air Act. The difference between the public health, air quality, and economic and environmental conditions resulting from these two scenarios represent the benefits and costs of the Act's implementation from 1970 to 1990 (USEPA, 1997). Results of the analysis indicated that the benefits of the Clean Air Act greatly outweighed the associated costs. Direct benefits of the Clean Air Act include reduced incidence from the baseline condition of a number of adverse human health effects, such as the health effects cited in the comment. The ambient air quality standards (AAQS) developed under the Clean Air Act, which have resulted in the benefits noted in the report, are thresholds of significance in the Draft EIS/EIR. National and state AAQS are set at levels to protect the health of even the most sensitive populations. Sensitive populations may include those with increased exposure (e.g., children, adults engaged in physical activity), those undergoing greater physiological change (e.g., children, pregnant women and their fetuses), individuals with impaired physiological conditions (e.g., elderly persons, persons with existing diseases), and individuals with lower levels of protective biological mechanisms due to genetic variability within the population (OEHHA, 2000).

Currently, attainment of AAQS, even when multiple criteria pollutants are present, is generally considered sufficient to protect human health. NEPA and CEQA thresholds of significance and AAQS were used in the Air Quality Assessment section of the Draft EIS/EIR to evaluate impacts associated with criteria pollutants. California has a State Implementation Plan (SIP) that provides an attainment strategy to reduce criteria pollutant concentrations to acceptable levels. The Clean Air Act, Section 176, requires that federal actions conform to applicable SIP. Changes in AAQS, such as the recent revision of the AAQS for particulate matter, will be reflected in the SIP.

TAPs are air pollutants that may pose a potential hazard to human health; however, AAQS and emission control standards have not been established for nearly all of these chemicals. Moreover, many TAPs are "of concern" at levels far below those that cause acute toxic effects because they cause chronic toxic effects at lower concentrations. For these chemicals, levels that are considered safe for long-term exposures will also be protective for short-term exposures. California regulates TAPs through its air toxics program. TAPs are evaluated using risk assessment; estimated risks and hazards are compared to cancer and hazard thresholds to determine whether an impact is significant. As with AAQS, toxicity criteria developed for TAPs are protective of even the most sensitive subpopulations.

OEHHA. 2000. Air Toxics Hot Spots Program. Risk Assessment Guidelines. Part III, Technical Support Document for the Determination of Noncancer Chronic Reference Exposure Levels.

USEPA. 1997. The Benefits and Costs of the Clean Air Act, 1970 to 1990.

SAL00018-13

Comment:

In April 2000, the South Coast Air Quality Management District ("SCAQMD") determined that Lennox had the highest concentrations of pollution of all communities neighboring LAX. (SCAQMD, Air Monitoring Study in the Area of Los Angeles International Airport, April 2000, Original EIS/EIR Response Exhibit 9.) SCAQMD conducted testing for particulate matter ("PM") and volatile organic compounds ("VOCs") at fourteen sites around LAX. (Id.) SCAQMD found that the concentrations of these pollutants were highest on the east side of the airport, particularly at Felton School in Lennox. (Id.) As stated in the SCAQMD report:

"Samples collected in the initial study both north and south of the airport typically showed lower concentrations of VOCs than did samples collected east of LAX. This trend held for all mobile source related compounds except benzene, for which the areas east and south of the airport showed comparable values." (Id. at p. 11.)

The report goes on to state:

"Using benzene and 1,3 butadiene as the indicators of mobile source activity, clear trends in the west-to-east data emerge. Background sites to the north and south of LAX showed lower levels of VOCs than did sampling locations to the east of these sites. The background sites, on average, were also consistent with respect to the levels of contaminants found. VOC levels were elevated at all locations on the east side of Aviation Blvd. Levels were typically 2 to 3 times higher on average than they were at background locations." (Id. at p. 12.)

This pollution has a direct correlation to levels of respiratory illness in Lennox School District students. In fact, UCLA doctors conducting the UCLA Health Fair in Lennox have indicated that a higher percentage of children in Lennox have asthma and other respiratory ailments than in any other Los Angeles area community the Health Fair has visited.

SCAQMD found a strong correlation between airport activity and the pollutant levels found in Lennox. (Id.) Alternative D will only exacerbate these problems.

Response:

The content of this comment is essentially the same as comment AL00034-16; please refer to Response to Comment AL00034-16.

SAL00018-14

Comment:

Because of the anticipated environmental and related health impact of noise and pollution on the schools, students could potentially fall behind in their schooling, one class grade or more. Several students could have an impaired ability to retain information as a result of the impact. These students may not be able to grasp as much as other students and would not be able to process more advanced concepts taught in high school that build upon what they were supposed to, but did not, learn in elementary school. More children would have asthma and allergies than they would without the implementation of Alternative D. Children may also have an increased risk of heart attacks and death.

Children in Lennox School District schools may have permanent learning disabilities that limit their career choices and quality of life. Furthermore, they may have shorter lifespans and worse general physical health than other children at other non-impact schools. Lennox School District students may have lifelong psychological weaknesses that would affect every aspect of their lives.

Response:

The content of this comment is essentially the same as comment AL00034-17; please refer to Response to Comment AL00034-17.

3. Comments and Responses

SAL00018-15

Comment:

These adverse health impacts are real. These are the impacts that will disproportionately and significantly affect the minority, low- income community of Lennox.

Response:

The content of this comment is identical to comment SAL00018-14; please refer to Response to Comment SAL00018-14.

SAL00018-16

Comment:

3. The SEIS/EIR Violates CEQA by Failing to Consider Alternatives that Equitably Distributes Burden Among Populations.

Because of the significant and unmitigatable impact of all of the proposed alternatives, including Alternative D, on minority and low-income communities, other alternatives must be explored.

California Public Resources Code § 21002 states, in pertinent part:

"The Legislature finds and declares that it is the policy of the state that public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects, and that the procedures required by this division are intended to assist public agencies in systematically identifying both the significant effects of proposed projects and the feasible alternatives or feasible mitigation measures which will avoid or substantially lessen such significant effects."

California law requires the SEIS/EIR to consider feasible alternatives that would substantially lessen the disproportionate and significant environmental effects of the project on minority and low-income communities. LAWA failed to do so.

Response:

All LAX Master Plan alternatives were selected in accordance with the requirements identified in the California Environmental Quality Act (CEQA) regulations, and the National Environmental Policy Act (NEPA). Please see Chapter 3, Alternatives, of the Draft EIS/EIR and Supplement to the Draft EIS/EIR for a detailed discussion of the alternatives selection process. As indicated in Chapter 3, Alternatives, of the Supplement to the Draft EIS/EIR, Alternative D was formulated as a direct response to the strongly expressed desire of many citizens, as indicated in comments on the Draft EIS/EIR, that LAWA limit activity at LAX in favor of a more regional approach to airport planning in Southern California. This desire was in large part based on the goal of more equitably distributing environmental impacts associated with air travel, and reducing potential future effects on communities surrounding LAX, including disproportionate adverse effects on minority and low-income communities. Alternative D has substantially reduced environmental effects compared to earlier alternatives, in direct support of the primary goal of an alternatives analysis under CEQA. Alternative D has the fewest overall impacts of the build alternatives and less impact on minority and low-income communities. As described on page 4-175, in Section 4.4.3, Environmental Justice, of the Supplement to the Draft EIS/EIR, relating to aircraft noise, implementation of Alternative D would result in fewer overall individuals exposed to high noise levels than would occur if the project were not approved, as represented by the No Action/No Project Alternative.

It should also be noted that the airport's effects on communities to the east are largely due to the airport's long-standing runway orientation, which distributes much of the aircraft noise over the ocean, but consequently affects communities to the east more than those to the north and south. Accordingly, increases in aircraft activity at LAX, due to its physical layout, preclude a completely equitable distribution of impacts among the communities surrounding LAX. However, all feasible mitigation measures to address disproportionately high and adverse effects on minority and low-income

populations have been identified and are presented along with offsetting benefits in Section 4.4.3, Environmental Justice (subsection 4.4.3.7), of this Final EIS/EIR.

See pages 1-3 of Appendix S-D of the Supplement to the Draft EIS/EIR for a discussion of regional environmental justice issues as analyzed in the Southern California Association of Governments (SCAG) Regional Transportation Plan and Regional Aviation Plan, including issues associated with airport improvement projects and LAX. These documents indicate that limiting expansion at LAX is the best possible outcome from an environmental justice perspective given the high concentration of minority and low-income populations in the LAX vicinity. Alternative D was added to the Supplement to the Draft EIS/EIR as a build alternative designed to serve a level of future (2015) activity comparable to the No Action/No Project Alternative. Alternative D is consistent with the policy framework of the SCAG 2001 RTP, which calls for no expansion of LAX, and instead, shifting the accommodation of future aviation demand to other airports in the region.

Also see Topical Response TR-EJ-3 regarding environmental justice and regional context and Topical Response TR-RC-1 regarding the LAX Master Plan role in the regional approach to meeting air service demand.

SAL00018-17

Comment:

4. The SEIS/EIR Violates CEQA By Failing to Provide Mitigation Measures for the Significant Environmental Justice Impacts.

The SEIS/EIR is required to mitigate the environmental justice burden imposed by Alternative D to the extent feasible. (California Public Resources Code §§ 21002, 21002.1.) The SEIS/EIR, however, fails to describe any mitigation measures to alleviate its impacts on schools. Instead, it proclaims that it will only provide mitigation measures in those schools not deemed to be Title 21 compliant. (See Environmental Justice, Section 4.4.3.5.1.2, p. 4-329; Supplemental Aircraft Noise Technical Report, Section 6.2.3, p. 154.) This rationale is flawed for two reasons: (1) it over-estimates the effect of the Settlement Agreement (See Part Two infra); and (2) it fails to address the independent obligations of CEQA.

Feasible mitigation programs exist that would address the noise issues in minority and low income schools. Sound insulation can alleviate noise impacts inside classrooms. Working examples of this are the Moffet Elementary School and Dolores Huerta Elementary School. These schools, built with noise mitigation as a key component, are able to provide a decent learning environment despite its proximity to LAX. Compare aircraft noise above 75 dBA for the 1996 baseline: Moffett Elementary School at .5 minutes and Felton Elementary School at 46.0 minutes. (SEIS/EIR, Supplemental Aircraft Noise Technical Report, Table S17.) Furthermore, to the extent that the significant noise impacts in Lennox School District schools are unmitigatable, the SEIS/EIR should address the option of relocating those schools.

Additionally, the Lennox School District has been investigating the acquisition of a large vacant parcel of land near Imperial and Aviation for the Lennox Math, Science & Technology High School Academy. However, Alternative D proposes another use for that particular parcel of land. This parcel would have been ideal for the charter school because Lennox is a highly developed and densely populated community with little available vacant land. If LAWA proceeds with Alternative D, Lennox School District will be forced to find another location for the charter school and most likely incur increased costs for condemnation proceedings, payment of relocations benefits and demolition of existing buildings. The impact on the charter high school should be considered when considering impacts and addressing mitigation.

The same mitigation analysis must be conducted for air quality and other significant impacts of the proposed project upon minority and low-income populations.

To the extent feasible, LAWA is obligated to mitigate its impacts on the Lennox School District. (14 California Code of Regulations § 15126.4.) The SEIS/EIR fails to do so. The failure to include such mitigation measures in the body of the SEIS/EIR violates CEQA. (Id.) Accordingly, this SEIS/EIR is fatally inadequate and must, before further action is taken, be revised to comply with CEQA.

3. Comments and Responses

Response:

Please see Response to Comment AL00034-23 and AL00034-38 regarding aircraft noise related mitigation measures and noise impacts on schools within the Lennox School District.

SAL00018-18

Comment:

PART TWO

THE SEIS/EIR IMPROPERLY RELIES UPON AND OVER ESTIMATES THE EFFECT OF THE SETTLEMENT AGREEMENT

The Original EIS/EIR states in one volume:

"In the mid-1970's, the City of Los Angeles ... [settled] a noise lawsuit. Under the terms of the settlements, each school in the public ... systems that had participated in the lawsuit agreed to allow an avigation easement, deeming the school to be compatible with the airport under Title 21." (Original EIS/EIR, Land Use, Section 4.2, pp. 4-95, 4-96.)

Over a thousand pages later, the Original EIS/EIR states:

"One public school in the Lennox Elementary School District would be exposed to outdoor noise levels that would remain significant after mitigation unless acquisition or relocation of the schools is undertaken." (Original EIS/EIR, Schools, Section 4.27, p. 4-1219.)

In a separate volume, the Original EIS/EIR states:

"As presented in Technical Report 1, Land Use, eight public schools would be exposed to significantly high levels of noise by 2015 within the Inglewood Unified School District and Lennox Elementary School District. For those impacted schools not already considered compatible pursuant to California Code of Regulations, Title 21, mitigation in the form of sound insulation or acquisition and relocation would be provided." (Original EIS/EIR, Schools Technical Report, Section 17, p. 15.)

The SEIS/EIR picks up on these points when discussing mitigation of noise impacts on schools. (See, for example, Environmental Justice, Section 4.4.3.5.1.2, p. 4-329; Supplemental Aircraft Noise Technical Report, Section 6.2.3, p. 154.)

Thus, the SEIS/EIR both addresses and dismisses further consideration of the impacts upon Lennox School District schools solely based upon the existence of the 1970's Settlement Agreement. (Amended Judgment and Final Order in Condemnation, Original EIS/EIR Response Exhibit 11; the operative "Judgment and Final Order" is actually entitled Amended Judgment and Final Order in Condemnation, and referred to herein as "Settlement Agreement.")

It is apparent LAWA has no intention of providing mitigation in any form to Lennox School District schools as part of Alternative D. As set forth below, this deficient approach (1) fails to even consider the entirety of the terms of the Settlement Agreement; (2) fails to consider other surcharges which would be caused by an expansion not provided for by the express grant of the avigation easement in the Settlement Agreement; and (3) inappropriately avoids and dismisses a proper CEQA analysis.

Response:

Please see Responses to Comments AL00034-25, AL00034-27, AL00034-29, and AL00034-31 regarding on the effect of the "Settlement Agreement" and the scope of the avigation easements. Please also see Topical Response TR-N-8 regarding noise-based vibration effects and Response to Comment PC00045-4 regarding fumes. See also Response to Comment SAL00017-17.

SAL00018-19

Comment:

1. The SEIS/EIR Fails to Consider All Possible Surcharges on the Avigation Easements.

As with the Original EIS/EIR (Original EIS/EIR, Land Use, Section 4.2, p. 4-95, fn. 72.), when discussing the historically high noise levels affecting the Lennox School District, the SEIS/EIR refers to and relies solely upon the Settlement Agreement which granted LAWA an avigation easement over Lennox School District schools. (SEIS/EIR, Supplemental Aircraft Noise Technical Report, Section 6.2.3, p. 154.) The SEIS/EIR concludes:

"LAWA has established agreement with most public and a few private schools in the airport environs related to the amount of cumulative noise that may be generated from airport operations over each. Where those cumulative noise levels are exceeded (measured in decibels of CNEL), addition of the facility to the list of sound insulation eligibility may be warranted." (Id.)

This conclusion is incomplete and misstates the Settlement Agreement (discussed further in Part Two Sections 2 and 3 *infra*). The Settlement Agreement provides that the purpose of the air easements granted to LAWA are for "noise, vibrations and fumes" over the schools. (Settlement Agreement, page 3, lines 18-21.) The Settlement Agreement further provides:

"Vibration and fume levels are not quantitatively described for the purpose of the distribution of the air easements but it is agreed that those levels of vibration and fumes which accompany the agreed-to CNEL values shall not be a burden of the easements." (Settlement Agreement, page 11, lines 1-5.)

In other words, LAWA may only contend that the avigation easement is not surcharged if "levels" of vibration and noise are the same as in 1970. What the Settlement Agreement does not discuss, does not preclude, and leaves open is whether a surcharge may occur when the frequency of vibrations and fumes is increased from the frequency of vibrations and fumes occurring in 1970.

Paragraphs 4.a and 7 of the Settlement Agreement make clear it was the intent of the parties not to further burden the avigation easements by an increase or "deviation" in frequency of flight operations over Lennox School District schools. Rather such deviations were only permitted if "temporary and not permanent." (Settlement Agreement, page 13, line 14.)

Response:

Please see Responses to Comments AL00034-25, AL00034-27, AL00034-29 and AL00034-31 regarding possible surcharges on avigation easements. Please also see Topical Response TR-N-8 regarding noise-based vibration effects and Response to Comment PC00045-4 regarding fumes. See also Response to Comment SAL00017-18.

SAL00018-20

Comment:

2. The Impacts of the Alternate D Will Constitute a Surcharge on the Avigation Easements.

Under California law, the extent of an easement is determined by the terms of its grant. (California Civil Code § 806.) As stated by the California Supreme Court, an owner of an easement may not increase the use of the easement in any manner that imposes a new or greater burden on the servient tenement without the consent of the servient owner. (Colegrove W. Co. v. City of Hollywood (1907) 151 Cal. 425, 429.) Further, "...it is well settled that 'both parties have the right to insist that so long as the easement is enjoyed it shall remain substantially the same as it was at the time the right accrued, entirely regardless of the question as to the relative benefit and damage that would ensue to the parties by reason of a change in the mode and manner of its enjoyment. [Citation omitted.]" (Whalen v. Ruiz (1953) 40 Cal.2d 294, 302.)

In fact, "California courts have set their faces firmly against ... increases in the burden upon the servient tenement." (Wall v. Rudolph (1961) 198 Cal.App.2d 684, 694.) Accordingly, "[t]he requirement that the easement involve only a limited use or enjoyment of the servient land is a corollary of the nonpossessory character of the interest. If a conveyance purported to transfer to A an unlimited use or enjoyment of [a parcel of land], it would be in effect a conveyance of ownership to A [of the parcel of land], not of an easement." (Id., at p. 697; emphasis in original.)

3. Comments and Responses

The aviation easement granted by the Lennox School District to LAWA was based upon criteria which have been far exceeded. For example, the number of take-offs and landings identified in Exhibit F in 1970 (used as two of the three elements to establish the CNEL contours) has dramatically increased as of 2003. In 1970, the total of take-offs and landing events per day was 1,061. (Settlement Agreement, Exhibit F, Figures 6, 7.) The total number of take-offs and landing events per day in 2003 is over 1,700, an increase in flight frequency of over 62%. (Los Angeles World Airports, Traffic Comparison, May 28, 2003.) This will increase even further to 2,148 under Alternative D, that is, over 100% more than anticipated by the aviation easement. (SEIS/EIR, Executive Summary, Table ES-1.)

Moreover, the aviation easement anticipated an increase in aircraft operations at LAX up to 40,000,000 passengers annually. (Settlement Agreement, Exhibit F, paragraph B.) LAX is currently operating at over 51,000,000 passengers annually. (Los Angeles World Airports, Traffic Comparison, May 28, 2003.) Alternative D predicts an increase in aircraft operations to accommodate at least 78,900,000 passengers annually, once again, almost 100% more than anticipated by the Settlement Agreement. (SEIS/EIR, Executive Summary, Table ES-1.) In addition, the amount and frequency of airplane traffic will also necessarily increase under Alternative D to accommodate the predicted increase in cargo tons per year by 50% over today's traffic alone. (Id.)

Perhaps most significant, however, is the decrease in altitude of air traffic over Lennox School District schools proposed by Alternative D due to the eastward extension of runway 24L and its direct impact on "levels" of noise, vibration and fumes. (See, SEIS/EIR, Noise, Sections 4.1.6.1.5.3 and 4.1.6.1.5.4.2, pp. 4-64 and 4-66, respectively.)

Thus, the increase in frequency of air traffic through the aviation easement proposed by Alternative D will constitute a material surcharge upon the easement. This increased frequency results in an increase in not only the number of noise events, but in the number of vibration and fume events as well.

This burden on the easement will, at the very least, require the Lennox School District's consent, and realistically also require further mitigation in the form of additional sound attenuation measures at each of the affected school sites.

Therefore, the SEIS/EIR must further consider, and LAWA must mitigate, the impact upon the existing or future incompatible land use resulting from implementation of Alternative D, as the Judgment and Final Order will not, as suggested, conclusively control the question given the anticipated substantial surcharge upon the aviation easement and resulting burden to the servient tenement, Lennox School District schools.

Response:

Please see Responses to Comment AL00034-25, AL00034-27, AL00034-29, AL00034-31, AL00034 -32 and AL00034-38 and SAL00018-19 regarding the potential effect of Alternative D on aviation easements. See also Response to Comment SAL00017-19.

The commenter contends that there would be a decrease in the altitude of air traffic over Lennox School District schools based on the extension of Runway 24L approximately 1,280 feet eastward under Alternative D. However the altitude of landings using Runway 6R/24L after its extension would remain the same as current operations, since this eastward extension is to provide greater takeoff length for aircraft departing to the west, over the ocean. The landing threshold for aircraft landing from the east would remain in its current location through displacement.

SAL00018-21

Comment:

3. The Existence of the Settlement Agreement is Irrelevant to Whether LAWA Must Comply With CEQA.

The existence of an aviation easement alone does not render a school "Compatible" under Title 21. Throughout the SEIS/EIR, LAWA implies that those schools which entered into aviation easements with LAWA are automatically deemed "compatible" uses, and therefore do not require mitigation. The regulatory definitions of "compatible" and "incompatible" uses do not support this contention.

The definition of incompatible land uses includes:

"[P]ublic and private schools of standard construction for which an avigation easement for noise has not been acquired by the airport proprietor or that do not have adequate acoustic performance to ensure an interior CNEL of 45 dB or less in all classrooms due to aircraft noise." (Emphasis added.) (21 California Code of Regulations 5014(b).)

The definition stated in the disjunctive is not of "compatible" land uses, but of "incompatible" land uses. Thus, public schools with an interior CNEL of 45 dB are plainly "incompatible" land uses, with or without an avigation easement. The accepted rules of statutory construction simply do not allow any other interpretation or extrapolation to be made by LAWA.

Under the basic tenets of statutory construction, courts will,

"ascertain the intent of the drafters so as to effectuate the purpose of the law [by]... first examin[ing] the words themselves, giving them their usual and ordinary meaning and construing them in context. When statutory language is clear and unambiguous, 'there is no need for construction and courts should not indulge in it.' [Citations omitted.]" (Esberg v. Union Oil Co. (2002) Cal.4th 262, 268.)

In this case, the plain meaning of the regulation does not present any ambiguity. The use of the word "or" in a regulation indicates an intention to use it disjunctively so as to designate alternative or separate categories. (Piet v. U.S. (1959) 176 F. Supp. 576, 583.)

Therefore, those schools that do not have adequate sound insulation to ensure an interior CNEL of 45 dB or less, are incompatible uses for purposes of Title 21 and are entitled to mitigation irrespective of whether LAWA holds avigation easements for those schools.

Even if LAWA successfully maintains Alternative D is not a surcharge on the avigation easement granted by Lennox School District, and, despite the foregoing, is nonetheless "compliant" with Title 21, LAWA must still identify the need for and then provide for the implementation of mitigation measures. Under California law:

"Any one may waive the advantage of a law intended solely for his benefit. But a law established for a public reason cannot be contravened by private agreement." (California Civil Code § 3513.)

The California Environmental Quality Act ("CEQA") is a state environmental law applicable to public agency decisions to authorize projects that could have an adverse impact on the environment. The purpose of the CEQA Environmental Impact Report requirement is to provide the information needed to make informed decisions in the selection and authorization of projects. (California Public Resources Code §§ 21001(g), 21002, 21061; 14 California Code of Regulations § 15121.) Without question, CEQA and its requirements are "established for a public reason." Therefore, under both sound principles of law as well as fundamental considerations of fairness and justice, the existence of the avigation easement (a private agreement between two public agencies) cannot "waive" the requirement of mitigation of the significant impacts upon students and teachers associated with Alternative D.

Thus, appropriate project alternatives, significant impacts and related mitigation measures must be analyzed in the SEIS/EIR. (California Public Resources Code §§ 21002.1, 21100.) In this instance, the SEIS/EIR must identify measures that would mitigate the impacts of Alternative D on Lennox School District in general and impacted school facilities in particular. (Id.) Without this analysis, the selection process is flawed and an informed decision cannot be made.

The Settlement Agreement between the City of Los Angeles and various school districts does not affect this state mandated analysis. The SEIS/EIR claims that the Settlement Agreement operates to mitigate significant impacts upon schools and students. (Environmental Justice, Section 4.4.3.5.1.2, p. 4-329; Supplemental Aircraft Noise Technical Report, Section 6.2.3, p. 154; See also, EIS/EIR, Land Use, Section 4.2.) This claim is in direct contradiction to the requirements of CEQA (14 California Code of Regulations § 15126.4) and Civil Code §3513.

CEQA requires LAWA to conduct and publicly disclose its analysis of impacts upon affected schools and of measures that can mitigate those impacts, if any. (Id.) Thus, the SEIS/EIR must be revised to conduct a thorough analysis of impacts upon schools and of measures that can be taken to mitigate those impacts. (Id.)

3. Comments and Responses

Response:

Please see Response to Comments AL00034-32 and AL00034-38 regarding the extensive analyses of significant impacts pertaining to noise and land use compatibility presented in the Draft EIS/EIR and the Supplement to the Draft EIS/EIR. See also Response to Comment AL00034-31 regarding use of aviation easements for land use compatibility. With respect to the commentor's claim that Civil Code Section 3513 invalidates the aviation easements awarded by the Court, this is a legal argument which is not supported by the Amended Judgment and Final Order of the Court (referred to by the commentor as the "Settlement Agreement") establishing the aviation easements to which the Lennox School District schools are subject. This document is described and incorporated by reference in Response to Comment AL00034-25. See also Response to Comment SAL00017-20.

The commentor's proposed legal interpretation of Title 21, Section 5014, not only is inconsistent with LAWA's, the commentor's interpretation would not necessarily result in any of the District's schools with aviation easements becoming incompatible uses. For example, according to the Supplement to the Draft EIS/EIR, none of the District's schools are reasonably projected to have interior classroom noise in excess of 45 dB CNEL under Alternative D, based on the exterior CNEL noise levels at the Lennox School District schools and the noise level reduction (NLR) of 29 dB applied therein. The 29 dB is based on the average NLR measured at several schools throughout the area in 2000. See Appendix S-C1, Supplemental Aircraft Noise Technical Report, Section 6.2.1. For schools with or without easements to have interior noise in excess of 45 dB CNEL, and so fall under the Districts' proposed definition of incompatible uses, the projected exterior CNEL would need to be greater than 74 CNEL. None of the schools within the Lennox School District would be exposed to more than 74 CNEL under any of the alternatives evaluated in the Draft EIS/EIR and Supplement to the Draft EIS/EIR, with the exception of Felton Elementary School, under Alternative B. As described in Section 4.2, Land Use (subsection 4.2.8) of the Draft EIS/EIR and Supplement to the Draft EIS/EIR, under Alternative B, Felton Elementary School would be newly exposed to the 75 CNEL.

SAL00018-22

Comment:

PART THREE

THE NOISE ANALYSIS OF THE SEIS/EIR IS INADEQUATE2

1. The SEIS/EIR Under-predicts Noise Impacts to Lennox School District Facilities by Omission.

There appears to be no specific mention of the following Lennox School District schools within the SEIS/EIR:

- Dolores Huerta Elementary School.

- Lennox Math, Science & Technology High School Academy, located on the Whelan Elementary School campus.

- Felton Preschool, located on the Felton Elementary School campus.

The lack of reference to these schools may be because they are not impacted, but the Lennox School District would request some acknowledgement of the existence of these schools within the Final EIS/EIR to provide reassurance that these schools have not merely been overlooked in the analysis.

In addition, Jefferson Elementary School is not included on Table S31 of the Supplemental Aircraft Noise Technical Report, which presents changes in the cumulative duration of classroom noise levels above 55 dBA under the various alternatives. The possibility that this school is not exposed to classroom noise levels above 55 dBA under any alternative seems unlikely given the school's proximity to the airport, its alignment with the southern runways and the inclusion in Table S31 of schools that would be expected to be exposed to lower noise levels due to their greater distance from the runways.

2 For the purpose of these comments, the use of the terms "Decibel", "dB" and "dBA" are all intended to mean A-weighted decibels.

Response:

Section 4.1, Noise, and Section 4.2, Land Use, of Draft EIS/EIR and Supplement to the Draft EIS/EIR presented noise impacts compared to 1996 baseline conditions and included a Year 2000 update for informational purposes. Therefore, additional schools or name changes to schools that occurred after 2000 were not included for analysis in the Supplement to the Draft EIS/EIR. Dolores Huerta Elementary, located at 11036 Hawthorne Boulevard, opened in January 2003. Impacts on the Lennox Math, Science & Technology High School Academy were identified as impacts on Whelan Elementary in the Technical Report 1, Land Use Technical Report, of the Draft EIS/EIR, and Section 4.2, Land Use, and Technical Report S-1, Supplemental Land Use Technical Report, of the Supplement to the Draft EIS/EIR, since the name change to this facility occurred in August 2003. As presented therein, no significant noise impacts are projected to occur under any of the Master Plan alternatives on Whelan Elementary. See also Topical Response TR-GEN-1 regarding the environmental baseline.

Multiple educational facilities located on the same parcel were generally identified as a single school. However, impacts on noise-sensitive parcels within the Lennox School District that would result from the Master Plan alternatives were clearly listed by the predominant use, address, assessors parcel number and grid id, in Technical Report 1, Land Use Technical Report, of the Draft EIS/EIR, Section 4.2, Land Use, and Technical Report S-1, Supplemental Land Use Technical Report, of the Supplement to the Draft EIS/EIR. The omission of the school name presented by the commenter would not change the conclusions regarding noise impacts on the District's facilities. Felton Preschool was not referenced separately from Felton Elementary School since they share the same parcel. As indicated therein, Felton Elementary would be significantly impacted by high noise levels under Alternative B. Under the "Settlement Agreement" providing, among other matters, avigation easements and prior noise mitigation payment, this school is not eligible for further aircraft noise mitigation. See Response to Comment AL00034-25 for a description of the "Settlement Agreement." See Subtopical Response TR-N-2.3 regarding the evaluation of noise impacts beyond 65 CNEL noise levels.

Regarding Jefferson Elementary School, this school was inadvertently omitted from Table S31 of Appendix S-C1, Supplemental Aircraft Noise Technical Report. The subject correction is incorporated into Section 4.1, Noise, and 4.2, Land Use, and Appendix F-C, Errata to the Draft EIS/EIR and the Supplement to the Draft EIS/EIR, of this Final EIS/EIR.

SAL00018-23

Comment:

2. The SEIS/EIR Under-Predicts Noise Impacts on Lennox School District Facilities by Relying on Noise Modeling Results Which Are Acknowledged Within the Report to Under-Predict Actual Aircraft Noise Levels.

As discussed in the Supplemental Aircraft Noise Technical Report (page 15) the INM used for all noise predictions in the SEIS/EIR under-predicts aircraft noise in comparison to real measured noise levels. The study's under-prediction of noise levels is likely to lead to an under-prediction of the number of schools at which the 2015 aircraft noise levels exceed certain noise thresholds of significance. The Lennox School District recommends that the Final EIS/EIR include detailed analysis of the likely real noise impact upon Lennox School District schools.

Response:

The content of this comment is essentially the same as Comment SAL00017-22; please see Response to Comment SAL00017-22. Additionally, please see Response to Comment AL00034-38 regarding mitigation of Lennox schools.

SAL00018-24

Comment:

3. The "Single Event" Noise Analysis Presented in the SEIS/EIR is Incomplete.

3. Comments and Responses

The Lennox School District's comments on the Original EIS/EIR pointed out potential disruption to speech communication within classrooms associated with "single events," i.e., the noise associated with individual aircraft flyovers. The Lennox School District is pleased to see that single events are now considered within the SEIS/EIR. The District remains concerned, however, that the issue of the applicable threshold(s) of significance has not been resolved within the SEIS/EIR.

Mitigation measure MM-LU-4, which incorporates specific noise mitigation measures for schools, is "subject to modification" based upon the results of further study. Details of the proposed 'further study' are not, however, provided for our comment.

Response:

The content of this comment is essentially the same as Comment SAL00017-23; please see Response to Comment SAL00017-23.

SAL00018-25

Comment:

4. The Limited 'Single Event' Noise Analysis Presented in the SEIS/EIR Substantially Under-predicts Impacts to Lennox School District Facilities in a Number of Ways.

a. The indoor classroom Lmax thresholds are set too high.

The Supplemental Aircraft Noise Technical Report proposes a 55 dBA Lmax threshold of significance for teaching classes. According to Page 149 of this report, this threshold was derived from Table 3.3 of a 1992 FICON publication, using a speaker-to-listener distance of 20 feet and assuming a raised voice level. Reference to the FICON 1992 publication shows that the table in question was reproduced from the 1973 EPA publication, "Public Health and Welfare Criteria for Noise," ("EPA Report") as Figure 6.1 of the EPA Report.

The EPA Report qualifies the data in a number of important ways. The qualifications include the following:

- Figure 6.1 published by EPA in 1973 was for an outdoor noise environment. Page 6-7 of the EPA Report states that the data "is not valid to assess the intrusion of the outdoor levels on the reception of speech indoors because of the reverberant build up of sound by reflections from the walls of the room... The data in the pertinent literature suggests that, for most instances, a reasonable value for the design of rooms where oral communication is important is somewhere in the range 40-45 dBA."

- Page 6-7 of the EPA Report goes on to state, "Lower noise levels would be required if the talker has imprecise speech (poor articulation) or if the speaker and listener speak different dialects." Considering the fact that (1) the speaker in the classroom is occasionally the student, and (2) the student's first language is often not the same as that of the teacher, these qualifications are certainly applicable in Lennox School District schools. (See Part One, Section 2, supra.)

- Page 6-7 of the EPA Report also states that the data in its Figure 6.1 represents conditions for young adults and that "adequate speech communication with children requires lower noise levels than are required for adults". This qualification also applies to the Lennox School District schools.

- Pages 6-7 to 6-8 of the EPA Report also state, "Persons with hearing losses require more favorable speech-to-noise ratios than do those with normal hearing." Given that all pupils will not all have perfect hearing at all times, due in great part, but not exclusively, to frequent childhood ear infections, this qualification is also pertinent. In addition, Lennox School District students reside within the Lennox community and are afflicted with long-term, likely unmitigated exposure to aircraft noise at home, possibly resulting in permanent hearing loss. This potential for permanent hearing loss should also be considered.

The EPA qualifications of the data were not contemplated in the SEIS/EIR analysis. Appropriate consideration of these qualifications would result in a lower threshold for the application in question.

On the above basis, the Lennox School District believes the 55 dBA Lmax indoor criterion used in the SEIS/EIR to be incorrectly derived. A lower criteria based upon consideration of all relevant factors, including: talker-to-listener distances greater than 20 feet, noise effects in indoor environments, the need for a higher signal-to-noise ratio for children, children's propensity to temporary hearing loss, and children with limited English proficiency should be utilized by LAWA.

Response:

The content of this comment is essentially the same as Comment SAL00017-24; please see Response to Comment SAL00017-24.

SAL00018-26

Comment:

b. Classroom interior noise levels based upon assumed 29 dBA out-to-in aircraft noise reduction do not adequately protect a large enough proportion of classroom users in the Lennox School District.

According to the Supplemental Aircraft Noise Technical Report, the 29 dBA out-to-in noise reduction for aircraft noise intrusion to classrooms is the average result of sample measurements conducted at "several schools" by LAWA. (p. 149.) Insufficient details were provided in the SEIS/EIR to assess whether the sampling was applicable to Lennox School District classrooms. Furthermore, since the 29 dBA is an average result, several classrooms in the study must have lower sound attenuation levels. It is therefore likely that sound insulation for some Lennox School District classrooms would be lower than 29 dBA.

Deriving an indoor noise impact threshold using the 29 dBA average would not adequately protect the occupants of those classrooms with worse than average sound isolation. For example, as is common in Southern California, the Lennox School District utilizes 113 portable classrooms. These would not generally be expected to provide such a high level of out-to-in noise reduction for aircraft noise. The noise threshold for mitigation should be designed to protect actually impacted classrooms, not just the 'average' case.

Response:

Comment noted. Please see Response to Comment SAL00017-25 (Comment noted. The commentor is correct in noting that since the 29 decibel attenuation rate is an average, some measurements must have been below the average and others were above. The measurements on which the average was based ranged from 22.4 to 44.6 decibels of difference. Please see Response to Comment SAL00015-119 regarding selection of school single event analysis thresholds. As stated on page 145, of Section 6.2.1 Threshold of Significance of Appendix S-C1, Supplemental Aircraft Noise Technical Report of the Supplement to the Draft EIS/EIR LAWA has conducted exterior and interior noise measurements at several schools throughout the area, including nine schools in Inglewood -- none were in Lennox.)

SAL00018-27

Comment:

c. The SEIS/EIR's proposed 84 dBA Lmax outdoor single event noise threshold is too high to assess single event noise impact upon classrooms, leading to a severe under-reporting of existing and future noise impacts.

The World Health Organization ("WHO") states that for speech to be intelligible when listening to complicated messages, such as in schools, interfering noise should not exceed 35 dBA. (World Health Organization, Guidelines, supra.) Assuming the classrooms in question operate with closed windows and doors (which would assume the existence of air-conditioning in the classrooms) and have been provided with sound attenuation to achieve a minimum noise level reduction of 25 dB (as required under the Land Use Compatibility Guidelines of the Federal Aviation Regulations for schools exposed to aircraft noise in the CNEL 65 to 70 range), this would suggest that occurrence of outdoor noise levels exceeding 60 dBA, which is much lower than the 84 dBA threshold, would result in speech interference within classrooms.

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Even using the upper limit of the EPA's suggested range (see item 4 a., above) of 45 dBA as being a threshold above which interference with typical speech becomes noticeable indoors, and again assuming 25 dBA out-to-in sound insulation, such a conservative analysis would suggest speech disturbance would be noticeable when outdoor noise levels exceed 70 dBA. Again this is a much lower threshold than 84 dBA.

Table S17 of the Supplemental Aircraft Noise Technical Report presents results for time above 75 dBA outdoors. Reviewing the range of thresholds for speech interference discussed above, it is highly likely that aircraft noise levels exceeding 75 dBA at a school result in speech interference within classrooms. (As discussed above, the appropriate threshold is probably lower than 75 dBA.) Table 1 below, presents "time above" data in minutes, projected for the year 2015 unless otherwise indicated, for Lennox School District schools extracted from Table S17 of the Supplemental Aircraft Noise Technical Report.

Table 1 - Aircraft Noise Time above 75 dBA in Minutes, for the year 2015 unless otherwise stated.

School	1996	No Project	Alt. A	Alt. B	Alt. C	Alt. D
Felton Elementary School - PBS035	46.0	45.5	31.6	49.4	47.5	45.3
Lennox Middle School - PBS091	8.2	5.2	7.7	41.8	5.2	4.8
Buford Elementary School - PBS019	41.6	38.2	44.7	25.8	42.9	42.3
Moffet Elementary School - PBS102	.5	.7	1.2	30.1	.7	.7
Jefferson Elementary School - PBS055	26.0	28.3	14.1	45.3	26.5	24.8
Whelan Elementary School - PBS123	52.1	51.7	47.0	33.5	56.1	55.0

The results presented in Table 1 suggest that the cumulative duration of speech interference in classrooms per day for all of the above Lennox School District schools is high under nearly every project alternative scenario. Given the amount of speech disturbance levels indicated by the conservative analysis presented above, any further increase in cumulative duration of speech disturbance is of serious and immediate concern. The Supplemental Aircraft Noise Technical Report's reliance on analysis using a time above 84 dBA outdoor noise level clearly understates the existing and future aircraft noise disturbance at Lennox School District facilities.

When speech interference occurs in the classroom, students suffer a loss of learning time. Other possible outcomes include students failing to understand important information from the teacher, loss of concentration during study, or interference with standardized testing. (See Part One, Section 2b., supra.) The predicted increase in the duration of speech interference in Lennox School District classrooms gives rise to serious noise impacts that do not receive adequate attention in the SEIS/EIR.

Instructional learning also suffers from speech interference that occurs outside the classroom. Schools are required to provide 200 minutes of Physical Education to children for every two-week period. Physical Education does comprise 'actual learning' which is interrupted at an even greater frequency and intensity than in the classroom. In addition, schools are faced with safety issues when children cannot hear teachers over aircraft noise during Physical Education activities.

Response:

Comment noted. The commenter misinterprets WHO's classroom guidelines as 35 dBA. The WHO guideline is 35 Leq dBA, which is an average for the 8 hour school period. The noise levels have been normalized for the school hours of 8:00 a.m. to 4:00 p.m. The following metrics were assessed and based on windows closed. 55 Interior dBA, 65 Interior dBA and 35 Leq(h) based on ANSI standards

that are comparable to WHO standards. Please see Section 6.2.1 Threshold of Significance of Appendix S-C1, Supplemental Aircraft Noise Technical Report of the Supplement to the Draft EIS/EIR. The commentor misinterprets his reference to the FAA Land Use Noise Compatibility Guidelines. As stated in Sec. A150.101 Noise contours and land usages Part 150 Airport Noise Compatibility Planning, where the community determines that residential or school uses must be allowed, measures to achieve outdoor to indoor Noise Level Reduction (NLR) of at least 25 dB and 30 dB should be incorporated into building codes and be considered for individual approvals. However, use of the NLR criteria will not limit outdoor noise problems. Please see Response to Comment AL00017-24 regarding references to the 1973 EPA Report. The Aircraft Time Above 75 decibels in Table S17, Regular and Special Grid Point Assessment -Aircraft Time in Minutes above 75 dBA, Comparison of Build Alternatives to 1996 Baseline, Year 2000 conditions, and 2015 No Action/No Project Alternative of Appendix S-C1, of the Supplement to the Draft EIS/EIR is based over a 24-hour period, not over an 8-hour school day. Thus the total time above 75 dB during school hours would be less. Additionally, this table does not incorporate the outdoor to indoor reduction of noise due to building construction. Please see Table S31, Average Daily Minutes Above Threshold, Average Number of Daily Events and Average Event Duration (in Seconds) Above 55 Interior dBA Speech Interference Levels During the Average School Day (8:00 a.m. - 4:00 p.m.), Table S32, Average Daily Minutes Above Threshold, of 65 dBA Interior Speech Communication Levels During the Average School Day (8:00 a.m. - 4:00 p.m.), and Table S33, Hourly Equivalent Noise Level at LAX Area Schools With Exceedance of ANSI 35 Leq(h) Thresholds During the Average School Day (8:00 a.m. - 4:00 p.m.) of Appendix S-C1 of the Supplement to the Draft EIS/EIR. Please see the following portions: Appendix S-C, Supplemental Aircraft Noise Technical Report and Appendix S-1, Supplemental Land Use Technical Report of the Supplement to the Draft EIS/EIR regarding extensive evaluation of single-event noise impacts on school disruption. Additionally, please see Subtopical Response TR-LU-3.14 regarding Existing and Proposed ANMP Program Related to Schools.

SAL00018-28

Comment:

d. The main body of the SEIS/EIR should consider significantly increased cumulative duration to excessive noise levels as a significant noise impact.

The Supplemental Aircraft Noise Technical Report introduces three thresholds of significance for single event impacts upon classrooms (55 dBA Lmax, 65 dBA Lmax and 35 dBA Leq (1 hour)). It states, "Each school listed on the tables may, for CEQA purposes, be considered single event impacted if its noise level exceeds any of the three thresholds of significance..." (SEIS/EIR, Supplemental Aircraft Noise Technical Report, Section 6.2.2, p. 150.) The main body of the SEIS/EIR, however, appears to only consider new exposure to levels above these thresholds (as opposed to all levels in excess of these thresholds) as the threshold of significance. This is in clear contrast to the pronouncements in the Supplemental Aircraft Noise Technical Report. No justification has been provided in the SEIS/EIR for its failure to acknowledge these impacts.

This can be illustrated by the example of Felton Elementary School. According to the Supplemental Aircraft Noise Technical Report, the classrooms at this school are exposed to instantaneous indoor noise levels exceeding 55 dBA for a cumulative duration of 2.4 minutes per day based upon the 1996 baseline. Under Alternative D, in 2015, this cumulative duration would increase to 6.8 minutes per day. This is a 283% increase in cumulative daily exposure to classroom noise levels above 55 dBA, yet the main body of the SEIS/EIR, which uses new exposure to any event louder than 55 dBA levels as the threshold of impact for single events, fails to acknowledge a noise impact at this school.

Out of the six Lennox School District schools considered in the SEIS/EIR, the report only identifies single event noise impact to two schools. These impacted schools are Lennox Middle School (new exposure to an Leq (1 hour) level above 35 dBA under Alternative B) and Moffett Elementary (new exposure to maximum classroom noise levels above 55 dBA under Alternative A and new exposure to an Leq (1 hour) level above 35 dBA under Alternative B).

It should be noted, however, that the remaining four Lennox School District schools considered in the SEIS/EIR - Buford Elementary School, Felton Elementary School, Jefferson Elementary School and Whelan Elementary School - are all already above at least one of the report's three thresholds under the 1996 baseline. Felton Elementary School is above all three thresholds at 1996 baseline levels. Given

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the existing (1996) high aircraft noise exposure at these schools, any increase in cumulative duration of speech disturbance is considered troubling and use of the newly exposed requirement leads to a failure to consider such impact.

Given the substantial amount of existing speech disturbance, any increase in cumulative duration of speech disturbance is considered troubling and again, use of the newly exposed requirement leads to an understatement of the noise impact associated with all of the project alternatives considered.

Response:

Comment noted. Please see Appendix S-C1, Supplemental Aircraft Noise Technical Report of the Supplement to the Draft EIS/EIR for a listing of tables that include Alternative D impacts. The commentator is correct in identifying that Lennox Middle School will be newly exposed to high single event noise levels above 35 dBA Leq(h) in Alternative B. However, the commentator is partially correct in identifying that Moffett Elementary School will only be newly exposed to high single event noise levels above 55 dB Lmax in Alternative A. Under Alternative B, Moffett Elementary School will be newly exposed to high single event noise levels above 35 dBA Leq(h), as well as, single event noise levels above 55 dB Lmax in Alternative A. Please see Table S4.2-10, Alternative A Listing of Schools Newly Exposed to High Single Event Noise Levels and Table S4.2-14, Alternative B Listing of Schools Newly Exposed to High Single Event Noise Levels, of Section 4.2, Land Use of the Supplement to the Draft EIS/EIR. Schools significantly impacted by single event noise impacts will receive sound insulation to reduce interior noise levels to the applicable threshold noise level, unless the school is subject to an existing aviation easement. The purpose of CEQA is to address potential impacts of a proposed project, not pre-existing environmental conditions that are already identified. Schools that are already exposed to classroom disruption under the defined thresholds for the 1996 Baseline and Year 2000 conditions are identified in Table S9, Listing of Schools Exposed to High Single Event Noise Levels of S-1, Supplemental Land Use Technical Report of the Supplement to the Draft EIS/EIR. For more information on thresholds of significance please see Section 4.1.4.1.1, of Section 4.1, Noise, of the Supplement to the Draft EIS/EIR and Subtopical Response TR-LU-5.2, regarding thresholds used in the Draft EIS/EIR and Supplement to Draft EIS/EIR to identify significant aircraft noise impacts. Additionally, the commentator is correct in identifying that the average duration of flight event will increase because the average landing overflight above impacted schools will be lower. Please see Section 4.1.6.1.5.4.2, School Disruption, of Section 4.1, Noise of the Supplement to the Draft EIS/EIR.

SAL00018-29

Comment:

5. The Project Alternatives Included in the EIS/EIR Do Not Appear to Satisfy CEQA or NEPA Requirements.

According to Title 14 California Code of Regulations, Chapter 3, Guidelines for Implementation of CEQA:

"An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project." (15 California Code of Regulations § 15126.6(a).)

Significant noise impacts are predicted for Lennox School District schools under each alternative considered, including the "No Action/ No Project" alternative. No alternative has been considered that would avoid or substantially lessen the noise impact upon Lennox schools as required by CEQA.

According to the Council for Environmental Quality, a NEPA analysis:

"...shall inform decision makers and the public of the reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment... [including]... reasonable alternatives not within the jurisdiction of the lead agency."

In this context, a proper NEPA analysis should include at least one alternative whereby a significant noise impact was avoided in Lennox schools by diverting the proposed increased heavy jet traffic to other airports.

Response:

This comment is essentially the same as comment AL00035-37; please refer to Response to Comment AL00035-37.

SAL00018-30

Comment:

6. The Analysis of Temporary Aircraft Noise Impacts Is Inadequate.

The main body of the SEIS/EIR does not appear to provide any analysis of temporary aircraft noise impact on Lennox School District schools, a discussion of how long they might last, or a recommendation for any mitigation measures. As with all significant adverse impacts, these construction impacts must be described and analyzed and mitigation measures presented.

Response:

Please see Responses to Comments AL00034-25, AL00034-27, AL00034-35 and AL00034-38 for a discussion of noise impacts on schools within the Lennox School District and the "Settlement Agreement."

As described on page 26 of Technical Report S-C1, Supplemental Aircraft Noise Technical Report, of the Supplement to the Draft EIS/EIR, temporary aircraft noise impacts associated with the relocation of runway 7R/25L would last approximately one year. A comparison of Figure S5 in the Supplemental Aircraft Noise Technical Report with Figure S1 in Technical Report S-1, Land Use Technical Report, of the Supplement to the Draft EIS/EIR indicates that the majority of areas that would experience temporary aircraft noise impacts are located within the current ANMP boundaries or would be eligible for mitigation under the revised ANMP boundaries (see Topical Response TR-LU-3 for a description of changes to the ANMP that would occur with the approval of the LAX Master Plan). Therefore temporary aircraft noise impacts during construction have been accounted for with appropriate mitigation provided. In addition, schools in the Lennox School District do not qualify for the mitigation measures established in the Supplement to the Draft EIS/EIR, since aviation easements, noise mitigation payments, and other provisions of the "Settlement Agreement" have resolved land use incompatibility and aircraft noise mitigation issues.

SAL00018-31

Comment:

7. Inadequate/Mislabeled Data in Supplemental Aircraft Noise Technical Report.

The Supplemental Aircraft Noise Technical Report, which presents the specific noise calculation results relevant to Lennox School District schools, provides data labeled as 'DNL' in Table S14. It is unclear whether this data is actually CNEL data that has been mislabeled. Since the project thresholds of significance are set in terms of CNEL rather than DNL, providing DNL data prevents the reader from looking at predicted CNEL impacts on specific Lennox School District schools.

Response:

The content of this comment is essentially the same as Comment SAL00017-30; please see Response to Comment SAL00017-30.

SAL00018-32

Comment:

8. Specific Noise Mitigation Measures for Lennox School District Facilities Are Not Identified in the SEIS/EIR.

According to Title 14 California Code of Regulations, Chapter 3, Guidelines for Implementation of CEQA:

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"An EIR shall describe feasible measures which could minimize significant adverse impacts...the discussion of mitigation measures shall distinguish between the measures which are proposed by project proponents to be included in the project and other measures proposed by the lead, responsible or trustee agency or other persons which are not included but the lead agency determines could reasonably be expected to reduce adverse impacts if required as conditions of approving the project. This discussion shall identify mitigation measures for each significant environmental effect identified in the EIR." (14 California Code of Regulations § 15126.4.)

Mitigation measure MM-LU-4, which incorporates noise mitigation measures for schools, is "subject to modification" based upon the results of further study. Details of the proposed 'further study' are not, however, provided for review. The proposed noise mitigation measures (further study excluded, because study alone will not do anything to mitigate the predicted noise impact) are not therefore clearly stated in the report.

Response:

The content of this comment is essentially the same as Comment SAL00017-31; please see Response to Comment SAL00017-31.

SAL00018-33

Comment:

9. The SEIS/EIR's Analysis of the Health Effects of Noise on Students is Flawed.

a. The SEIS/EIR improperly relies on a flawed FICON document.

The SEIS/EIR relies heavily on noise level standards from a document prepared by the Federal Interagency Committee on Noise ("FICON") entitled "Federal Agency Review of Selected Airport Noise Analysis Issues." This document is misrepresented in the report and should not be relied upon. The misrepresentation is to describe this document as a "study detailing the degree of speech understanding at various noise levels..." (SEIS/EIR, Noise, Section 4.1.2.1.2, p. 4-12.)

First, FICON is an interagency task force consisting of representatives from various government agencies. It does not consist of experts on noise or noise impacts on children who have appropriate scientific training and experience to critically evaluate and summarize a scientific body of literature.

Second, there are many individuals on FICON with clear conflicts of interest in assessing the scientific literature. The majority of FICON representatives work for federal agencies that are major producers of noise (e.g., Federal Aviation Administration ("FAA"), the U. S. military, National Aeronautics and Space Administration ("NASA")).

Third, the entire FICON document devotes five pages to the topic of speech communication. No scientific analysis could "detail the degree of speech understanding" in such a limited manner. The uncritical acceptance of the FICON document reflects a serious lack of understanding and knowledge of the scientific literature on the effects of noise on children's learning and speech perception.

Fourth, some important data the FICON document relies upon are outdated and in some cases inaccurate. For example, Table 3.3 in the FICON document which is reprinted from a 30 year old Environmental Protection Agency ("EPA") document ("EPA Report") is widely rejected in the scientific community in its applicability to children's learning. Data from adults listening to a trained speaker conversing in the outdoors were used to develop this Table. It has long been known that children need a larger signal to noise ratio to comprehend speech than an adult, and noise effects in interior environments must take into account sound intensity and reverberation time (time for sound to decay). (American National Standards Institute, "Acoustical performance criteria design requirements and guidelines for schools," ANSI S12.60-2002; World Health Organization, Environmental Health Information, Guidelines for Community Noise, 2000, Exhibit 20; Nelson, P. & Soli, S., "Acoustical barriers to learning: Children at risk in every classroom." Language, Speech, and Hearing Services. 31: 356-361, 2000; Picard, M., & Bradley, J.S., "Revisiting speech interference in classrooms." Audiology, 40: 221-244, 2001) The FICON document and the SEIS/EIR which relies primarily on the FICON document is replete with errors of this sort.

Fifth, the FICON document omits abundant research on airport noise and deficits in reading acquisition. More than 20 studies around the world (Evans, G.W. & Lepore, S.J., "Nonauditory effects of noise on children." *Children's Environments*, 10: 31-51, 1993; Kryter, K.D., "The handbook of hearing and the effects of noise." San Diego, Academic Press, 1994, Exhibit 21; World Health Organization, Environmental Health Information, Guidelines for Community Noise, 2001) including a dose response relationship (Green, K., Pasternack, B. & Shore, R., "Effects of aircraft noise on reading ability of school age children." *Archives of Environmental Health*, 37: 24-31, 1982, Exhibit 22) interventions to reduce noise (Bronzaft, A., "The effect of a noise abatement program on reading ability." *Journal of Environmental Psychology*, 1: 215-222, 1981) and most convincingly, a prospective, longitudinal study (i.e. the same children are compared before and after the opening of a major new airport) (Hygge, S., Evans, G.W., & Bullinger, M., "A prospective study of some effects of aircraft noise on cognitive performance in school children." *Psychological Science*, 13: 469-474, 2002, Exhibit 23), show significant deficits in reading from transportation related noise exposure.

Response:

The content of this comment is essentially the same as Comment SAL00017-32; please see Response to Comment SAL00017-32.

SAL00018-34

Comment:

b. The SEIS/EIR ignores the scientifically confirmed and well-established link between noise exposure and children's learning.

The SEIS/EIR relies heavily on FICON's flawed logic in developing its basic arguments. The SEIS/EIR states that "there is no reliable statistical relationship between the amount of aircraft noise exposure present and the degree of learning difficulty experienced by children at affected schools..." (SEIS/EIR, Noise, Section 4.1.2.1.2, p. 4-11.) First unless the SEIS/EIR consulting team includes individuals trained in statistics and research design methodology, this claim is suspect *prima facie*. Second, because there is very little data (consisting of one airport study (Green, K., Pasternack, B. & Shore, R. "Effects of aircraft noise on reading ability of school age children." *supra*) and one road traffic study (Lukas, J.S., DuPree, R.B. and Swing, J.W. Effects Of Noise On Academic Achievement And Classroom Behavior, *supra*.) to be exact, not zero as stated by FICON and uncritically repeated in the SEIS/EIR) showing a dose-response relationship between noise levels and learning deficits, the report presumes therefore there is no evidence to support a link between noise exposure and learning difficulties. This is patently false.

There are multiple sources of evidence to demonstrate a relationship between airport noise exposure and significant deficits in children's learning. Many studies show that aircraft noise is significantly related to deficits in reading acquisition (see reviews in Evans, G.W. & Lepore, S.J., "Nonauditory effects of noise on children." *Children's Environments*, 10: 31-51, 1993, Exhibit 24; Kryter, K.D. "The handbook of hearing and the effects of noise." *supra*; World Health Organization, Guidelines, 2001, *supra*.) Not one of these studies is cited in the FICON document or the SEIS/EIR. This is a glaring omission in an SEIS/EIR that is mandated by state and federal law to consider potential health and welfare costs and benefits of a proposed project. The focus on speech and communication should be at least matched by an analysis of the noise and reading acquisition literature.

In contrast to the FICON document, the SEIS/EIR briefly notes a more recent American National Standards Institute ("ANSI") classroom standard criterion established in "Acoustical Performance Criteria, Design Requirements, and Guidelines for Schools," *supra*. (hereinafter referred to as "ANSI Report"). This document recommends lower levels of acceptable noise intensity in classrooms than FICON. The SEIS/EIR omits discussion of the World Health Organization ("WHO") noise criterion document, "Adverse Health Effects of Noise," Section 3, April 2001, (hereinafter referred to as the "WHO Report"), which predates the ANSI study by a few years. The WHO and ANSI standards converge on 35 dBA for an interior noise standard for elementary school classrooms. What is particularly important to understand is that unlike the FICON document, the ANSI and WHO reports were developed by scientists knowledgeable about noise and its human impacts. These reports are much more detailed and provide a thorough discussion and analysis of the evidence. In the case of the WHO Report, it represents a consensus statement of leading noise researchers in the world on the current level of knowledge about noise and its impacts and provides recommendations of acceptable

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noise standards to protect the public. Unlike the FICON document, the WHO and ANSI reports were also widely distributed to scientists in draft form for critical feedback, and then went through multiple iterations of revisions. There was substantially scientific peer review of the WHO and ANSI reports. This did not occur for the FICON document.

Response:

The content of this comment is essentially the same as Comment SAL00017-33; please see Response to Comment SAL00017-33.

SAL00018-35

Comment:

c. The SEIS/EIR entirely neglects the substantiated link between noise and other adverse learning and health effects on children.

The SEIS/EIR also does not consider evidence of other adverse learning and health effects on children chronically exposed to aircraft noise. These are widely available in the scientific literature. Children chronically exposed to noise suffer from motivational deficits. They persist less in achievement related contexts. Both laboratory (Glass, D.C. "Behavior patterns, stress, and coronary heart disease." Hillsdale, NJ: Erlbaum, 1977) and field studies of noise (Bullinger, M., Hygge, S., Evans, G.W., Meis, M. and von Mackensen, S., "The Psychological Cost of Aircraft Noise for Children," *supra*; Evans, G.W., Hygge, S. & Bullinger, M., "Chronic noise and psychological stress." *Psychological Science*, 6: 333-338, 1995, Exhibit 25) show that children are less likely to continue efforts in problem solving if they have been exposed to uncontrollable noise. These motivational deficiencies are believed to be caused by the uncontrollable nature of ambient noise exposure.

Constant exposure to a noxious, uncontrollable stressor like noise produces learned helplessness (Peterson, C., Maier, S. & Seligman, M.E.P., "Learned helplessness." NY: Oxford University Press, 1993). Individuals learn that regardless of their efforts to cope with an adverse environmental condition, they cannot do anything about it. The outcomes of their behaviors are noncontingent on their behaviors. It is worth noting that the most common way learned helplessness is produced in human laboratory studies, is to expose individuals to uncontrollable noise. There is very strong evidence from human experiments that exposure to uncontrollable noise can produce significant decrements in task persistence. Field studies with children indicate parallel trends from chronic exposure to aircraft noise (See for reviews Cohen, S., "Aftereffects of stress on human performance and social behavior: A review of research and theory." *Psychological Bulletin*, 88: 82-108, 1980, Exhibit 26; Evans, G.W., "Environmental stress and health." In A. Baum, T. Revenson & J.E. Singer (Eds.), *Handbook of Health Psychology*. Mahwah, NJ: Erlbaum, 2001, Exhibit 27; Glass, D.C., & Singer, J.E., "Urban stress: experiments on noise and social stressors." NY: Academic Press, 1972; Peterson, C., Maier, S. & Seligman, M.E.P. "Learned helplessness.", *supra*.) The effect of learned helplessness is compounded for Lennox School District students because learning does not only occur in the classroom. These children also learn at home (i.e. reading and homework) with chronic exposure to aircraft noise.

Additionally, there are several studies documenting links between chronic noise exposure in children and elevated blood pressure. There are no dose response data, but several studies with different research designs (cross-sectional, intervention, longitudinal) show that airport noise exposure is associated with higher blood pressure in children. (See for reviews Evans, G.W. "Environmental stress and health." *supra*.; Ising, H. Babisch, W., & Kruppa, B., "Acute and chronic noise stress as cardiovascular risk factors." *Noise and Health*, 4: 37-48, 1999; World Health Organization, *Environmental Health Information, Guidelines for Community Noise*, 2001, *supra*.) A smaller number of studies also find evidence of elevated stress hormones from exposure to airport noise (Evans, G.W., Bullinger, M. and Hygge, S., "Chronic Noise Exposure and Physiological Response: A Prospective Study of Children Living Under Environmental Stress." *Psychological Science*, Vol.9, No.1, January 1998, Exhibit 28; Ising, H., et al. "Acute and chronic noise stress as cardiovascular risk factors.", *supra*.) It is well know that children with higher blood pressure will tend to have higher blood pressure as adults.

Response:

Please see Response to Comment AL00017-52. The types of noise-related health effects identified in the above studies are consistent with the information presented in the Draft EIS/EIR and Technical Report 14b. The studies, however, do not provide any scientific evidence or other basis for determining

the nature, extent, or significance of noise-related health effects due to any of the Master Plan alternatives. However, as explained in Response to Comment AL00035-36, the Supplement to the Draft EIS/EIR addressed the effects of single event or cumulative aircraft noise relative to school disruption associated with the No Action/No Project Alternative and all four build alternatives in Section 4.1, Noise, and Section 4.2, Land Use, with supporting technical data and analyses provided in Appendix S-C1 and Technical Report S-1. Mitigation is provided under Mitigation Measures MM-LU-3 and MM-LU-4 in the form of study of aircraft noise levels that result in classroom disruption and sound insulation for schools determined by the study or interim noise measurements to be significantly impacted. Schools in the Lennox School District are subject to the aviation easements, as well as prior noise mitigation payments, and so are not eligible for further mitigation.

SAL00018-36

Comment:

10. The SEIS/EIR's Proposed Noise Study is Inadequate.

a. LAWA may not postpone its proposed noise study absent a commitment by LAWA to mitigate.

The California Environmental Quality Act requires that, whenever feasible, all impacts must be mitigated for any project that is carried out by or approved by a public agency. California Public Resources Code §§ 21002, 21002.1(b). Thus, significant effects on the environment must be either eliminated or substantially minimized where feasible. (*Berkeley Keep Jets Over the Bay Committee v. Board of Port Commissioners* (2001) 91 Cal.App.4th 1344, 1355.)

According to the SEIS/EIR, LAWA will initiate a study of the relationship between aircraft noise levels and the ability of children to learn. (SEIS/EIR, Land Use, Section 4.2, p. 4-210.) Based upon this study, LAWA will set a new threshold of significance for classroom disruption. (Id.)

Nonetheless, the SEIS/EIR is vague, inconclusive and inconsistent with respect to actual mitigation. The SEIS/EIR makes no clear statement or commitment to mitigate the impacts even after establishing the new threshold of significance discussed above.

According to California law, LAWA must make a binding "commitment" to achieve a desired level of mitigation. (*Sacramento Old City Association v. City Council of Sacramento* (1991) 229 Cal.App.3d 1011, 1028.) One manner in doing so is to effectuate "specific performance criteria articulated at the time of project approval." (Id. at 1029.) Without either a binding commitment or a performance standard, the CEQA analysis is flawed.

For example, the SEIS/EIR states that "any schools found to exceed a newly established threshold of significance for classroom disruption shall be incorporated into the ANMP administered by LAWA." (SEIS/EIR, Land Use, Section 4.2, p. 4-210.) According to the SEIS/EIR, the ANMP performance standard is as high as 45 CNEL. (SEIS/EIR, Land Use, Section 4.2, p. 4-198.) Since the new threshold of significance will in all likelihood be lower than 45 CNEL, reliance on the ANMP performance standard would render the new threshold immaterial for mitigation purposes.

Also, conflicting language in the SEIS/EIR creates ambiguity as to whether LAWA will provide substantial mitigation. The SEIS/EIR states that mitigation measures would "mitigate schools that are impacted by significant single event levels through further study of the relationship between the learning and aircraft noise exposure levels, and the subsequent sound insulation of schools where impacts are shown to be significant." (SEIS/EIR, Noise, Section 4.1, p. 4-80.) The Supplemental Aircraft Noise Technical Report, however, hedges by associating eligibility for mitigation with the CNEL levels in the Settlement Agreement. (Section 6.2.3, p. 154.) Additionally, it states that "the potential for additions to the sound insulation program for schools will be revisited as part of LAWA's continuing environmental management responsibilities." (Id.)

The SEIS/EIR does not state whether LAWA will mitigate to levels below significance (i.e. below the new threshold of significance). Nor does the SEIS/EIR provide a "standard of performance" for noise mitigation. It also does not clarify whether this mitigation will occur in schools it believes are otherwise "compatible" under Title 21. (See, e.g., SEIS/EIR, Environmental Justice, Section 4.4.3.5.1.2, p. 4-329.)

3. Comments and Responses

Although the SEIS/EIR acknowledges the impact of aircraft noise on children's learning, it does not commit to mitigation. The SEIS/EIR's inconclusive approach circumvents the mitigation analysis called for by CEQA.

Response:

The content of this comment is essentially the same as Comment SAL00017-35; please see Response to Comment SAL00017-35.

SAL00018-37

Comment:

b. A deferred noise analysis is inappropriate.

Possible impacts must be studied as early as possible to avoid deferment of formulation of mitigation measures. (See, *Sundstrom v. County of Mendocino* (1988) 202 Cal. App. 3d 296, 307.) In general, "an environmental assessment, including a statement of the mitigation measures, may not be deferred until a future study or project." (*Rio Vista Farm Bureau Center v. County of Solano* (1992) 5 Cal.App.4th 351.)

There is substantial evidence currently before LAWA that significant impacts of aircraft noise on children's learning will occur. Despite this, LAWA is deferring the assessment of this impact. CEQA requires environmental review at the earliest feasible stage in the planning process. California Public Resources Code Section 21003.1; *Sundstrom v. County of Mendocino*, 202 Cal. App. 3d 296, 307.

In this case, there is no justifiable reason for delaying the study or not initiating the study at an earlier date. In September of 2001, in response to the Original EIS/EIR, the Lennox School District analyzed an abundance of studies and academic research regarding the relationship between aircraft noise and children's learning, 'learned helplessness' and high blood pressure. LAWA does not present a satisfactory reason for its failure to conduct or initiate its proposed study at that time, nearly two years prior to release of the Supplement, or any time since then. Thus, the SEIS/EIR fails in its obligation to conduct the study at the earliest feasible stage in the process.

Also, as a result, the SEIS/EIR fails to meet the requirement of "completeness and a good faith effort at full disclosure." (*Berkeley Keep Jets Over the Bay Committee v. Board of Port Commissioners* (2001) 91 Cal.App.4th 1344, 1355.)

Response:

The content of this comment is essentially the same as Comment SAL00017-36; please see Response to Comment SAL00017-36.

SAL00018-38

Comment:

c. Failure to conduct a study prior to publishing the SEIS/EIR is against public policy.

The oversight in failing to conduct a noise study in and of itself may seem inconsequential, however, in face of overarching public policy considerations, it is significant. Public policy dictates that, "in the absence of overriding circumstances, the CEQA process demands that mitigation measures be timely set forth, that environmental information be complete and relevant, and that environmental decisions be made in an accountable arena." (*Gentry v. City of Murrieta* (1995) 36 Cal.App.4th 1359, 1393-1394.) Otherwise, the process diminishes the influence of decisionmaking in CEQA by not allowing the public to review the environmental impacts and provide comments to the lead agency. "Public and agency review" has been called the "strongest assurance of the adequacy of the EIR. [Citations]" (*Sundstrom v. County of Mendocino* (1988) 202 Cal. App. 3d 296, 308.) Absent this public review, LAWA is not accountable to mitigation measures for a significant impact caused by aircraft noise on children's learning.

Moreover, CEQA's very purpose "is to inform the public and its responsible officials of the environmental consequences of their decisions before they are made. Thus, the EIR 'protects not only

the environment but also informed self-government.[Citations.]" (Berkeley Keep Jets Over the Bay Committee v. Board of Port Commissioners (2001) 91 Cal.App.4th 1344, 1354.) The lack of early disclosure and public review completely disregards and undermines the CEQA process.

Response:

The content of this comment is essentially the same as Comment SAL00017-37; please see Response to Comment SAL00017-37

SAL00018-39

Comment:

d. The proposed noise study must meet stringent scientific standards to be valid.

LAWA proposes to commission a study to determine a dose-response relationship between aircraft noise exposure and learning deficits in children. (SEIS/EIR, Land Use, Section 4.2, p. 4-210.) This is a worthy scientific endeavor that will entail a large, complex, and lengthy process that will cost an enormous sum of money. The proposed study will require considerable expertise, experience, and knowledge in formulating, conducting, analyzing and interpreting complex data. As currently described in the SEIS/EIR, it is impossible to evaluate the potential merits of the proposed study because major elements of the most basic scientific information are not presented about the study.

No scientific research proposal can be evaluated for its potential merit without a careful, even handed and critical review of the existing literature bearing on the topic. The current document provides an incomplete, outdated, and highly biased overview of the literature. It relies too heavily on one summary review (FICON). Furthermore no conceptual arguments are developed linking the literature overview with the proposed study. In scientific research, investigators must build a conceptual and methodological rationale for any proposed study. The current document does not do this.

The SEIS/EIR needs to include a statistical power analysis to estimate the number of participants to be included in the proposed study. Standard scientific review criteria for empirical research proposals call for statistical estimates of effect sizes from existing literature and their incorporation into research proposals. This power analysis would need to address the overall sample size for establishing a dose response function between noise and each learning outcome of interest. Furthermore, critical subsample power estimates would need to be incorporated such as ESL and non-ESL children, children suffering permanent and temporary hearing loss (a very common occurrence among elementary school children because of ear infections) and grade levels given likely age differences in susceptibility to adverse noise impacts on reading acquisition as well as speech perception. For example, according to ANSI:

"Limitations in vocabulary and in the ability to 'fill in the blanks' when partial communication occurs in difficult listening situations have been shown to reduce intelligibility for children with limited English Proficiency, again despite normal intelligibility in quiet environments. These children may require 2 to 5 dB more favorable signal-to-noise ratios in difficult listening situations to achieve the same level of intelligibility as children with normal English proficiency. (Citations omitted.) (ANSI, "Acoustical Performance Criteria, Design Requirements, and Guidelines for Schools.", supra.)

This is of particular significance to Lennox School District due to its having a student body consisting of 71.2% "English Learner" students. (See Part One, Section 2a., supra.) In addition, ANSI estimates that hearing impairments caused by ear infections are,

"estimated incidence as high as 25% to 30% among kindergarten and first grade children..... Signal to noise ratio improvements of 3 dB to 5 dB together with increases in absolute speech sound levels of 10 dB to 30 dB are necessary for children with these impairments to achieve the same level of speech intelligibility in classrooms with high background noise." (ANSI, "Acoustical Performance Criteria, Design Requirements, and Guidelines for Schools.", supra.)

The research design of the proposed study would also need to address in detail how duration of exposure (e.g., months in residence) and home noise exposure would be incorporated into a study of schools varying in aircraft noise exposure.

3. Comments and Responses

Given a thorough statistical power analysis is needed to ensure that the appropriate number of participants are included overall and in critical subgroups in order to provide the necessary sensitivity to detect potential adverse effects, a thorough sampling plan also needs to be developed. The following issues must be addressed in the SEIS/EIR with respect to the proposed study: How and where will participants be sampled and what special sampling techniques will be used to ensure adequate representation of critical subgroups (e.g., ESL)? Will children with temporary or permanent hearing loss be included in the study and how will these classifications be determined? Will data be collected in one or multiple school districts and if the latter, how will differences in reading curricula be handled? Will data be collected only once, yielding a cross-sectional study or will a panel design be developed to monitor children's learning trajectories over time? If the latter research design is incorporated, at what ages would children be monitored and how often would data be collected? If a longitudinal design is incorporated, how will attrition be dealt with both in the research design and in data analysis?

No information is provided in the SEIS/EIR about the manner in which the proposed study would be conducted and what measures of learning would be incorporated. Is the primary focus on chronic or acute noise? This has dramatic implications for interpretation of the data and bears significantly on procedural conduct of the study itself. For example, reliance on archival records of standardized tests confounds chronic and acute noise exposure since the tests are taken during airport operational periods.

Outcome measures (e.g., reading acquisition, speech perception) need to be described, including at a minimum their basic psychometric properties (e.g., reliability, validity) and their appropriateness for use in a culturally diverse, multi-language sample.

How exactly will noise exposure be estimated and what metrics will be used? The SEIS/EIR glosses over critical distinctions in noise metrics such as L_{max}, L_{Leq}, CNEL, and time above peaks. The authors of the proposed study need to say what metric(s) they would use and provide a rationale, discussing in depth the strengths and weaknesses of each alternative. How will reverberation time be monitored and incorporated into data analyses and interpretation? In interior settings, reverberation time influences speech intelligibility. The very difficult issue of exposure estimation also requires discussion. Where and when will noise exposure be measured? Children learn in the classroom, on the playground, and at home. A narrow focus on school noise level changes ignores the potential influence of changes in home noise levels caused by expanded airport operation.

There is no data analytic plan included in the study proposal detailing precisely how the results would be analyzed. Such a plan at a minimum would describe what statistical techniques would be used and how controls for factors with known covariation with noise and learning would be dealt with in the analyses. For example, how will the proposed study statistically or methodologically handle the comingling of income, ethnicity, noise exposure, and learning?

It is basic scientific practice to address the kinds of issues briefly summarized above in research proposals to obtain funding to conduct research. Scientific review panels for the National Science Foundation or the National Institutes of Health routinely consider and evaluate the scientific merits of proposals using such criteria. This is widely understood and supported by scientists. Major foundations that support scientific research subscribe to similar scientific review criteria as well. Written proposals that address the types of issues and questions raised above are typical, routine practice engaged in by scientists prior to conducting research.

Because the SEIS/EIR ties the proposed study to some critical policy decisions, it is critical to provide some additional material to the document under review. In particular, regulatory bodies and the public need to know more about how the results would be used to determine mitigation measures. For example, what indices of deficit would be considered significant and trigger mitigation? If reading acquisition is delayed on average by six months and for even longer for ESL children, would LAWA consider this sufficient to incorporate mitigation? What percentage of loss in speech perception is considered sufficient to warrant mitigation? Parallel questions need to be discussed for all health and welfare outcomes judged pertinent to the study design.

There is precedent in California and federal environmental regulatory procedures to incorporate a margin of safety in standards to protect vulnerable subgroups of the population. For example air pollution standards both in California and at the federal-level mandate protection for asthmatic children. (See Cal/EPA, Staff Report: Public Hearing to Consider Amendments to the Ambient Air quality Standards for Particulate Matter and Sulfates. Air Resources Board and Office of Environmental Health

Hazard Assessment, May 2002, <http://www.arb.ca.gov/research/aaqs/std-rs/pm-final/pm-final.htm>, see also, USEPA, Review of the National Ambient Air Quality Standards for Particulate Matter: Policy Assessment of Scientific and Technical Information. Office of Air Quality Planning and Standards, June 2001, <http://www.epa.gov/ttn/oarpg/tl/reports/pmstdrft.pdf>.) How will determinations be made of which groups of children are vulnerable and in need of additional protection from elevated noise levels at school and in their homes? What margin of safety will be incorporated to protect these vulnerable subgroups, once determined?

Decisions about criteria for mitigation and protection of vulnerable subgroups in the population are both scientific and political. Since one of the major reasons for the proposed study in the SEIS/EIR is to determine mitigation procedures, government bodies with regulatory responsibility, as well as the public, must have the opportunity for discussion and review of the criteria that will be used to determine such critical policy decisions. The present document is silent on these issues therefore precluding regulatory and public scrutiny as mandated in CEQA and NEPA.

Response:

The content of this comment is essentially the same as Comment SAL00017-38; please see Response to Comment SAL00017-38.

SAL00018-40

Comment:

PART FOUR

THE EMISSIONS, MODELING, MITIGATION MEASURES AND HEALTH IMPACT ANALYSIS OF THE SEIS/EIR IS INADEQUATE

CEQA requires the EIS/EIR to "identify and focus on" significant environmental effects of proposed projects. (14 California Code of Regulations § 15126.2.) "Direct and indirect significant effects of the project on the environment shall be clearly identified and described, giving due consideration to both the short-term and long-term effects." (Id.) The EIS/EIR also must describe "feasible measures which could minimize significant adverse impacts." (14 California Code of Regulations § 15126.4.) The EIS/EIR fails to adequately do so.

1. The Emissions Estimations in the SKIS/EIR Violate CEQA.

The emissions estimates in the SEIS/EIR for jet aircraft and storage and handling of fuels may be underestimated. Correction of this underestimation will result in increased pollutant concentrations that may result in exceedances of the National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) as well as increases in off-site cancer risks and noncancer hazard indices for off-site populations.

Response:

Please see Topical Response TR-AQ-2 regarding toxic air pollutants and Topical Response TR-AQ-3 regarding air pollution increase

SAL00018-41

Comment:

a. Jet Aircraft Emission Estimates May Be Underestimated As the Methodology Used to Estimate Particulate Emissions from Jet Aircraft Is Unclear and May Be Flawed.

To estimate particulate matter less than 10 microns (PM10) emission rates from aircraft for the EIS/EIR, Los Angeles World Airports (LAWA) used information from three sources: (1) fourth edition of AP-42; (2) Whitefield and Hagen Study; and (3) the 1994 California FIP Docket. (Original EIS/EIR, Technical Report 4, Attachment H.) The emission rate data from these studies are combined; the combined data are plotted for each of the four aircraft operating modes. Based on these plots, a relationship between fuel usage and PM10 emission rate is interpolated.

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A review of the data shows the first and second studies to be in approximate agreement; the FIP Docket provides an alternate data set. As there is approximately an order of magnitude more FIP Docket data, the data from this study dominate the results. If the FIP Docket data were removed from the combined data set, it is clear that the relationship between fuel usage and the PM10 emission rates would change and the estimated total PM10 emissions from aircraft would also change.

Based on the information presented in the EIS/EIR, it is unclear how the FIP Docket data are used in the PM10 emission rate analysis. It appears that a relationship between PM10 emissions and fuel usage is derived from a graphical representation of a relationship between particulate mass concentration and smoke number (i.e., from a plot of an equation relating PM concentration and smoke number).

There are two issues with this derivation. First, it is not clear how a relationship between fuel usage and PM10 emissions is derived from a plot of particulate mass concentration versus smoke number. Second, because the particulate mass concentration versus smoke number data appear to be simply a plot of some unknown equation, the number of data points taken from this graph seems to be arbitrary. Since the number of points taken from this graph is approximately 10 times greater than the number of data points available from the other two studies, it appears that LAWA may have arbitrarily weighted the combined data set heavily towards the FIP Docket data and away from the AP-42 and Whitefield and Hagen data.

Aircraft emissions of PM10 are potentially underestimated. An increase in PM10 emissions will result in an increase in off-site concentrations of PM10. As noted below, the potential noncancer health impacts associated with these PM10 emissions have not been quantified in the EIS/EIR. Inclusion of additional PM emissions may result in exceedance of the noncancer hazard index for off-site populations.

At a minimum, LAWA needs to clarify the approach used to develop the FIP Docket data; conduct a sensitivity analysis to determine the importance of the FIP Docket data to their results; and, if necessary, remove arbitrary weighing of FIP Docket data over other data sets, correct the PM10 emission rates, and remodel off-site PM10 concentrations.

Response:

The content of this comment is identical to comment SAL00017-40; please refer to Response to Comment SAL00017-40.

SAL00018-42

Comment:

b. Potentially significant evaporative emissions of toxic air contaminants resulting from the storage and handling of organic liquids may not have been quantified.

LAWA does not include volatile organic compound (VOC) emissions from organic liquid storage and transfer in their Industrial Source Complex Short Term 3 (ISCST3) modeling of toxic air pollutant emissions. They assume that: (1) storage emissions are almost exclusively from Jet A fuel; (2) emissions of Jet A vapor do not contain significant quantities of the toxic air pollutants modeled; and (3) limited future operations of gasoline fueling would include vapor recovery and therefore result in minimal emissions of air toxics.

There are three problems with this exclusion of VOC emissions. First, diesel fuel and gasoline are used at the airport. LAWA should provide data to show that storage and resulting emissions of these fuels are insignificant. Second, LAWA should provide justification for the assumption of no toxic air pollutants in Jet A vapor. Third, LAWA should provide some screening calculations to validate their assumption that gasoline fueling would result in insignificant emissions of air toxics (especially benzene).

Toxic air emissions from storage and handling of organic liquids may have been underestimated. An increase in toxic air emissions will result in increases in off-site cancer risks and noncancer hazard indices for off-site populations.

At a minimum LAWA needs to quantitatively demonstrate that emissions of toxics from storage and handling of diesel fuel and gasoline are insignificant; and provide a speciated chemical list for Jet A fuel.

Response:

The content of this comment is essentially the same as Comment SAL00017-41; please refer to Response to Comment SAL00017-41.

SAL00018-43

Comment:

2. The Modeling Approach of the EIS/EIR Violates CEQA.

The modeling approach presented in the EIS/EIR has several significant flaws that result in underestimation of both criteria and toxic pollutants impacts on nearby receptors. The analysis of the emission impacts is inadequate, the methodology used to estimate plume rise is flawed, the assumption of no downwash is not justified, the meteorological data used in the modeling is inadequate, the conversion of sulfur dioxide to sulfate is not addressed, and finally, secondary formation of toxic pollutants and deposition effects are ignored. These flaws result in an underestimate of ambient pollutant concentrations. Correcting these flaws will result in an increase in pollutant concentrations and may result in exceedances of the NAAQS and CAAQS as well as increases in off-site cancer risks and noncancer hazard indices for off-site populations.

Response:

The content of this comment is essentially the same as Comment AL00034-42. Please see Response to Comment AL00034-42.

SAL00018-44

Comment:

a. The extent to which emissions from motor vehicles traveling the I-405 and I-105 interstate highways have been included in the air quality analysis is unclear. Emissions of carbon monoxide, toxic air contaminants, particulate matter, and ozone precursors from these sources may be underestimated. Airborne concentrations of these chemicals at locations downwind from the freeways (e.g., community of Lennox) may be underestimated accordingly.

The I-405 and I-105 interstate highways are major sources of air pollution in the immediate project area. Motor vehicle emissions from these roadways negatively impact air quality on local and regional scales. These roadways produce elevated concentrations of directly-emitted chemicals (including carbon monoxide, benzene, 1,3-butadiene, formaldehyde, and diesel exhaust) at locations immediately downwind from the roadways, and contribute to elevated ozone and secondary particulate matter (i.e., particulate matter formed in the atmosphere - a major source of visibility impairment) concentrations over a broader area. However, it appears that the EIS/EIR analysis neglects to include emissions from motor vehicles traveling on the I-405 and I-105 roadways, except for carbon monoxide emissions from short segments (only) of these roadways which are considered in the analysis of carbon monoxide impacts near traffic intersections.

Exclusion of motor vehicle emissions from the I-405 and I-105 interstate highways would result in underestimation of airborne concentrations of carbon monoxide, benzene, 1,3-butadiene, formaldehyde, diesel exhaust, and other toxic air contaminants at locations downwind from the roadways, e.g., within the community of Lennox. Estimated concentrations of carbon monoxide near roadway intersections and areas downwind of the I-405 and I-105 roadways (e.g., intersections 46 and 107 on Figure 4.3.2-1 from the Original EIS/EIR) would be greater if all carbon monoxide emissions from motor vehicles on the freeways were considered, and may comprise significant air quality impacts at these locations. Estimated cancer and noncancer health risks for schoolchildren and residents located downwind from I-405 and I-105 (e.g., as predicted for Alternative D in Section 4.24 of the SEIS/EIR) would be greater if all pollutant emissions from motor vehicles were considered, and may comprise significant impacts for these people.

LAWA should clarify the extent to which emissions from motor vehicles traveling the I-405 and I-105 interstate highways are or are not included in the air quality and health risk analyses. If pollutant emissions from these major sources are not considered, the emissions, air quality modeling, and human

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health risk analyses should be revised to incorporate these potentially significant sources of pollution or justification should be provided to support their omission from the analysis.

Response:

The Draft EIS/EIR and Supplement to the Draft EIS/EIR address human health and safety in Section 4.24, Human Health and Safety, and air quality in Section 4.6, Air Quality, and traffic in Section 4.3, Surface Transportation. Supporting technical data and analyses are provided in Appendix G and Technical Reports 4, 14a, and 14c of the Draft EIS/EIR and Appendix S-C1 and S-E and Technical Reports S-4, S-9a, and S-9b of the Supplement to the Draft EIS/EIR.

Air quality impacts from project-related traffic from the I-105 and I-405 freeways are included in the CO intersection analysis presented in Section 4.6, Air Quality, of the Draft EIS/EIR and Section 4.6 of the Supplement to the Draft EIS/EIR. Table 4.6-12 of the Draft EIS/EIR and Table S4.6-13 of the Supplement to the Draft EIS/EIR present the air quality impacts at the freeway offramps for the interim and horizon build years for all alternatives.

Direct air quality impacts from I-105 and I-405 thru traffic are not included in the analysis since this traffic is not directly related to the LAX Master Plan project.

SAL00018-45

Comment:

b. The extent to which "sound walls" and other structures have been considered in the dispersion modeling of carbon monoxide and toxic air contaminants is unclear. Airborne concentrations of carbon monoxide and toxic air contaminants at locations where "downwash" and "cavity" effects occur may be underestimated.

Obstacles to air flow such as walls and buildings create localized flow phenomena known as "downwash," "cavity effects," and "eddies," typically on the downwind side of the obstacle, which results in buildup of pollutant concentrations. For example, pollutant concentrations between tall urban buildings may be 2 to 20 times higher than in the surrounding area (United States Department of Energy, 1984). A sound wall built parallel to and downwind from an interstate highway would result in elevated pollutant concentrations both within the roadway and also along the leeward side of the wall (away from the roadway) due to downwash; this effect is illustrated in the figure below. (United States Department of Energy (1984) Atmospheric Science and Power Production, Darryl Randerson, Editor, Technical Information Center, Office of Scientific and Technical Information, DOE/TIC-27601 (DE84005177).)

[See original document.]

It is not clear to what extent that increased pollutant concentrations caused by building-and structure-induced flow effects have been considered in the EIS/EIR analysis. It is noted that building downwash and cavity effects are assumed to be negligible with respect to aircraft emissions because the emissions sources (aircraft) are located within the airport and away from any receptor locations which may be influenced by building effects. (Original EIS/EIR, Technical Report 4, Attachment A, p24.) However, it is unknown if downwash/cavity effects are considered in the dispersion modeling of carbon monoxide and toxic air contaminants, especially those emitted from motor vehicles.

The Original EIS/EIR states that "site geometry and characteristics" are considered in the dispersion modeling of carbon monoxide from roadway intersections. (Original EIS/EIR, Appendix G, p. 28.) It is not stated which, if any, particular roadway geometry features are incorporated into the analysis of any particular intersections. For example, it is unknown whether sound walls or other structures are included in the analysis of roadway intersections near the I-405 interstate highway. The presence of a sound wall or similar structure east of I-405 would cause elevated concentrations of carbon monoxide and other toxic air contaminants emitted by motor vehicles along the leeward side of the structure. We conclude that airborne concentrations of carbon monoxide and toxic air pollutants may be underestimated at locations where walls and buildings produce downwash effects, including the area downwind (east) from I-405.

Response:

Modeling CO impacts at intersections was performed using methods outlined in the U.S. EPA's Guideline for Modeling Carbon Monoxide from Roadway Intersections (EPA-454/R-92-005, November 1992) and the California Department of Transportation's Transportation Project-Level Carbon Monoxide Protocol (CO Protocol), (University of California Davis, December 1997). These methods are approved by FAA, SCAQMD, and U.S. EPA.

The U.S. EPA's approved dispersion model for impacts at roadway intersections and along roadways, CAL3QHC, is not sophisticated enough to include the level of detail the commentor suggests. "Site characteristics and geometry" were incorporated as best as possible and limited by the model itself. However, as with all dispersion modeling, an inherent level of conservatism is built into the model, such to account for protection of human health and property.

Please see Response to Comment AL00034-45 regarding building downwash.

SAL00018-46**Comment:**

c. The methodology used to estimate plume rise from jet aircraft is questionable and requires further justification.

LAWA determines the plume rise of hot exhaust gas from jet aircraft engines based on a heat balance to determine the heat flux and the equivalent exit velocity that would result. (Original EIS/EIR, Technical Report 4, p. 19.) To calculate this exit velocity, they make four critical assumptions. First, the jet engine exhaust gas temperature is fixed and unrelated to the heat flux. Second, as the exhaust gas from the jet engine begins to slow (in the horizontal plane) and begins to move vertically upward as a plume, the diameter of the plume (in the vertical plane) may be estimated by the wingspan of the jet.

Third, the temperature of the plume is equal to the jet engine exhaust gas temperature. As there are no ambient heat sources, this implies that the movement of the exhaust gas is adiabatic, isothermal, and there is no rapid expansion of exhaust gas. Finally, the temperature of ambient air is assumed to be 293 Kelvin (K). Calculated exit velocity, plume temperature, and plume diameter were then input into ISCST3 to determine plume rise.

There are three problems with this approach. First, the temperature of the plume is assumed equal to the temperature of the exhaust gas. Given isothermal movement, this is only true if the total mass per second of air leaving the jet engines equals the mass per second of air moving up in the plume. LAWA should check their calculations to be sure that this is true, otherwise the plume rise calculations may be in error.

Second, the implied assumptions of isothermal movement and slow expansion of exhaust gas are physically unrealistic. It is likely that exhaust gas will expand rapidly when exiting the jet engine and cooler, ambient air will be entrained into exhaust gas as it moves away from the jet engine. Both of these effects will tend to lower the temperature in the plume. LAWA should perform a sensitivity analysis to determine the quantitative influence of these phenomena on the resulting plume rise.

Finally, the temperature of the ambient air should be consistent with the average temperature data used in the ISCST3 model runs. LAWA should average the temperatures in the meteorological data set used in the model runs to determine the correct average ambient temperature.

Plume rise may be overestimated. If so, concentrations of NO₂, PM₁₀, and air toxics resulting from aircraft emissions may be underestimated. Increases in concentrations of these pollutants may result in exceedances of the NAAQS and CAAQS as well as increases in off-site cancer risks and noncancer hazard indices for receptor populations.

At a minimum LAWA needs to check their calculations to ensure conservation of mass; conduct a sensitivity study to determine the quantitative influence of rapid expansion of exhaust gas and entrainment of ambient air on plume temperature; and calculate the plume rise with the correct average ambient temperature.

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Response:

The content of this comment is essentially the same as Comment AL00034-44. Please see Response to Comment AL00034-44.

SAL00018-47

Comment:

d. The assumption that building downwash is negligible requires further justification.

LAWA believes that building downwash will not be significant based on their assumption that the nearest receptor is too far off-site. (Original EIS/EIR, Technical Report 4, p 24.) LAWA should validate this assumption by modeling the most conservative source-receptor geometry, with building downwash included, to ensure this statement is correct. These results should be presented in Technical Report 4.

Off-site impact from airport emissions may be underestimated. If so, concentrations of criteria pollutants and air toxics resulting from airport emissions may be underestimated. Increases in concentrations of these pollutants may result in exceedances of the NAAQS and CAAQS as well as increases in off-site cancer risks and noncancer hazard indices for receptor populations.

LAWA needs to conduct a sensitivity study to show that building downwash effects are negligible.

Response:

The content of this comment is essentially the same as Comment AL00034-45. Please see Response to Comment AL00034-44.

SAL00018-48

Comment:

e. The meteorological data set used may be inadequate relative to EPA and SCAQMD recommendations.

LAWA used the most recent meteorological data collected at LAX. These data consist of hourly surface and upper air data from the LAX meteorological observation station operated by the SCAQMD for the 12-month period beginning March 1, 1996 and ending February 28, 1997.

As recommended by EPA, "five years of representative meteorological data should be used when estimating concentrations with an air quality model. (USEPA, Guideline on Air Quality Models (Revised), Original EIS/EIR Response Exhibit 14. Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711, EPA-450/2-78-027, 1986, August 1995 update.) Consecutive years from the most recent, readily available 5-year period are preferred." SCAQMD recommends the use of the 1981 dataset. Accordingly, LAWA should conduct their air modeling with either the most recent five years of data from the LAX station, selecting the most conservative year results as representative of maximum long-term pollutant concentrations resulting from emissions associated with LAX or use the 1981 dataset. Furthermore, this five-year data set or 1981 dataset should be used to estimate average temperature (plume rise), mixing heights (EDMS), and wind speed (volume source height) used in other calculations and analyses.

Pollutant ambient air concentrations may be underestimated. If so, concentrations of criteria pollutants and air toxics resulting from emissions associated with expansion of LAX may be underestimated. Furthermore, the location of the maximum off-site impacts may also change. Increases in concentrations of these pollutants may result in exceedances of the NAAQS and CAAQS as well as increases in off-site cancer risks and noncancer hazard indices for receptor populations.

At a minimum LAWA needs to (1) conduct a sensitivity study to determine which year of LAX meteorological data is the most conservative or use the SCAQMD designated 1981 year of data; (2) if different from the meteorological data used in their analysis, redo all air modeling with the correct meteorological data; and (3) use the most conservative meteorological data set to estimate meteorological data used in other calculations and analyses.

Response:

The content of this comment is essentially the same as Comment AL00034-46. Please see Response to Comment AL00034-44.

SAL00018-49

Comment:

f. Atmospheric conversion of sulfur dioxide to sulfate may be significant and is not addressed.

LAWA has ignored production of sulfate from sulfur dioxide (SO₂) due to the complexity of sulfate-formation mechanisms. LAWA assumes that all sulfur emitted by sources remains in the atmosphere as SO₂. This assumption is not conservative; the California Ambient Air Quality Standard (CAAQS) for sulfate is more than six times lower than the CAAQS for SO₂ (6.2 parts per billion by volume (ppbv) compared to 40 ppbv).

Formation chemistry for conversion of nitrogen oxides (NO_x) to nitrogen dioxide (NO₂) is equally complex, if not more so. The Tier 2 Ambient Ratio Method (ARM) recommended by USEPA in the Guideline on Air Quality Models for converting total NO_x to NO₂ values may be modified to estimate formation of sulfate from SO₂. (USEPA, Guideline on Air Quality Models, supra.) LAWA could gather the most recent years of data on the annual average SO₂-to-sulfate ratio near LAX and use this data to estimate the formation of sulfate.

The concentration of sulfate in ambient air is underestimated. Increases in concentrations of sulfate may result in an exceedance of the CAAQS for sulfate. As exposure to sulfate causes respiratory irritation, underestimating the ambient sulfate concentration may significantly underestimate the numbers and types of respiratory illnesses that may be observed in nearby populations, particularly young children who may be especially sensitive to respiratory irritants.

At a minimum LAWA needs to develop an approach to model sulfate chemistry and estimate sulfate concentrations.

Response:

The content of this comment is essentially the same as comment AL00034-47; please refer to Response to Comment AL00034-47.

SAL00018-50

Comment:

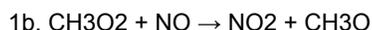
g. Secondary formation of toxic air pollutants may be significant and is not addressed.

LAWA has ignored the production of several toxic air pollutants formed in the atmosphere due to reactions among other pollutants (i.e., formed by secondary reactions). As outlined in the EPA's guidance on Air Dispersion Modeling of Toxic Pollutants in Urban Areas, these pollutants should be included in any air toxic analysis. (USEPA, Draft Air Dispersion Modeling of Toxic Pollutants in Urban Areas - Guidance, Methodology and Example Applications. Emissions, Monitoring and Analysis Division (MD-14), Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711, EPA-454/R-99-021, July 1999, Original EIS/EIR Response Exhibit 13.) The pollutants formed by secondary reactions include formaldehyde, acetaldehyde and acrolein.

For example, formaldehyde may be formed in the atmosphere through photolysis or oxidation of other, directly-emitted hydrocarbon species:

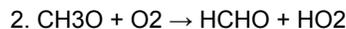


oxidation of methane



photolysis of acetaldehyde

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formation of formaldehyde

An estimate of concentrations based on secondary reactions is needed and should be added to the ISCST3 output. LAWA should use EPA's OZIPR screening model to estimate the secondary formation of these pollutants. (USEPA, Draft Air Dispersion Modeling, *supra*.) Case studies provided in EPA's guidance document show secondary formaldehyde as the major component of total atmospheric formaldehyde (a ratio of 4 to 1 over primary formaldehyde).

If the total ambient formaldehyde concentration attributable to the project were increased by a factor of 5 to account for secondary formation, the contribution from formaldehyde to total absolute cancer and noncancer risks would increase by the roughly the same factor for all years/alternatives. The absolute contributions of formaldehyde to total cancer and noncancer risks in different years/alternatives are not presented in the SEIS/EIR (see comment 4[f]).

The concentrations of formaldehyde, acetaldehyde and acrolein in ambient air are underestimated. Increases in concentrations of these pollutants may result in increases in off-site cancer risks and noncancer hazard indices for receptor populations. At a minimum LAWA needs to model formaldehyde, acetaldehyde and acrolein chemistry.

Response:

The content of this comment is identical to comment SAL00017-47; please refer to Response to Comment SAL00017-47.

SAL00018-51

Comment:

h. The exclusion of deposition effects from the multipath risk analysis is not justified.

LAWA has neglected to include deposition effects and associated multipathway risk analysis based on conclusions presented in the deposition report, included as Attachment Y to Original EIS/EIR Technical Report 4. In this report, LAWA claims that a direct correlation between airport operations and deposition could not be determined.

Nonetheless, LAWA goes on to state, "The limited monitoring duration [less than two weeks] and time of year, while required to meet project schedule requirements, were not optimal for dry deposition monitoring. The limited nature [*italics added*] of this study did not allow for the determination of summertime maximum deposition rates or provide data necessary to perform a mass balance analysis..." (Original EIS/EIR, Technical Report 4, Attachment Y.)

LAWA is stating that the study was too short to make any definitive conclusions and further deposition sampling will be required before the deposition impact of airport emissions on off-site soils can be quantified. In other words, the study is incomplete.

If the study is limited and incomplete, there is no rational reason why LAWA should exclude deposition effects and the associated multipathway risk analysis. Furthermore, the deposition sampling locations selected for this study appear to be outside of the maximum particulate matter plume predicted by LAWA's ISCST3 modeling, further undercutting the already limited nature of this deposition study. Therefore, pending a more complete deposition study, LAWA should include deposition effects and a multipathway risk analysis in the EIS/EIR.

Deposition effects have been improperly excluded from consideration. Soil concentrations of pollutants sorbed to particulate matter have been underestimated. Increases in soil concentrations of these pollutants may result in increases in off-site cancer risks and noncancer hazard indices for receptor populations.

At a minimum LAWA needs to estimate concentrations of pollutants sorbed to particulate matter in soil based on emissions occurring over the duration of the project; and based on these soil concentrations, run a multipathway risk analysis to determine the health impacts of these soil concentrations.

Response:

The content of this comment is identical to comment AL00034-49; please refer to Response to Comment AL00034-49.

SAL00018-52

Comment:

3. The Mitigation Measures Proposed By The SEIS/EIR Violate CEQA.

a. The mitigation measures proposed in the SEIS/EIR have not met all requirements outlined in the SCAQMD CEQA Handbook.

The mitigation measures proposed in the SEIS/EIR have not met all requirements outlined in the SCAQMD CEQA Handbook. Before mitigation measures may be applied to total project emissions they must meet several criteria. The mitigation measures proposed in the SEIS/EIR have not demonstrated compliance with three of these criteria.

Several proposed mitigation measures do not meet the required criteria. Therefore, mitigated emission estimates may be too low. Increases in emissions of mitigated pollutants may result in exceedances of the NAAQS and CAAQS as well as increases in off-site cancer risks and noncancer hazard indices for receptor populations. Furthermore, without mitigation measures, the proposed project under Alternatives A, B, and C will result in exceedances of regulatory thresholds for criteria and/or toxic pollutants. (SEIS/EIR Table 4.24.1-3.)

At a minimum LAWA needs to: (1) develop a matrix showing each mitigation measure and how it meets each of the three missing criteria identified above; and (2) improve documentation of the effectiveness of the selected mitigation measures used to reduce pollutant emissions.

Response:

Please see Response to Comment SAL00017-49 regarding mitigation measures.

SAL00018-53

Comment:

b. Mitigation measures, except those specific to construction activities, should be applied towards the No Action/No Project alternative in addition to Alternatives A, B, C, and D.

Mitigation measures are defined in SEIS/EIR Section 4.6.8, including Table S.4.6-18. With the exception of those measures specific to construction activities, the identified measures may be implemented under the No Action/No Project alternative as well as Alternatives A, B, C, and D. For example, the following mitigation measures identified in Table S.4.6-18 are generally applicable to all alternatives including No Action/No Project:

Airside

Convert GSE to electric power

Clean Vehicle Fleets

Promote commercial vehicles/trucks/vans using terminal areas to install SULEV/ZEV engines

Promote "best-engine" technology for rental cars using on-airport RAC facilities. Consolidate nonrental car shuttles using SULEV/ZEV technology

Energy Conservation

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Cover any parking structures that receive direct sunlight to reduce volatile emissions from vehicle gasoline tanks and install solar panels on these roofs where feasible to supply electricity or hot water

Highways and Roadways

Link ITS with off-airport parking facilities, with ability to direct/divert trips to these facilities

Expand ITS/ATCS, concentrating on I- and I- corridors, extending into South Bay and Westside surface street corridors

Link LAX traffic management system with airport cargo facilities, with ability to reroute cargo trips to/from these facilities

Develop a program to minimize the use of conventional-fueled fleet vehicles during smog alerts

Landside

Contract with commercial landscapers who operate lowest emitting equipment

Parking

Provide free parking with preferential parking locations for ULEV/SULEV/ZEV in all (including employee) LAX lots; provide free charging stations for ZEV; include public outreach

Pay-on-foot (before getting into car) to minimize idle time at parking check out; include public outreach

Implement on-site circulation plan in parking lots

Promote employee rideshare opportunities

Encourage employee telecommuting

Provide video-conference facilities

Transit and Intermodal

Establish network of strategically placed, off-airport intermodal check-in terminals serviced by LAX-dedicated clean-fuel buses; provide low-priced parking to LAX users of off-airport intermodal terminal facilities; include public outreach

As noted in Part Four, Section (g), *infra*, the logical basis for evaluation of project significance under Alternatives A, B, C, or D in a future year (e.g., 2015) is the No Action/No Project alternative in the same future year. For such a comparison, it is appropriate that non-construction mitigation measures be applied towards both the build and no-build alternatives, as it is possible if not likely that these measures will be implemented regardless of which alternative is pursued. Application of non-construction mitigation measures to only the build alternatives, as is currently done, would incorrectly favor the build alternatives over the no-build alternative.

Response:

Please see the Supplement to the Draft EIS/EIR Appendix S-E Section 2.3 for a detailed discussion of the recommended air quality mitigation measures. The proposed air quality mitigation program was developed cognizant of the fact that LAWA already complies with, and will continue to comply with, a myriad of rules and regulations implemented and enforced by federal, state, regional, and local agencies to protect and enhance ambient air quality in the South Coast Air Basin. In particular, due to the long persistence of challenges to attain the ambient air quality standards in the South Coast Air Basin, the rules and regulations promulgated by CARB and SCAQMD are among the most stringent in the U.S. LAWA will continue to comply with all existing applicable air quality regulatory requirements for activities over which it has direct control and will meet in a timely manner all regulatory requirements that become applicable in the future, and the air quality analysis incorporated this ongoing compliance into the air quality analyses for the No Action/No Project Alternative and Alternatives A, B, C, and D.

Some of these rules include measures suggested by the commenter, such as Clean Vehicle Fleets (SCAQMD Rule 1191) and Promote Employee Rideshare Opportunities/Encourage Employee Telecommuting (SCAQMD Rule 2202).

LAWA is committed not only to meet these requirements but also to serve as an example of environmental stewardship by developing and implementing ongoing air quality improvement programs that further reduce the impacts of LAWA operations on local ambient air quality. As part of its continuing commitment to help clean the air and enhance the quality of life for surrounding communities, LAWA has instituted a number of highly effective voluntary air quality programs built on innovative environmental technologies and practices. The air quality analysis incorporated these ongoing air quality improvement programs, which include commitments to reduce impacts from LAWA operations and from construction activities at LAX, into the air quality analyses for the No Action/No Project Alternative and Alternatives A, B, C, and D. LAWA continues its commitment to air quality improvement programs for activities over which it has direct control. The Draft EIS/EIR and the Supplement to the Draft EIS/EIR both properly assumed that mitigation measures specifically identified, adopted, and implemented by FAA and LAWA to reduce or eliminate project-related impacts only apply to the build alternatives. In the absence of a discretionary action by FAA or the City of Los Angeles, such as would occur under the No Action/No Project Alternative, there is no mechanism that would trigger the need to adopt or implement mitigation measures.

All feasible mitigation measures are included in the Final EIS/EIR and have been considered in the preparation of the air quality mitigation plan. As required by Section 15097 of the CEQA Guidelines, the Mitigation Monitoring and Reporting Program for the approved project provides the mechanism to ensure the implementation of mitigation measures.

SAL00018-54

Comment:

4. The Health Risk Analysis of the EIS/EIR Violate CEQA.

The flaws in the health risk analysis conducted for the EIS/EIR result in underestimated acute, cancer, and noncancer health impacts. Estimated cumulative cancer risks to school children are underestimated, cumulative cancer risks and noncancer hazards are incorrectly calculated, the significance threshold for noncancer health effects is too high, potential health impacts associated with exposure to lead are improperly calculated, potential health impact from jet engine particulate emissions are ignored, noncancer health risks to school children are underestimated, and acute health impact are not evaluated. These flaws result in an underestimation of the health impacts to receptors of concern.

Response:

This comment summarizes health risk assessment issues in Comment Letter SAL00018. In this letter, a discussion of each issue follows the initial summary paragraph. LAX has provided separate responses for each of these health risk assessment issues in Responses to Comments SAL00018-55 through SAL00018-68. Please refer to these individual responses for a detailed discussion of the health risk assessment issues.

SAL00018-55

Comment:

a. Alternative D with mitigation may result in a potentially significant increase in cancer risk (over baseline) to schoolchildren and/or residents in and around Lennox.

Figure S.4.24.1-18 shows that incremental cancer risks in and around Lennox will increase under Alternative D, even with implementation of mitigation measures. As shown, the estimated additional (over baseline) cancer risk for residents and/or schoolchildren in the southwestern portion of Lennox is between one and ten per million individuals (dark blue shaded area). We note that the threshold of significance for incremental cancer risk is ten per million individuals. Because incremental cancer risks under Alternative D in this geographic area may be underestimated (see comment 4c), actual incremental cancer risks may exceed the threshold of significance.

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Response:

Please refer to Topical Responses TR-HRA-2 and TR-HRA-3 regarding airport emissions and link with adverse health effects and human health impacts.

Acute and chronic hazards for all build alternatives and the No Action/No Project Alternative were addressed in Section 4.24.1, Human Health Risk Assessment (subsection 4.24.1.6, Environmental Consequences, and subsection 4.24.1.9, Level of Significance After Mitigation), of the Supplement to the Draft EIS/EIR. Supporting technical detail is provided in subsection 4.1.2, Assessment of Acute Hazards, in Technical Report S-9a of the Supplement to the Draft EIS/EIR. As described in these sections, health risks (cancer, non-cancer chronic and non-cancer acute) for the majority of nearby residents would be lower for Alternative D than for 1996 baseline, Year 2000 conditions and the No Action/No Project Alternative. Alternative D provides for airfield improvements that would enable aircraft to move more efficiently, thereby reducing air pollutant emissions from aircraft operating in taxi/idle mode, and provides substantial improvements to the on-airport and off-airport surface transportation systems, thereby reducing air pollutant emissions from motor vehicles. Additionally, Alternative D, unlike the No Action/No Project Alternative, includes Master Plan commitments and mitigation measures to reduce air pollutant emissions.

To evaluate potential impacts resulting from the expansion of LAX, the health risk assessment assessed risk and hazards for maximally exposed individuals using upper bound predictions of exposure, i.e. receptors were assumed to be exposed to maximum predicted concentrations of TAPs at reasonable maximum exposure periods. The analysis treated outdoor concentration estimates as equivalent to actual personal exposure to the population. However, human exposures to air pollution depend on concentrations in both indoor and outdoor environments and the amount of time people spend in various locations, including their homes, schools workplaces and commuting. The methods used in the human health risk assessment were conservative, that is, methods used were more likely to overestimate than underestimate possible health risks. Please see Response to Comment SAL00017-52 for the response to comment 4c (Comment SAL00018-57) referred to by the commentor regarding cumulative cancer risk estimates for school children.

SAL00018-56

Comment:

b. Incremental cancer and noncancer risks in the area northeast of the I-105/I-405 Interchange may be underestimated under all project alternatives.

The EIS/EIR may underestimate cancer and noncancer risks to residents and schoolchildren in the area northwest of the I-105/I-405 interchange. Actual airborne concentrations of carbon monoxide and toxic air contaminants including benzene, 1,3-butadiene, formaldehyde, and diesel exhaust in areas downwind from the I-105 and I-405 highways may be higher than estimated in the EIS/EIR because (1) pollutant emissions from motor vehicles may not be completely accounted for in the analysis (see comment 2b) and (2) the effect of buildings and other structures on air flow and buildup of pollutant concentrations may not have been adequately considered (comment 2c).

Response:

The Supplement to the Draft EIS/EIR addressed air quality and traffic impacts associated with Alternative D in Section 4.6, Air Quality, and Section 4.3, Surface Transportation, respectively. Supporting technical data and analyses are provided in Appendix S-E and Technical Reports S-2a, S-2b, and S-4 of the Supplement to the Draft EIS/EIR. Please refer to the Response to Comment SAL00018-55 regarding the conservative methodology used to evaluate potential health risk impacts.

The commentor's self-references to comments 2b and 2c appear to be incorrect. These references apparently should be to comments 2a and 2b, respectively. For responses to these comments, please refer to the Response to Comment SAL00018-44 regarding pollutant emissions from motor vehicles and Response to Comment SAL00017-44 regarding the effect of buildings and other structures on air flow, i.e., building downwash.

SAL00018-57

Comment:

c. Estimated cumulative cancer risks to school children have been underestimated due to underestimates in the total number of years children spend in school.

The Human Health Risk Assessment (HHRA) estimated the potential incremental cancer risks for children attending schools by identifying the school with the highest projected concentrations of toxic air pollutants, and determining the total length of time that children would likely be at school. Approximately 20 schools were identified as being within one mile of LAX. Lennox Middle School was identified as a location where high cancer risks to school children are predicted to occur. (SDEIS/EIR, Technical Report 9a, Attachment B, Figures B-1 and B-2.)

Children ages 6 to 12 years old were evaluated in the HHRA, since "this age range includes the youngest school ages and it is sufficiently long for analysis of chronic exposures and risks" (Original EIS/EIR, Technical Report 14a, Attachment B, p. 42). Accordingly, children in school were assumed to be exposed to emissions from LAX for six years.

However, given that children will, in fact, be in school from ages 5 to 18 years (kindergarten through 12th grade), and that one charter high school currently exists within Lennox and another is being planned, it is very likely that children could be exposed to emissions from LAX for a 13-year period (corresponding to kindergarten through 12th grade). As estimates of cancer risk are directly proportional to the total time that an individual is exposed over the course of the lifetime, the assumption that school children are only exposed for six years is misleading, and results in an underestimate of the potential incremental cancer risks posed by children attending school.

Cancer risks for school children are underestimated in the EIS/EIR. Cancer risks should be recalculated for the school children to account for the potential that children could be exposed to emissions from LAX during their entire pre-school through high school years.

Response:

The content of this comment is essentially the same as comment AL00034-51; please refer to Response to Comment AL00034-51.

SAL00018-58

Comment:

d. Significant flaws in the methods used to calculate cumulative cancer risks and noncancer hazards undermine the conclusions of the EIS/EIR and obscure actual health risks posed by the various alternatives.

The HHRA repeatedly touts the benefits of all build alternatives, stating that with mitigation, "all of the build alternatives would have lower (more favorable) human health impacts than those associated with the No Action/No Project Alternative..." (Original EIS/EIR, p. 4-999.) Many of the tables and text describing the incremental cancer risks and noncancer hazards actually present negative risks, indicating not only a reduction in risks below those associated with baseline conditions, but a "beneficial impact on LAX-associated cancer risks" (or noncancer hazards). (Original EIS/EIR, Technical Report 14a, p. 51.) Such statements are not only misleading, they are technically inaccurate.

For example, some of the projected increase in cancer risk for some chemicals for Alternative D 2015 pre-mitigation conditions (e.g., diesel particulates, formaldehyde, benzene) is claimed to be offset by a projected decrease in cancer risk for other chemicals (arsenic, beryllium, and chromium). (SEIS/EIR, Technical Report 9a, Table S8.)

The fundamental flaw in this logic is the assumption that a decrease in the concentration of one carcinogenic compound can offset the increase the concentration of another carcinogen. If the implementation of a given alternative results in lower concentrations of diesel exhaust than would occur under the baseline conditions, then the incremental contribution of diesel to the total cancer risk drops

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to zero. However, a net reduction in diesel is not "credited" against the likelihood that increases in other chemicals may cause cancer in exposed individuals.

To illustrate this point, assume two chemicals exist, say 1,3-butadiene and benzene, and the baseline cancer risks are 10×10^{-6} for each chemical. If the projected cancer risk under Alternative A is 13×10^{-6} for 1,3-butadiene and zero for benzene, the projected incremental cancer risk is $+3 \times 10^{-6}$ for 1,3-butadiene and the projected incremental cancer risk from benzene would be presented as -10×10^{-6} (indicating that the concentrations of benzene under Alternative A drop below the baseline concentrations), the cumulative risk from both compounds is NOT -7×10^{-6} , as would be presented in this HHRA it is 13×10^{-6} . Independent of any projected improvement in diesel risks, 1,3-butadiene is still projected to cause an increase in cancer risk of $+3 \times 10^{-6}$.

In other words, if the projected incremental cancer risk posed by 1,3-butadiene is $+3 \times 10^{-6}$ and the projected incremental cancer risk from diesel is presented as -14×10^{-6} (indicating that the concentrations of diesel under the alternative drop below the baseline concentrations), the cumulative risk from both compounds is NOT -11×10^{-6} , as presented in this HHRA, it is $+3 \times 10^{-6}$. Independent of any projected improvement in diesel concentrations, 1,3-butadiene is still projected to cause an increase in cancer risk of 3×10^{-6} . (Data values taken from Original EIS/EIR, Technical Report 14a, Table 13, Alternative A, Adult Resident.)

Potential health impacts have been improperly summed. This fundamental flaw permeates the HHRA, and results in underestimates of the potential health impacts of all alternatives. As currently presented, it is impossible to evaluate each of the alternatives to determine which alternatives may pose a significant health threat, or to ascertain whether the proposed mitigation measures will be sufficient to reduce the health risks to insignificant levels.

The Lennox School District recommends that LAWA correct these errors and recalculate the risks for all alternatives.

Response:

The content of this comment is essentially the same as comment AL00034-52; please refer to Response to Comment AL00034-52.

SAL00018-59

Comment:

e. The basis for significance threshold for noncancer health effects is unclear and five times greater than the threshold typically used by regulatory agencies.

A significant impact relative to human health is defined in the Original EIS/EIR as a build alternative that would result in a total incremental chronic hazard index (HI) greater than 5 for any target organ system at any receptor location. (Original EIS/EIR, p 4-1009.) The basis for this significance threshold is unclear, is inconsistent with statements made in the Human Health Risk Assessment Technical Report, and is considerably less protective than acceptable thresholds established by regulatory agencies under various regulatory programs.

As described in the Original EIS/EIR, noncancer risk estimates are calculated by dividing the estimated exposure by the "reference dose," often referred to as the acceptable exposure level. (Original EIS/EIR, Technical Report 14a, p 28.) The ratio of the exposure to the reference dose is termed the hazard quotient (HQ). To assess the overall potential for noncarcinogenic effects posed by more than one chemical, the HQs for each chemical are summed, and the resulting value is referred to as the Hazard Index (HI).

As stated in the Original EIS/EIR, "a HQ greater than one indicates an exposure greater than that considered safe..." (Original EIS/EIR, Technical Report 14a, p. 28.) This conclusion is consistent with thresholds established by USEPA and Cal/EPA under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), and California's Toxic Hot Spots program (AB2588), respectively. Similarly, an overall HI of no greater than one is the threshold that is used by Cal/EPA in determining whether conditions at a site could potentially result in unacceptable adverse noncancer

health effects. Sites for which the multichemical HI is greater than one typically trigger further investigation, and often remediation.

The significance threshold used in this EIS/EIR to evaluate the potential for adverse noncancer health effects is five times higher (i.e., five times less protective) than noncancer thresholds typically used by regulatory agencies under various state and federal regulatory programs. It is unclear how and why a different and less protective standard is being used to evaluate the potential health impacts associated with the various build alternatives. If the more standard noncancer HI threshold of one were used to evaluate the significance of the various alternatives, the conclusions of each of the build alternatives, and the corresponding need for mitigation, would be different than is currently presented.

For example, under Alternative B in 2015, "people living in an area immediately east of the north runways might be exposed to TAPs from LAX sufficiently to produce a hazard index above [5]. People living in a larger area extending east-northeast from the LAX theme building over 6 miles would be exposed to sufficient concentrations of TAPs to produce an incremental hazard index between 1 and 5..." (Original EIS/EIR, p. 4-1014.) Thus, the number of people subjected to unhealthy levels of toxic chemicals may be greatly understated by the EIS/EIR.

The effect that establishing the threshold hazard index at 1 would have on the conclusions of the Alternative D analysis is unclear. The Lennox School District has commented elsewhere that the manner in which incremental risks under the project build alternatives are calculated and expressed in the EIS/EIR is inappropriate (i.e., use of negative risks, selection of 1996 as baseline, methodology for calculating baseline risks). If Alternative D risks were redefined and recalculated as suggested, and if the threshold index were established at 1 per standard practice, then estimated noncancer risks may exceed the significance threshold.

The discussion of noncancer risks is critical because children are more susceptible to noncancer risks as a result of the rapid growth and development of their nervous, immune and reproductive systems, and rapid maturing organs and tissues. Noncancer risks to children include, but are not limited to, increases in asthma and other respiratory related illness such as pulmonary bacterial infection, emphysema, chronic bronchitis, and reduced pulmonary function. As discussed in Part One, Section 2c, Lennox School District students are the most exposed to LAX-related pollution, and appear to have the highest asthma rate, of any population in the Los Angeles area.

LAWA should rewrite the discussion of noncancer risks, and clearly identify those alternatives that would be considered significant based on the more appropriate noncancer significance threshold of one.

Response:

The content of this comment is essentially the same as comment AL00033-341; please refer to Response to Comment AL00033-341. Also, please refer to Response to Comment AF00001-36 regarding the Lennox Health Fair.

SAL00018-60

Comment:

f. The EIS/EIR fails to consider and evaluate the potential health impacts associated with exposure to lead.

As described in the EIS/EIR lead "may be released in significant quantities from LAX ..." (Original EIS/EIR, Technical Report 14a, Attachment B, p. 19.) The potential impacts associated with exposure to lead are typically evaluated by using models developed by both USEPA and Cal/EPA to predict the blood-lead level that would result from a given exposure.

Because children are especially sensitive to the neurological effects of low levels of lead exposure, these models are used to estimate the blood-lead levels in children. The results from the model are then compared to the low blood-lead levels that have been demonstrated to result in subtle neurological damage in children, as established by the Center for Disease Control (CDC). The models are easy to use, have been used for more than eight years, and are considered the industry standard for evaluating lead exposures and determining whether such exposures could result in unacceptable health impacts.

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Although the EIS/EIR notes that LAX may release significant quantities of lead, the EIS/EIR does not evaluate the impacts of such releases in accordance with the standard industry practice. Instead, the EIS/EIR compares the predicted concentrations of lead to the Ambient Air Quality Standard, and concludes that, because the concentrations are below the Ambient Air Quality Standard, lead is not a toxic air pollutant (TAP) of concern for the LAX Master Plan. (Original EIS/EIR, Technical Report 14a, Attachment B, p. 12.)

Such treatment of lead significantly diminishes the public health significance of this TAP, and does not allow for a fair determination as to the public health impacts that may result from the various build alternatives. Any risk assessment submitted to either Cal/EPA or the USEPA would be instantly rejected if conclusions about the public health significance of lead were based solely on a comparison to the Ambient Air Quality Standard.

Further, the EIS/EIR states that a cancer slope factor is not available for lead. (Original EIS/EIR, Technical Report 14a, Attachment B, pp. 18-19.) The Lennox School District notes that the Cal/EPA Office of Environmental Health Hazard Assessment (OEHHA) has released a cancer slope factor for lead. The cancer slope factor, although not yet a promulgated standard, is available, and is being used by OEHHA to establish the No Significant Risk Level (NSRL) for lead under California's Proposition 65.

Health impacts resulting from lead in all years/scenarios, including Alternative D, may be underestimated. Because of the heightened public awareness to the risks associated with lead exposure and the plethora of information that exists describing the adverse health effects that can result from lead exposure, lead should be evaluated in this EIS/EIR in the most comprehensive manner that is reasonably practicable. Failure to do so is scientifically unjustifiable and is inconsistent with the more rigorous evaluations conducted for other chemicals included in the HHRA.

LAWA should rerun all health risk calculations to determine the human health implications of the increases in lead emissions that will result from all build alternatives.

Response:

The content of this comment is essentially the same as comment AL00035-54; please refer to Response to Comment AL00035-54.

SAL00018-61

Comment:

g. Excluding particulate emissions from jet aircraft from the quantitative risk evaluation could significantly underestimate the potential for noncancer health impacts.

Particulate emissions from aircraft were not quantified in the HHRA because "there is insufficient information regarding the nature and toxicity of total petroleum hydrocarbon (TPH) emissions associated with aircraft and toxicity criteria for these emissions are not available..." (Original EIS/EIR, Technical Report 14a, p. 81.) Particulate matter, in the form of diesel exhaust, is emitted from several ground sources (predominantly trucks and buses). Emissions of diesel exhaust from these ground sources have been included in the HHRA. However, the EIR states that because aircraft use a different fuel and a substantially different combustion process than diesel engines, the particulate emissions in jet exhaust are "not considered chemically, physically, or toxicologically similar to diesel exhaust..." (Original EIS/EIR, Technical Report 14a, p. 12.) Accordingly, the impact of such emissions have not been quantified in the HHRA.

This is the logic set forth in the EIS/EIR for excluding jet particulate emissions from the HHRA. The argument, however, for not being able to evaluate the toxicological effects of particulate exhaust from jets is flawed. Functionally, the methods used to evaluate the noncarcinogenic toxicity of "diesel" are based entirely on the particulate matter present in diesel exhaust.

According to USEPA, the systemic (non-cancer) toxicity of diesel emissions is due to the insoluble carbon core of diesel particles; when the exhaust is filtered to remove the particulate matter, the remaining exhaust mixture does not produce long-term toxicological effects in laboratory animals. The mechanism of toxicity of the carbon core relates to the deposition of the particles deep in the lung, and

the accumulation and aggregation of these particles that result from the inability of the lung's normal clearance mechanisms to effectively remove the particles from the deep regions of the lung. The accumulation of particles sets off a pathogenic sequence that may result in the presence of pulmonary inflammatory, fibrotic, or emphysematous lesions. (United States Environmental Protection Agency (USEPA), Integrated Risk Information System, On-line database maintained by USEPA, 2001.)

Because the noncancer toxicity associated with diesel exhaust is believed to be attributable entirely to the insoluble carbon core of the particulate matter, the noncancer toxicity factor would be equally applicable to other sources of particulate matter, such as jet fuel exhaust. If one can estimate the quantity of particulate matter that could be released from the exhaust of a jet engine, then use of the noncarcinogenic toxicity criteria for diesel is a scientifically defensible and appropriate method for evaluating the public health significance of the particulate emissions. Given the significant increase in the air traffic at LAX, failure to quantify potential impact associated with particulate emissions from jet aircraft could represent a significant omission from the estimated noncancer impacts.

The fact that particulate emissions from aircraft engines may be different than those from diesel engines is not adequate justification for ignoring the cancer health risks of aircraft particulate emissions entirely. It is reasonable to assume, given the lack of information to the contrary, that aircraft particulate emissions are similar to diesel emissions with respect to cancer effects. If this assumption were false, and aircraft particulates were in fact less carcinogenic than diesel exhaust, then the result would represent a conservative upper bound of the cancer risk posed by aircraft particulate matter. The existing estimate of risk posed by aircraft particulates, i.e. zero, could be considered a lower bound.

Data presented in Attachment W to Technical Report 4 of the Original EIS/EIR indicate that aircraft contribute approximately 45 percent of total LAX operational PM10 emissions within the LAX local area. If one makes the assumption that the cancer and noncancer toxicity of aircraft PM10 emissions are similar to that of diesel particulates, they would conclude that the cancer and noncancer risks posed by operational PM10 emissions may be underestimated by roughly a factor of 2 in all years/alternatives. The relative contributions of particulate matter to total cancer and noncancer risks in different years/alternatives are not presented in the SEIS/EIR. (See Part Four, Section 4g., *infra*.)

Health impacts from particulate matter may be underestimated. The Lennox School District recommends that LAWA recalculate all estimates of noncancer risk, and include in the evaluation the potential adverse health effects that can result from exposure to particulate emissions from jet aircraft.

Response:

The content of this comment is essentially the same as comment AL00034-55; please refer to Response to Comment AL00034-55.

SAL00018-62

Comment:

h. Absolute cancer and noncancer risks are not presented in the EIS/EIR.

Cancer and noncancer risks are quantified solely on an incremental basis relative to 1996 risks, which themselves are not presented. The impression received is that presentation of absolute risk numbers is being avoided, presumably because they are large and may cause alarm.

Response:

The content of this comment is identical to comment SAL00017-57; please refer to Response to Comment SAL00017-57.

SAL00018-63

Comment:

i. The EIS/EIR does not consider child-specific noncancer toxicity criteria which have been proposed by the State of California and are intended for use in the risk assessment of California school sites. Noncancer health risks to schoolchildren may be underestimated accordingly.

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Cal/EPA has issued proposed child-specific chronic reference doses (chRfDs) for six chemicals of particular concern to the health of schoolchildren: cadmium, chlordane, heptachlor, heptachlor epoxide, methoxychlor, and nickel (Cal/EPA, Development of Health Criteria for School Site Risk Assessment Pursuant to Health and Safety Code Section 901(g): Proposed Child-Specific Reference Doses (chRfDs) for School Site Risk Assessment - Cadmium, Chlordane, Heptachlor/Heptachlor Epoxide, and Nickel. Draft Report. Integrated Risk Assessment Section, Office of Environmental Health Hazard Assessment, June 2003, Exhibit 29). The proposed child-specific RfDs are generally more conservative than the US EPA RfDs used in the EIS/EIR health risk assessment, as shown in the following table.

[See original document.]

The proposed chRfDs were developed by Cal/EPA specifically for the protection of schoolchildren and are intended for use in the risk assessment of California school sites. Thus, these toxicity criteria are appropriate for use in the EIS/EIR health risk analysis of noncancer impacts to offsite school children.

As the relationship between reference dose and noncancer health risk (hazard quotient) is linear, use of these chRfD values would result in an increase in the estimated noncancer health risk to school children from each of the listed chemicals, by the amount (ratio) given in the table. For example, the estimated noncancer health risk to school children posed by cadmium would be 50 times greater if the chRfD value were used.

Only one of the six listed chemicals is identified as a chemical of potential concern (COPC) in the EIS/EIR health risk assessment: cadmium. However, use of these RfD values may cause additional chemicals to be added to the group of COPCs. For example, an increase in the estimated health risk from methoxychlor by a factor of 250 may elevate this chemical to the status of potential concern.

At a minimum, the EIS/EIR health risk analysis should consider these toxicity criteria in an uncertainties section, and assess to what extent adoption of these criteria would affect the conclusions of the health risk assessment.

Response:

The content of this comment is identical to comment SAL00017-58; please refer to Response to Comment SAL00017-58.

SAL00018-64

Comment:

j. Use of 1996 as basis for determining project significance is not explained and seems illogical.

Significance of project impacts under build scenarios in future years is evaluated by comparison to 1996 "baseline" conditions and, in the SEIS/EIR, to 2000 conditions. The rationale for this is not clear. To evaluate project impacts for, e.g., Alternative D in 2015, it seems more logical to compare Alternative D 2015 conditions to No Action/No Project 2015 conditions. In this manner, the effects of the project may be directly quantified.

Response:

The content of this comment is identical to comment SAL00017-59; please refer to Response to Comment SAL00017-59.

SAL00018-65

Comment:

k. Methodology for establishment of baseline (1996) impacts is poorly defined and highly suspect. All determinations of significance of Alternative D through comparison to 1996 baseline impacts are therefore questionable.

According to the Original EIS/EIR, 1996/baseline impacts were not estimated directly but rather were derived by adjusting model predictions under the 2005 no-build alternative:

"Baseline conditions were not separately modeled. Instead, air quality for the baseline year (1996) was estimated from results of air dispersion modeling for the No Action/No Project Alternative for horizon year 2005... Thus, emissions estimates for 1996 were derived by subtracting out emissions associated with the No Action/No Project Alternative in 2005..." (Original EIS/EIR, p. 4-1007).

The Lennox School District notes that the 1996 emissions inventory is the basis for all other inventories, including the 2005 No Action/No Project Alternative inventory, and therefore assumes that the final sentence in the above citation is a misstatement. It infers that 1996/baseline chemical concentrations were derived by scaling the chemical concentrations predicted by the air dispersion model for the 2005 No Action/No Project Alternative. The EIS/EIR does not document or support this scaling operation. The Lennox School District is unaware of any way in which a modeled concentration field may be scaled other than by uniform application of a constant factor (all values in a given chemical concentration field multiplied by the same factor). Therefore, it appears that any source-specific (i.e., spatial) differences between the 1996 and 2005 inventories were lost in the scaling process.

The EIS/EIR does not explain or support the rationale for not simply estimating baseline impacts directly, by using the 1996 inventory as input to the dispersion model. The indirect method apparently employed is inferior to direct modeling of 1996 impacts, because it results in a loss of spatial resolution of chemical emissions and resulting airborne concentrations. As the 1996/baseline impacts are the basis for determination of significance of the project, the process by which these baseline impacts were estimated should be thoroughly described. From the sparse and confusing discussion provided, it appears that the 1996 impacts were roughly fudged. Therefore, the Lennox School District holds significance determinations based on these 1996 impacts to be generally questionable.

Response:

Please refer to TR-GEN-1 and TR-HRA-1 regarding environmental baseline issues.

As indicated in the Introduction to Chapter 4 of the Draft EIS/EIR, in accordance with Section 15125 of the State CEQA Guidelines, the affected environment constitutes the baseline physical conditions against which the significance of an impact is judged. Two baseline conditions were used in the analysis of the LAX Master Plan alternatives. These include the environmental baseline, or the physical conditions that existed at the time the Notice of Preparation (NOP) was published (in this case, physical conditions as of mid-1997 and aviation activities from the most recent, previous year, or 1996), and the Adjusted Environmental Baseline, which reflects environmental baseline conditions on the airport, and future conditions (allowing for regional growth) off-airport. The baseline assumptions used in the Draft EIS/EIR are responsive to CEQA requirements and are designed to provide the most clear and meaningful basis from which to measure and evaluate impacts.

The environmental baseline used for the impacts analysis in the Draft EIS/EIR was also used for the impacts analysis in the Supplement to the Draft EIS/EIR. In so doing, the basis for the CEQA analysis in the Supplement to the Draft EIS/EIR is consistent with that of the Draft EIS/EIR, and is in accordance with the CEQA Guidelines directive that the environmental setting as of when the NOP was published will normally constitute the baseline physical conditions by which a lead agency determines whether an impact is significant. Consequently, projected future changes anticipated to result from each of the LAX Master Plan alternatives are compared to uniform baseline data, allowing for consistency of comparison (i.e., 'apples' are compared to 'apples').

For updated comparative purposes, the Supplement to the Draft EIS/EIR includes a description of the more current physical environmental conditions in the vicinity of the proposed project. The physical conditions occurring at, and around, the LAX Master Plan study area in the Year 2000 are considered to be the most current environmental conditions that are meaningful and relevant to the analysis of the LAX Master Plan. The Year 2000 conditions used within the Supplement to the Draft EIS/EIR provide for a full year's worth of data for environmental conditions influenced by existing airport operations, as they existed prior to the terrorist attacks of September 11, 2001. Given that the events of September 11th substantially altered the nature and characteristics of operations at LAX, a description of existing environmental conditions that includes the period after that date is not considered to be representative of typical conditions.

Note that because risks and hazards are reported as increments above baseline, use of the 1996 baseline actually results in larger incremental impacts. Airport activity in 1996 was lower than that for

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Year 2000, resulting in a larger difference between baseline and projected activity under Master Plan alternatives.

For additional detail regarding baseline conditions associated with LAX operations please refer to Section 4.6, Air Quality, of the Supplement to the Draft EIS/EIR, and Section 3.3, Emissions Estimates for TAPs, of Technical Report 14a Human Health Technical Report and the Air Quality Modeling Protocol for Toxic Air Pollutants, LAX Master Plan EIS/EIR (Attachment F). Possible future emissions associated with LAX under the No Action/No Project Alternative and the build alternatives were estimated from the established baseline by either increasing or decreasing emission rate estimates from specific sources based on projected changes in airport operations for horizon years, 2005/2013 and 2015. Projected future emission rates from LAX sources were then used as inputs, along with meteorological and geographic information, to an air dispersion model. This model predicted possible future concentrations of TAPs for each horizon year at hundreds of locations within a defined study area around the airport. To estimate incremental TAP concentrations at specific locations in the study area baseline emissions were subtracted from total emissions estimated for build alternatives and the No Action/No Project Alternative for horizon years 2005/2013 and 2015.

SAL00018-66

Comment:

l. Alternative D post-mitigation incremental cancer risk to adult residents may be greater than 10 per million individuals.

Table S4.24.1-5 of the SEIS/EIR indicates that the post-mitigation incremental cancer risk to adult residents is 2 per million individuals, below the significance threshold of 10 per million individuals. However, given that (see other comments) (1) cancer risk posed by secondary pollution is ignored, (2) cancer risk posed by aircraft particulate matter is ignored, (3) cancer risk posed by lead is ignored, and (4) the 1996 baseline cancer risk is highly suspect, the actual Alternative D post-mitigation incremental cancer risk may exceed the significance threshold of 10 per million individuals.

Response:

The content of this comment is identical to comment SAL00017-61; please refer to Response to Comment SAL00017-61.

SAL00018-67

Comment:

m. Statement that acrolein noncancer risks are substantially overestimated in the EIS/EIR analysis is not supported by the arguments presented.

"Emissions estimates for acrolein are based on available data that were generated from old aircraft engines not generally in use today and using military fuel that differs from fuel used at LAX..." (SEIS/EIR, Human Health Risk Assessment, p. 4-615.) This statement implies that newer aircraft using civilian fuel emit less acrolein than estimated. However, the implication is not supported by any other information.

"Acrolein is not generally recognized as a significant TAP in the South Coast Air Basin..." (p. 4-615.) Prior recognition is not relevant or required. Further, this statement is contradicted by results of the USEPA study, which suggest that "hazard indices might fall in the range of 3 to 10 for chronic exposure to acrolein..." (SEIS/EIR, Human Health Risk Assessment, p. 4-619.)

"A recent study near Chicago's O'Hare Airport failed to detect acrolein in essentially all samples taken in communities near the facility..." (SEIS/EIR, Human Health Risk Assessment, p. 4-615.) Without discussion of sampling and analysis methods, especially of comparison of method detection limits to levels of concern, this statement is meaningless.

"The analysis presented for acrolein in the HHRA may substantially overestimate releases, and thus may overestimate possible chronic and acute impacts to human health..." (SEIS/EIR, Human Health Risk Assessment, p. 4-615.) For the reasons noted above, the Lennox School District does not believe

that sufficient evidence is presented in the EIS/EIR to justify this statement that acrolein impacts are overestimated in the HHRA.

Response:

The content of this comment is essentially the same as comment AL00033-344; please refer to Response to Comment AL00033-344.

SAL00018-68

Comment:

n. Use of different receptor/grid spacing when calculating pre- and post-mitigation impacts prevents assessment of mitigation effectiveness.

"A greater number of endpoints were assessed for post-mitigation conditions than for pre-mitigation conditions to ensure that the highest post-mitigation impacts were identified. As such, post-mitigation risks and hazard estimates represent conservative estimates which are in some cases greater than pre-mitigation risks..." (SEIS/EIR, Human Health Risk Assessment, p. 4-617.)

Increasing the receptor density does not ensure that the highest post-mitigation impacts are identified, it only increases the likelihood that they are identified. The additional data points likely include both lesser and greater values than would be predicted if only the smaller number of endpoints were considered. With both endpoint sets, it is possible, if not likely, that the greatest impacts (highest risk values) are not identified; however, this possibility is lower for the larger, post-mitigation endpoint set.

As noted, estimated post-mitigation risks in some cases are higher than pre-mitigation risks. This apparent increase in risk is likely an artifact caused by the larger number of endpoints used in the post-mitigation modeling. Comparison of pre- and post-mitigation impacts should be made with the same endpoint set (i.e., same group of receptors), to measure mitigation effectiveness.

Response:

The content of this comment is identical to comment SAL00017-63; please refer to Response to Comment SAL00017-63.

SAL00018-69

Comment:

PART FIVE

THE TRAFFIC IMPACT ANALYSIS IS INADEQUATE

To address traffic impacts of Alternative D on the Lennox School District, the SEIS/EIR must identify those locations where project traffic could cause significant impacts. (14 California Code of Regulations 151064.) In this regard it is typical for a traffic study to have clearly defined performance criteria with respect to how the study area is defined and the definition of "significant impact" within that study area. While the study area has been expanded since the Original EIS/EIR, it is not clear whether the expanded area of impact within the Lennox School District has been selected in this manner. Even if the impacts are less than significant, the SEIS/EIR should contain an evaluation showing how the study area was selected and indicating findings of significance or no significance on roadways within the Lennox School District.

Response:

Please see Response to Comment SAL00017-64.

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SAL00018-70

Comment:

Additionally, significant impacts to Lennox School District of the Lennox Interchange are not identified or addressed. CEQA requires evaluation in the SEIS/EIR of the significant impacts of the mitigation measures of projects as well as the project itself. (14 California Code of Regulations 15126.4.) The SEIS/EIR fails to do so.

1. The Analysis of the Impacts of the Lennox Interchange is Inadequate.

The addition of an interchange with I-405 at Lennox Boulevard is being proposed as a mitigation measure for Alternative D. The secondary impacts of this interchange on the Lennox street system needs to be studied since the addition of this interchange will have a number of direct and indirect effects on the Lennox area. (Id.) The most important of these are as follows:

a. Street closures may affect children's walk-to-school routes and create safety concerns for children walking to and from school.

The closure of Lennox Boulevard just east of the I-405 will divert traffic to parallel streets such as Century Boulevard and Imperial Highway, both of which serve the Lennox area. The resulting changes in traffic patterns relative to walk-to-school routes need to be assessed. For example, children may face more traffic and therefore may be exposed to increased safety risks in their walk-to-school routes. The SEIS/EIR should examine these issues and also possible mitigation measures to ensure safe walk-to-school routes (ex. crossing-guards, visibility improvements for intersections, etc.)

b. Configuration of entrance and exit freeway ramps will necessitate relocation of a Lennox School District preschool.

The SEIS/EIR fails to mention an existing preschool located on Lennox School District property. The Lennox interchange contemplates two alternatives for the erection of a freeway entrance and freeway exit loop ramp. Although the selection between these two alternatives will not be made until the Caltrans Project Study Report (PSR) process is completed, the preschool will be affected by one of these alternatives. In short, one of the alternatives will necessitate the relocation of the preschool. This impact and relocation concerns must be addressed in the SEIS/EIR.

c. The construction impacts of the Lennox Interchange must be examined.

The construction impacts of this interchange could be significant, especially for Buford Elementary School and Lennox Middle School, just west of Buford Avenue, and Felton Elementary School west of Felton Avenue. Construction phasing, and traffic management plans for construction traffic need to be studied to ascertain the type and magnitude of such impacts.

Response:

The Draft EIS/EIR and the Supplement to the Draft EIS/EIR are program level environmental documents intended to analyze the impacts of a Master Plan. It is acknowledged that further documentation may be required to address certain environmental issues in a more specific manner, as necessary and appropriate. The Lennox Boulevard Interchange would require such further documentation. Project Study Reports for both proposed freeway interchanges will need to be completed for the approval of Caltrans and the FHWA. Construction impacts of the interchange will be addressed in this document as well.

Figure S6 of Technical Report S-2b of the Supplement to the Draft EIS/EIR shows the changes in total PM peak-hour traffic in 2015 due to the installation of the I-405 and I-105 interchanges. Intersections that were studied east of the I-405 Freeway are shown on Figure S4.3.2-1 in Chapter 4.3.2 of the Supplement to the Draft EIS/EIR. Intersections on Century Boulevard and on Imperial Highway easterly to Hawthorne Boulevard were included.

It is expected that fewer vehicles will travel through the Lennox community as a result of closing Lennox Boulevard to construct the new interchange. However, it is acknowledged that the potential effects of

the interchange on children's safe route-to-school routes should be studied in the future Project Study Report.

Please also see Section 4.3.2.9 of Chapter 4.3.2 of the Supplement to the Draft EIS/EIR for additional information regarding the environmental impacts of the off-airport surface transportation mitigation measures. The potential relocation of the pre-school will be added to this section.

SAL00018-71

Comment:

2. Traffic Impacts of Alternative D on the Lennox School District Are Not Properly Addressed.

There are numerous other issues related to the impact of Alternative D on the Lennox area and hence on the Lennox School District. Alternative D expands the airport complex to the east, and although the I-405 Freeway acts somewhat as a barrier with respect to direct impacts in Lennox, there is the potential for indirect impacts that are either not addressed or only briefly addressed in the SEIS/EIR. Some examples are as follows:

a. Impacts of freeway avoidance traffic on Lennox School District are inadequately addressed.

Most of the freeway and freeway access mitigation measures will need to be the subject of further analysis as Caltrans Project Study Reports are prepared and more detailed designs are formulated. There is no assurance that desired freeway levels of service will be achieved when both project and cumulative impacts are considered. Under such conditions, "freeway avoidance" traffic could impact local streets and some of that freeway avoidance traffic will include airport trips (primarily employee and service related trips rather than air passenger trips). Actual conditions on the Lennox street system could therefore be worse than portrayed in the SEIS/EIR. Ideally, some provision should be made for monitoring traffic conditions to determine the magnitude of such trips, and to establish some form of "second tier" list of improvements for locations that may be impacted in this manner with trigger points for implementing improvements.

Response:

This comment is similar to comment SAL00017-66. Please see Response to Comment SAL00017-66.

SAL00018-72

Comment:

b. Construction impacts on traffic in Lennox are inadequately addressed.

The SEIS/EIR discusses construction traffic routing as a mitigation measure for project construction. The Lennox School District should be involved in this process in reviewing construction traffic routing to ensure that minimum impacts occur to schools, particularly the three schools located in the western part of the District.

Response:

Comment noted. LAWA welcomes the opportunity to work with the Lennox School District in the routing of construction traffic to minimize impacts to their schools.

SAL00018-73

Comment:

c. Impacts to Lennox associated with phasing of transportation improvements are inadequately addressed.

The phasing of transportation improvements is an important issue. Traffic impacts in the AM peak hour are of particular importance. Congested locations during this time will both impede students traveling to school, and cause secondary impacts such as traffic diverting to neighborhood streets to avoid

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congestion. Some discussion is given in the SEIS/EIR based on a conceptual phasing plan for the Master Plan. That phasing will be a complex undertaking, and should be accompanied by a detailed disclosure of impacts and mitigation measures for each phase as the details of the phasing plan emerge. Lennox's close proximity to the airport makes it vulnerable to any situation in which unanticipated traffic impacts of a particular phase causes problems on the local street system. Such impacts could well exceed those identified for the 2008 and 2015 time frames in the SEIS/EIR.

Response:

Please see Response to Comment SAL00017-68.

SAL00018-74

Comment:

PART SIX

THE ENROLLMENT IMPACT ANALYSIS IS INADEQUATE

The SEIS/EIR discusses the impact of Alternative D on enrollment as follows:

"Due to productivity increases (i.e., the production of more economic output per worker), Alternative D would result in a decrease of approximately 2,657 on-airport employees within the schools study area by 2015. As each on-airport employee is assumed to represent one household, the number of on-airport employee households within the schools study area would, therefore, decline by approximately 2,657." (SEIS/EIR, Schools, Section 4.27, p. 4-764.)

As to student enrollment for the Lennox School District, the SEIS/EIR states that in addition to Los Angeles Unified School District (LAUSD), "31 other school districts throughout Los Angeles County would also experience indirect project-related enrollment declines." However, the SEIS/EIR does not provide an estimate of the Lennox School District's expected share in decreased enrollment.

Without an analysis of Lennox School District enrollment in the SEIS/EIR, the impact to Lennox School District is unknown, but may very well be significant. The SEIS/EIR should assess the enrollment impact to Lennox School District and mitigate accordingly.

Whether the decrease in students is only relatively small to other school districts, the impact on the Lennox School District will be substantial. The Lennox School District relies almost exclusively on Average Daily Attendance for its revenue. A loss of students means the loss in student generated revenue. These impacts would translate into significant impacts upon budgeting, employment, maintenance and operations within the Lennox School District, and must be studied further, so that mitigation measures can be developed to address these impacts.

Response:

The decline in jobs over the planning period is not a product of Alternative D, but rather results from productivity increases (the production of more economic output per worker or increased efficiency due to advances in technology) would outweigh the net additional jobs associated with Alternative D. This effect is independent of Alternative D, and the forecast of reduced enrollment within the District associated with LAX related employment would occur with or without the project, as represented by the No Action/No Project Alternative. This does not suggest that the District would not see continued increases in enrollment and associated revenue over the period leading to 2015 due to other influences that would far exceed any potential effects related to LAX. See Topical Response TR-GEN-1 regarding the 1996 environmental baseline.

While the focus of the analysis is on LAUSD schools, as stated on page 4-765, in Section 4.27, Schools, of the Supplement to the Draft EIS/EIR, there would be project-related enrollment declines across 31 other school districts located throughout Los Angeles County. Given that the greatest enrollment decline within these 31 districts would involve the gradual loss by 2015 of approximately 225 students in Inglewood Unified School District under Alternative D, any effect on Lennox School District, which covers a much smaller geography, would be much more limited and the effect on enrollment would be more than offset by the overall forecasted increases in enrollment within the Lennox School District.

SAL00018-75

Comment:

PART SEVEN

THE SUBSTANTIAL SHIFT IN PROJECT OBJECTIVES REQUIRES LAWA TO EXAMINE AN ADEQUATE RANGE OF PROJECT ALTERNATIVES

Following the events of September 11th terrorist attacks, the basic objectives of the project have significantly shifted to an emphasis on security and safety over expansion. Several statements have been attributed to Mayor Hahn to this effect. However, Mayor Hahn's new objectives are only addressed in one alternative, Alternative D, the only alternative admittedly focused on enhanced safety and security measures.

The 1998 amendments to the CEQA Guidelines emphasized the importance of a clearly written statement of objectives. The following language was added for the requirements of the "project description,"

"A clearly written statement of objectives will help the lead agency develop a reasonable range of alternatives to evaluate in the EIR and will aid the decision makers in preparing findings or a statement of overriding considerations, if necessary. The statement of objectives should include the underlying purpose of the project." (14 California Code of Regulations 15124(b).)

A discussion of this section by the Governor's Office of Planning and Research provides further insight into this amendment - "Clear project objectives simplify the selection process by providing a standard against which to measure possible alternatives."

The standard by which to judge the range of alternatives required in an EIR is governed by the "rule of reason." 14 California Code of Regulations 15126.6(a); Citizens of Goleta Valley v. Board of Supervisors (1990) 52 Cal.3d 553, 565. In this case, LAWA completely changed its focus and objectives for the LAX project, yet only set forth one alternative in the SEIS/EIR to address these objectives. By only addressing one alternative, LAWA has effectively limited the public from meaningful public participation and informed decision making. It precludes the option of selecting a project that addresses the safety and security concerns of LAWA with less of an accompanying environmental justice impact. The notable lack of alternatives does not permit a reasoned choice and does not withstand the CEQA's "rule of reason."

When LAWA presented a 180 degree shift in its basic and central objectives, LAWA was required to comply with CEQA by discussing a reasonable range of alternatives. LAWA's failure to do so is fatal to the SEIS/EIR.

Response:

The comment is the same as Comment SAL00017-70; please see Response to Comment SAL00017-70.

SAL00018-76

Comment:

PART EIGHT

THE EIS/EIR VIOLATES CEQA READABILITY REQUIREMENTS

California Public Resources Code § 21003 states, in pertinent part:

"The Legislature further finds and declares that it is the policy of the state that:

"(b) Documents prepared pursuant to this division be organized and written in a manner that will be meaningful and useful to decision makers and to the public..."

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"(f) All persons and public agencies involved in the environmental review process be responsible for carrying out the process in the most efficient, expeditious manner in order to conserve the available financial, governmental, physical and social resources with the objective that those resources may be better applied toward the mitigation of actual significant effects on the environment."

Both the Original EIS/EIR and the SEIS/EIR violate this Code section.

a. Original EIS/EIR.

The Original EIS/EIR is inaccessible. It is 12,000 pages long and costs thousands of dollars to purchase. The CD version, although less expensive, is only accessible to people with computers. Many poorer residents of the most highly impacted areas do not have that technology. Additionally, the CD version contains many glitches, so entire sections are impossible to read or print. (See, e.g., EIS/EIR, CD Version Technical Report 4.)

Response:

Please see Response to Comment AL00033-255 regarding the content, structure, and availability of the Draft EIS/EIR and Supplement to the EIS/EIR for public review. It is unclear as to what, specifically, the commentator is referring regarding issues with the CD ROM version of the Draft EIS/EIR. However, Response to Comment AL00033-255 includes some discussion regarding the readability and printing of the electronic (e.g., CD ROM) version of the Draft EIS/EIR.

SAL00018-77

Comment:

Second, the Original EIS/EIR is so poorly organized that it is nearly impossible to find all of the pertinent information regarding a topic. Analysis regarding a particular topic is often spread among numerous sections of the "main document." Several of the so-called "technical reports" contain substantive narrative that is not reflected in the report itself. The "appendices" often contain other important information. The document itself provides no logical explanation as to why its contents are distributed in this manner.

For instance, as expected, the Noise section of the Original EIS/EIR contains information regarding the noise impacts of LAX expansion upon Lennox School District schools. However, the Noise Technical Report, thousands of pages later, contains crucial noise impact information that is entirely absent from the Noise section of the main document. In addition, the Noise Technical Report is not contained on the CD entitled "Technical Reports". Instead, it is on the "Appendices" CD, and is actually Appendix "D". The reason for this is entirely unclear.

The Land Use section, a thousand pages from the Noise section and several thousand pages from the Noise Technical Report, essentially states that LAWA will not mitigate noise impacts identified in the Noise section. (EIS/EIR, Land Use, Section 4.2, pp. 4-95, 4-96.) These few, critical sentences are not contained in the Noise section of the main document, nor the Noise Technical Report. This illogical placement of this crucial language suggests an intentional decision to obscure information that would raise "red flags" in respondents.

Response:

The comment is essentially the same as Comment AL00034-62; please see Response to Comment AL00034-62.

SAL00018-78

Comment:

b. Addition of Supplement to the EIS/EIR.

The SEIS/EIR contains many of the same problems of the Original EIS/EIR. It is thousands of pages long and costs over a thousand dollars to purchase. Consistent with the Original EIS/EIR, the various Supplemental Noise Technical Reports and the Environmental Justice Technical Report are contained

3. Comments and Responses

in the "Appendices" rather than with the "Technical Reports," as would make sense. Although the CD version of the document is less expensive, it is not accessible to those impacted citizens of Lennox who do not have access to a computer and are not trained to utilize the complex programs required to read from the CDs.

In total, the EIS/EIR violate CEQA readability requirements, and are inaccessible to a significant portion of the population impacted by the project that is the subject of the EIS/EIR.

Response:

Please see Response to Comment AL00033-255 regarding the content, structure, and availability of the Draft EIS/EIR and Supplement to the Draft EIS/EIR for public review.

SAL00018-79

Comment:

CONCLUSION

The individual and cumulative impacts of the EIS/EIR, including Alternative D, upon the education, health and safety of its students are of substantial concern to the Lennox School District. By law, LAWA must adequately consider and mitigate these impacts in its EIS/EIR. It fails to do so.

The EIS/EIR fails to adequately analyze the environmental justice, noise, health, pollution, traffic and enrollment impacts of the proposed project upon the Lennox School District. The EIS/EIR fails to propose adequate mitigation measures for these impacts. Furthermore, the EIS/EIR analysis of the cumulative impacts of the LAX expansion upon the Lennox School District is inadequate, both due to its own insufficiency and due to the inadequacy of its analyses of the underlying impacts.

For the foregoing reasons, the Lennox School District respectfully requests that LAWA revise the EIS/EIR to include alternative projects, further impact analysis and site specific mitigation information and proposals regarding the impacts on the Lennox School District.

Response:

Please see Responses to Comments SAL00018-3 through SAL00018-78 for responses to the specific concerns raised in the commentor's letter that provide the basis for the conclusion statement.

SAL00019 Janssen, David County of Los Angeles 11/3/2003

The content of this comment letter is identical to comment letter SAL00014; please refer to the responses to comment letter SAL00014.

SAL00020 Fulwood, Jerry City of Culver City 11/6/2003

SAL00020-1

Comment:

The City of Culver City has adopted the attached City Council Resolution 2003- R086 that formally transmits our comments on the LAX Master Plan Draft Supplemental EIS/EIR.

Response:

Comment noted.

3. Comments and Responses

SAL00020-2

Comment:

Overall, we believe the Draft Supplemental EIS/EIR fails to adequately address potential significant impacts to Culver City caused by the proposed project. The Draft Supplemental EIS/EIR and associated documents primarily focus on an analysis of impacts and proposed mitigation measures for the area immediately adjacent to the airport.

Due to the failure of the Draft Supplemental EIS/EIR to adequately address impacts and propose mitigation measures for Culver City, we believe that the Los Angeles World Airports (LAWA) should find the Draft Supplemental EIS/EIR inadequate for certification and require that it be revised and re-circulated to respond to the deficiencies we have identified in Resolution 2003-R086 and the extensive technical comments that is attached thereto as Exhibit A.

Response:

Comment noted. Similar to the Draft EIS/EIR, the Supplement to the Draft EIS/EIR provides a comprehensive analysis of environmental effects of the Master Plan alternatives, including impacts to communities nearby. This can be seen in the many figures, tables, and text throughout Chapter 4 of the Draft EIS/EIR and the Supplement to the Draft EIS/EIR. Much of the impacts and mitigation discussion focuses on the areas located close to LAX because this area has a greater potential to be significantly impacted by the project and, if significantly impacted, require discussion of mitigation measures. Whereas Alternatives A, B, and C included the proposed LAX Expressway, a portion of which would occur in proximity to Culver City and therefore included analyses of direct relevance to Culver City, Alternative D does not include the LAX Expressway or any other improvements in proximity to Culver City. The Alternative D improvement nearest to Culver City, specifically the proposed Ground Transportation Center, is located approximately 2 miles south of Culver City. The Supplement to the Draft EIS/EIR focuses primarily on impacts to communities in proximity to LAX because, unlike the other build alternatives, the improvements and activities proposed for Alternative D are generally limited to the existing airport environs. The analyses within the Supplement to the Draft EIS/EIR do, however, also include evaluation of impacts to more distant areas, such as traffic, noise, and air quality impacts, as appropriate.

With respect to the comments associated with Resolution 2003-R086 and the accompanying Exhibit A, please see Responses to Comments SAL00020-4 through SAL00020-68.

SAL00020-3

Comment:

Culver City's comments on the 2003 Supplemental EIS/EIR are in addition to the comments previously provided to LAWA on the 2001 Draft EIS/EIR. A copy of the 2001 Draft EIS/EIR comments is attached. Both sets of Resolutions adopted by the City Council constitute the City's comments on the entire LAX Master Plan and EIS/EIR.

We look forward to your response to the comments and concerns of the City of Culver City.

Response:

Comment noted. The City of Culver City's July 18, 2001 comment letter on the Draft EIS/EIR is identified as comment letter AL00018. For responses to these comments, please see comment letter AL00018. For responses to the City of Culver City's comments on the Supplement to the Draft EIS/EIR, please see Responses to Comments below.

SAL00020-4

Comment:

WHEREAS, the City of Los Angeles Department of Airports (LAWA) has developed a draft Master Plan for Los Angeles International Airport (LAX) which incorporates capacity enhancements to enable the

3. Comments and Responses

expansion of passenger activity from a current 60 million passengers per year up to an expected 98 million passengers per year and its cargo activity from its current 1.7 million tons per year to an expected 4.2 million tons per year through the year 2015; and,

WHEREAS, LAX is located in close proximity (approximately two miles) to the boundaries of the City of Culver City, and the impacts of its operation will affect and are of critical interest to the citizens of Culver City; and,

WHEREAS, on July 31, 1997, Culver City provided written comments to LAWA and the Federal Aviation Administration (FAA) on the June 11, 1997, Notice of Preparation/Notice of Intent of a Draft Environmental Impact Statement/Environmental Impact Report (Draft EIS/EIR), which in addition to other comments, requested that issues related to traffic, air quality, overflight operations, and regional context be analyzed in the environmental review document; and,

WHEREAS, on September 14, 1998, the City Council of the City of Culver City approved and adopted Resolution No. 98-R087, calling for the development of a Regional Airport Plan for Southern California that constrains LAX to operate within the capacity of its existing facilities and promotes development of additional capacity at the many other commercial airports in Southern California to serve the expanding air commerce market place. As established in City Council Resolution No. 98-R087, the City's official position regarding the proposed expansion is one of opposition to the LAX capacity expansion beyond that which can be accommodated by existing LAX facilities, and support for developing the capacity of other commercial airports within Southern California; and,

WHEREAS, LAWA and the FAA prepared a joint Draft EIS/EIR to address the potential environmental impacts caused by the proposed LAX expansion, which was released for public review and comment on January 18, 2001; and,

WHEREAS, the Draft EIS/EIR analyzes four project alternatives: 1) No Action /No Project; 2) Alternative A, Additional runway to the north airfield, 3) Alternative B, an additional runway to the south airfield, and 4) Alternative C, no additional runways but reconfiguration of existing runways including either lengthening, widening, and relocating; and,

WHEREAS, on June 25, 2001, the Culver City City Council adopted Resolution No.. 2001-R068 determining that the 2001 Draft EIS/EIR is substantially inadequate for certification by the Lead Agencies and that there was insufficient analysis of the environmental impacts of the proposed project to Culver City. Despite our close proximity to the airport, the 2001 Draft EIS/EIR does not adequately address potential significant impacts to Culver City caused by the LAX Master Plan, including the proposed LAX Expressway, an elevated roadway along the I-405. Also, a fully regional solution to the growth and demand in air passenger and air cargo capacity is not adequately considered in the 2001 Draft EIS/EIR. The City of Culver City's comments on the 2001 Draft EIS/EIR, including the City Council Resolution No. 2001-R068 were forwarded to LAWA on July 18, 2001; and,

WHEREAS, a City Staff Team, consisting of various City Departments as well as a noise consultant and a traffic consultant hired by the City of Culver City, was established to evaluate and comment on the adequacy of the Draft EIS/EIR in addressing potential impacts to Culver City; and,

WHEREAS, the City Council of the City of Culver City, accepted public comments and considered the Draft Supplemental EIS/EIR at public meetings on October 27, 2003.

NOW, THEREFORE, the City Council of the City of Culver City, California, DOES HEREBY RESOLVE as follows:

In addition to the comments made through Resolution No. 2001-R068, the following key findings are hereby made by the City Council of the City of Culver City. These findings are described more fully and augmented in greater detail in "Exhibit A", which is attached to this Resolution.

Response:

Comment noted. The City of Culver City's July 18, 2001 comment letter on the Draft EIS/EIR is identified as comment letter AL00018. For responses to these comments, please see comment letter AL00018. For responses to the City of Culver City's comments on the Supplement to the Draft EIS/EIR, please see Responses to Comments below.

3. Comments and Responses

SAL00020-5

Comment:

1. The Draft Supplemental EIS/EIR inadequately and inaccurately addresses the substantial adverse environmental impacts potentially affecting the City of Culver City. Below is a summary of impacts not discussed or analyzed in the Draft Supplemental EIS/EIR.

Response:

Comment noted. Please see the responses below relative to the specific concerns raised by the commentor.

SAL00020-6

Comment:

a. Traffic: The Draft Supplemental EIS/EIR is completely inadequate in evaluating traffic impacts in the City of Culver City. Only one intersection in Culver City was analyzed. The analysis should have included other intersections within the radius of influence of the Airport Expansion, to determine whether significant environmental impacts may be caused within Culver City and whether those impacts can be mitigated to a to a level of insignificance. Assessment of additional intersections should have been included, all of which currently are operating at unacceptable levels of service.

Response:

Please see Topical Response TR-ST-2 and, in particular, TR-ST-2.2 regarding the facilities selected for the traffic study. As discussed in that topical response, LAX is an intermodal transfer facility. It is not a true traffic generator, such as a regional shopping mall. Therefore, it is not necessary in the Draft EIS/EIR or the Supplement to the Draft EIS/EIR to identify and analyze every intersection that may be impacted by the project.

SAL00020-7

Comment:

As traffic delays impact the street network system, mass transit (Culver CityBus - Line 6) and public safety services are equally impacted. The Draft Supplemental EIS/EIR does not adequately address potential fiscal impacts of increased Home Land Security. Further, there is potential spillover congestion onto the I-10 freeway at the I-405 interchange. Not only is there a lack of acceptable analysis, the failure to address these issues results in a failure to address potential mitigation measures which might have the effect of reducing the levels of adverse impacts.

Response:

Transit corridor impacts and regional arterial and freeway impacts are discussed in Section 6, "Congestion Management Program (CMP) Analysis," of Technical Report S-2b of the Supplement to the Draft EIS/EIR. Please see also Topical Response TR-ST-2 and, in particular, Subtopical Response TR-ST-2.2 regarding the facilities selected for the traffic study.

Homeland security and the potential fiscal impacts of this issue are not environmental issues that are addressed in an EIS/EIR document.

SAL00020-8

Comment:

b. Aircraft Overflight Noise: There are potential aircraft overflight noise impacts from two new arrival paths and a new departure path. There are on average approximately 2,100 existing daily flights according to the 1996 environmental baseline. A major problem with the Draft Supplemental EIS/EIR regarding aircraft noise is the lack of key data and detailed analysis of the overflight noise impact to Culver City and other communities in close proximity. The degree of impact cannot be determined

because noise levels and flight frequency information for aircraft overflights is not provided in the Draft Supplemental EIS/EIR.

Response:

The commentor is correct in identifying that no over-flight noise levels are identified for the Culver City area. They were not addressed because projected noise levels in Culver City would be below the levels of significance defined by the Federal and State regulations. Federal Aviation Regulations define compatible land use impacts based on noise from aviation activities, using the 65 dB Community Noise Equivalent Level (CNEL), or a 1.5 CNEL increase in existing areas of 65 CNEL, as the impact thresholds for noise sensitive uses. For California evaluations, the Caltrans Airport Land Use Planning Handbook, provides noise and safety compatibility criteria for review of development near airports. The suggested noise compatibility criteria calls for no new residential development to be located within the 65 CNEL contour. Culver City is not located in the 65 CNEL for existing conditions, or any of the identified future build or no project/no action alternatives. Noise levels at locations outside the 65 CNEL contours were further addressed in Section 5.1 Locations of Significant Impact in Appendix D, Aircraft Noise Technical Report of the Draft EIS/EIR and Appendix S-C1, Supplemental Aircraft Noise Technical Report of the Supplement to the Draft EIS/EIR. Nighttime single event noise impacts and mitigation for LAX Master Plan alternatives are presented in Sections 4.1, Noise, and 4.2, Land Use, of the Supplement to the Draft EIS/EIR, with supporting information in Appendix SC and Technical Report S-1. Therefore, no further noise impacts analysis was necessary. Also please see Topical Response TR-N-2.3 regarding evaluation of impacts should extend beyond the 65 CNEL contour to all sensitive areas under flight tracks.

SAL00020-9

Comment:

c. Air Pollution: The Draft Supplemental EIS/EIR completely fails to evaluate localized air pollution impacts on Culver City.

Response:

This comment is essentially the same as Comment AL00018-10. Please see Response to Comment AL00018-10.

SAL00020-10

Comment:

No mitigation measures are proposed for Culver City from increased air and mobile sources from auto traffic, aircraft operations, construction, and in particular from freight and cargo operations.

Response:

Traffic and congestion are currently a problem in Los Angeles and its surrounding communities regardless of whether or not the LAX Master Plan is implemented. Mitigation measures proposed to improve traffic flow both in and around the airport include the following: the establishment of intermodal check-in facilities; bus turnouts and shelters; employee telecommuting options; expansion of the I-405 and I-105 corridors; etc. Please see Table S23 in Appendix S-E of the Supplement to the Draft EIS/EIR for a more detailed list of recommended mitigation measures for the proposed project. All of these measures will improve the flow of traffic and relieve congestion not only at the airport itself but to surrounding neighborhoods and communities, such as Culver City. There are currently no mitigation measures proposed for any specific city as there were no feasible mitigation measures identified that were city specific that would relieve potential air quality or traffic problems that can be directly attributed to the proposed project. The mitigation measures and overall improvements at the airport are expected to relieve congestion and improve traffic flow upon buildout. Air passenger travel at LAX is expected to increase annually either with or without the proposed project. The LAX Master Plan will accommodate this growth while easing both highway traffic and airfield congestion.

3. Comments and Responses

SAL00020-11

Comment:

Without this critical analysis, the Draft Supplemental EIS/EIR fails to comply with the minimum requirements of the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA).

Response:

Comment noted.

SAL00020-12

Comment:

d. Cumulative Impacts: The Draft Supplemental EIS/EIR fails to adequately analyze the cumulative impacts of other projects, which will be under construction during the same time period as the proposed expansion of LAX such as I-405 HOV project, Playa Vista, Baldwin Hills Regional Park Plan project, MTA Exposition Line project, and the West Los Angeles College Facilities Master Plan project.

Response:

Please see Response to Comment AL00018-19 regarding the evaluation of cumulative impacts in the Draft EIS/EIR and Supplement to the Draft EIS/EIR.

SAL00020-13

Comment:

For example, the cumulative impacts of the LAX expansion along with the Playa Vista project, including their cumulative construction impacts, would result in significant adverse impacts to the I-405, Sepulveda Boulevard, and other arterials, resulting in adverse impacts to local circulation and air emissions.

Response:

This comment is similar to comment PC00148-2. Please see Response to Comment PC00148-2.

SAL00020-14

Comment:

e. NOP/NOI Comment Letter: In response to the NOP/NOI to prepare the Draft EIS/EIR issued in June 1997, Culver City requested in a letter dated July 31, 1997, that major issues and concerns related to traffic, air quality, overflight operations, regional context, and other subject areas impacting Culver City be analyzed in the preparation of the Draft EIS/EIR. None or minimal analysis of these issues are contained in the 2001 Draft EIS/EIR or in the 2003 Draft Supplemental EIS/EIR. Further, Culver City's NOP/NOI comment letter is not contained in Draft Supplemental EIS/EIR or Appendix A of the 2001 Draft EIS/EIR, where copies of written comments from affected agencies are contained.

Response:

The Draft EIS/EIR and Supplement to the Draft EIS/EIR address traffic impacts in Section 4.3, Surface Transportation; air quality in Section 4.6, Air Quality; and noise impacts in Section 4.1, Noise, and Section 4.2, Land Use. Supporting technical data and analyses are provided in Appendix D, Appendix G, and Technical Reports 1, 2, 3, and 4 of the Draft EIS/EIR and Appendix S-c, Appendix S-E, and Technical Reports S-1, S-2a, S-2b, and S-4 of the Supplement to the Draft EIS/EIR. The air quality and noise analyses were conducted in accordance with established regulations and practices. The air quality analysis focused on emissions and peak concentrations, irrespective of jurisdictional boundaries. Regional emissions were also evaluated. The noise study area encompassed land uses within certain noise contours, also irrespective of jurisdictional boundaries. For a discussion of the traffic study area

relative to Culver City, please see Response to Comment AL00018-25. For a discussion of the LAX Master Plan role in the regional approach to meeting demand, please see Topical Response TR-RC-1.

Regarding the City's indication that their comment letter on the NOI/NOP is not included in Appendix A of the Draft EIS/EIR, both FAA and LAWA made best attempts to retain all comment letters received on the NOP/NOI and the Supplemental NOP, and provide copies of those letters in Appendix A. The City did not provide a copy of the subject letter in their comments on the Draft EIS/EIR and has not indicated what, if any, issues raised in the July 31, 1997 letter are not adequately addressed in the Draft EIS/EIR. It should be noted that Appendix A of the Draft EIS/EIR does contain a copy of hand-written comments provided by Theodore Smith III, Planning Commissioner, City of Culver City, during the scoping process.

SAL00020-15

Comment:

2. The magnitude of omissions in the Draft Supplemental EIS/EIR is so extensive that attached hereto as "Exhibit A" of this Resolution, are significant additional comments which detail the failure of the lead agencies to adequately address the complete array of adverse environmental impacts this project is anticipated to have on Culver City.

Response:

Comment noted. Please see Responses to Comments SAL00020-17 through SAL00020-68 below.

SAL00020-16

Comment:

Pursuant to the foregoing recitation and findings, the City Council of the City of Culver City, California, hereby:

1. Determines that the Draft Supplemental EIS/EIR is substantially inadequate and inaccurate for certification by the Lead Agencies and that a complete and proper level of environmental data and analysis must be incorporated into the Draft Supplemental EIS/EIR to address the identified deficiencies.

2. Establishes that this Resolution, including attached Exhibit "A," constitutes the City of Culver City's comments on the July 2003 Draft Supplemental EIS/EIR that was prepared for the proposed LAX Master Plan Addendum.

3. Directs and authorizes Staff to transmit the comments of the City of Culver City on the Draft Supplemental EIS/EIR to LAWA and FAA.

Response:

Comment noted. Please see Responses to Comments above.

SAL00020-17

Comment:

EXHIBIT A

City of Culver City Resolution No. 2003 - RO
Supplemental Draft EIS/EIR for the LAX Master Plan Addendum
October 27, 2003

SURFACE TRANSPORTATION

Intersection and Street Segment Traffic Impact Analysis

3. Comments and Responses

1. The impacts of LAX expansion traffic within Culver City were not given sufficient analysis. The most thorough method of analyzing the traffic flow quality and impacts on a street network is the evaluation of the operations at the critical intersections. They are the locations that act as valves for the flows on the intersecting streets. The flow along the street segments between the important intersections does not yield a true picture, because the interruptions to flow at the critical intersections are not properly accounted for in that type of analysis.

a) Only one intersection in Culver City was included in the impact analysis - Sepulveda Boulevard/Centinela Avenue, at the southern edge of the City [Figure 4.3.2-1, following page 4-243].

b) In response to the Notice of Preparation of the EIR several years ago, Culver City requested analysis at approximately 40 important intersections within the City, and those intersections were included in discussions of the study method and scope with the City of Los Angeles Department of Transportation and with the LAX consultants. The requests in the response to the Notice of Preparation were not acknowledged. Except for the one intersection mentioned above, the requested intersections were not included in the January 2001 Draft EIS/EIR or the July 2003 Draft Supplemental EIS/EIR. The intersections are listed below:

1. Braddock Drive @ Overland Avenue
2. Braddock Drive @ Sepulveda Boulevard
3. Bristol Parkway @ Centinela Avenue
4. Bristol Parkway @ Slauson Avenue
5. Buckingham Parkway @ Slauson Avenue
6. Centinela Avenue @ Green Valley Circle
7. Centinela Avenue @ Washington Boulevard
8. Centinela Avenue @ Washington Place
9. Culver Boulevard @ Main Street/Washington Boulevard
10. Culver Boulevard @ Overland Avenue
11. Culver Boulevard @ Sawtelle Boulevard
12. Culver Boulevard @ Sepulveda Boulevard
13. Duquesne Avenue @ Jefferson Boulevard
14. Glencoe Avenue @ Washington Boulevard
15. Green Valley Circle @ Sepulveda Boulevard
16. Hannum Avenue @ Playa Street
17. Hannum Avenue @ Slauson Avenue
- 18.1-405 NB Ramps s/o Venice Boulevard @ Sepulveda Boulevard
19. I-405 SB Ramp n/o Culver Boulevard @ Sawtelle Boulevard
20. Inglewood Boulevard @ Washington Boulevard
21. Jefferson Boulevard @ Overland Avenue
22. Jefferson Boulevard @ Sepulveda Blvd N

23. Jefferson Boulevard @ Slauson Avenue
24. La Cienega Boulevard @ Washington Boulevard
25. Marina Freeway @ Slauson Avenue
26. Matteson Ave/I-405 SB Ramps @ Sawtelle Boulevard
27. Motor Avenue @ Washington Boulevard
28. Overland Avenue @ Washington Boulevard
29. Playa. Street/Jefferson Blvd. @ Sepulveda Boulevard
30. Redwood Avenue @ Washington Boulevard
31. Sawtelle Boulevard @ Sepulveda Boulevard
32. Sawtelle Boulevard @ Venice Boulevard
33. Sawtelle Boulevard @ Washington Boulevard
34. Sawtelle Boulevard @ Washington Place
35. Sepulveda Boulevard @ Slauson Avenue
36. Sepulveda Boulevard @ Washington Boulevard
37. Sepulveda Boulevard @ Venice Boulevard
38. Sepulveda Boulevard @ Washington Place
39. Walgrove Avenue @ Washington Boulevard

c) Only six street segments in Culver City were included in the analysis - 1) Sawtelle Boulevard, south of Venice Boulevard; 2) Sepulveda Boulevard, south of Venice Boulevard; 3) Overland Avenue, south of Venice Boulevard; 4) Sepulveda Boulevard, south of Slauson Avenue; 5) Centinela Avenue, west of Sepulveda Boulevard; and 6) Washington Boulevard, east of Lincoln Boulevard [Figure 4.3.2-1].

d) Other streets that are components of routes to/from the airport, such as Jefferson Boulevard (west of Sepulveda Boulevard and east of Overland Avenue), Culver Boulevard, and Centinela Avenue (toward the east), are not included, although they are likely to carry meaningful volumes of airport traffic.

e) Of the streets that are included, some of the segments are not the most critical in evaluating impacts of airport traffic. For example, Overland Avenue, south of Jefferson Boulevard would have far higher impacts of airport traffic than the segment of Overland Avenue (south of Venice Boulevard) that was chosen for analysis. The same could be said about Sawtelle Boulevard, south of Culver Boulevard, and about Washington Boulevard, east and west of Sepulveda Boulevard.

f) There is only one study segment along the entire length of La Cienega Boulevard, although that is currently one of the most attractive routes to/from LAX. That attraction will certainly increase when the GTC is located adjacent to La Cienega Boulevard as part of Alternative D, but the impacts have been overlooked.

2. In the January 2001 Draft EIR/EIS in Table II-7.4 on page 11-7.13, the "existing" (1996) Level of Service (LOS) operations in the afternoon peak hour were at:

- LOS A or B along Sepulveda Boulevard, south of Venice Boulevard.
- LOS A and B along Overland Avenue, south of Venice Boulevard.
- LOS A along La Cienega Boulevard, south of Slauson Avenue.

3. Comments and Responses

- LOS A and B along Washington Boulevard, east of Lincoln Boulevard.

- LOS B and C along Sepulveda Boulevard, south of Slauson Avenue.

Those calculated levels do not conform to actual experience on the streets. The actual, observable operations are at lower levels, even though traffic signal enhancing equipment (ATSAC) has been installed. The application of street segment analysis has not sufficiently taken into account the interruptions to flow that occur at the critical intersections along the segments.

3. Many of the findings of current and future Levels of Service on street segments [Table S4.3.2-4, pages 4-258 through 4-261] are not credible and should be re-evaluated in light of current experience.

a) La Cienega Boulevard, south of Slauson Avenue is shown at LOS A or B during all peak hours to the year 2015, although the road is observably congested during peak hours and many non-peak hours now. New traffic counts should be taken and new analyses should be made to bring the study up-to date.

b) Washington Boulevard, east of Lincoln Boulevard, is shown at LOS A during all peak hours to 2015, although that high level of operations has not been the experience since the opening of the Costco store in that street segment. Apparently, the calculations, which are based on pre-Costco counts, did not take the new retail traffic into account, despite Costco being highlighted in the report text as a related project. New traffic counts should be taken and new analyses should be made to bring the study up-to date.

Again, those findings demonstrate the weakness of analysis using street segments instead of intersections. The interruptions of flow at the critical intersections are not fully accounted for in the segment methodology.

Response:

This comment is similar to comment AL00018-25. Please see to Response to Comment AL00018-25.

SAL00020-18

Comment:

4. On page 4-254 is the statement, "Analysis shows that these two important mitigation components [new freeway-to-airport interchanges on I-405 and I-105] would be effective in encouraging airport traffic to stay on the freeway system, and avoid off-loading onto the surface streets." No such analysis is presented, nor could one be produced without taking into account the already significant and increasing congestion on the San Diego Freeway, during both peak and non-peak periods.

The reason drivers seek alternative routes to/from LAX, instead of using the San Diego Freeway, is not the lack of a direct connection between the freeway and the airport. It is because the freeway, itself, north of the airport through Culver City and northward through West Los Angeles, is congested during much of the day, both on weekdays and on weekends. Sepulveda Boulevard and other north-south streets are attractive alternative routes for distances far north of Centinela Avenue. When Playa Vista is developed, the freeway congestion will increase and extend into more hours of the day, as well as further north.

Response:

Figure S6 in Technical Report S-2b shows the changes to total traffic volumes due to the addition of the interchanges on the I-405 and I-105 freeways in the PM peak hour for 2015. The traffic model results indicate that the I-405 Freeway will carry more vehicle trips with the addition of these new freeway connectors. The proposed Lennox Boulevard interchange will encourage airport traffic to use the I-405 freeway over the surface streets. Airport passengers will be able to travel from the freeway to the GTC or ITC without stopping at any traffic signals. In general, the traffic model indicates that as airport-related traffic increases on the I-405 Freeway, non-airport related traffic shifts to the parallel surface streets. However, the impact of these interchanges on the surface streets is limited to a small area. The project also calls for widening surface streets in the vicinity of the GTC and ITC, including Aviation Boulevard, La Cienega Boulevard, Arbor Vitae Street, and 111th Street to improve the movement of

traffic on surface streets. It is not the responsibility of the project to reduce freeway congestion through Culver City and West Los Angeles.

The estimated traffic generated from both Phase 1 and Phase 2 of the Playa Vista development were accounted for in the traffic model.

SAL00020-19

Comment:

Freeway Impacts

5. The proposed Lennox Interchange will not add to the capacity of the freeway nor improve its operations compared with current conditions. The interchange will not reduce freeway congestion north of the airport through West Los Angeles and into the San Fernando Valley. It may actually add to the congestion by giving airport-oriented drivers the false expectation of a convenient, fast route between the freeway and the airport. The interchange should not be considered to be a mitigation measure for traffic flows on the north/south surface streets, parallel to the freeway that would serve traffic to/from the airport. Most drivers who currently use the surface streets will continue to do so to avoid freeway traffic congestion, and many new drivers will be attracted to the surface streets because of significantly increased freeway congestion.

Response:

Figure S6 in Technical Report S-2b, Supplemental Surface Transportation Technical Report, Off-Airport, of the Supplement to the Draft EIS/EIR shows the changes to total traffic volumes due to the addition of the interchanges on the I-405 and I-105 freeways in the PM peak hour for 2015. The traffic model results indicate that the I-405 Freeway will carry more vehicle trips with the addition of these new freeway connectors. The proposed Lennox Boulevard interchange will encourage airport traffic to use the I-405 freeway over the surface streets. Airport passengers will be able to travel from the freeway to the GTC or ITC without stopping at any traffic signals. In general, the traffic model indicates that as airport-related traffic increases on the I-405 Freeway, non-airport related traffic shifts to the parallel surface streets. However, the impact of these interchanges on the surface streets is limited to a small area. The project also calls for widening surface streets in the vicinity of the GTC and ITC, including Aviation Boulevard, La Cienega Boulevard, Arbor Vitae Street, and 111th Street to improve the movement of traffic on surface streets. It is not the responsibility of the project to reduce freeway congestion through West Los Angeles and into the San Fernando Valley.

SAL00020-20

Comment:

6. The analysis of the impacts of airport expansion traffic on the freeways is cursory and difficult to ascertain. The results of the impact analyses are not covered or difficult to locate in the report text.

Response:

The Congestion Management Program Analysis described in Section 6 of Technical Report S-2b of the Supplement to the Draft EIS/EIR meets the requirements for this level of study. Project Study Reports (PSRs) will be completed at a later date for approval by Caltrans and the FHWA for the proposed interchanges on the I-405 and I-105 Freeways. The PSRs will have greater detail with respect to the operation of the freeways with the proposed interchanges included.

SAL00020-21

Comment:

7. Page ES-28: In the discussion regarding congestion, it states that the general area bounded by Marina Freeway, the San Diego Freeway, Rosecrans Avenue, and Vista Del Mar, the hours spent traveling on freeways would be reduced by about 10 percent. This cannot be so, considering that the San Diego Freeway is currently operating at very low levels of service throughout the day and that the LAX master plan is not adding capacity to any of the freeways.

3. Comments and Responses

Response:

The paragraph referenced by the commentor is not comparing Alternative D with current conditions, but with the No Action/No Project Alternative. Alternative D has elements that the No Action/No Project Alternative does not, such as additional remote terminal FlyAways, a consolidated rent-a-car facility that eliminates the privately operated rental car shuttles, improved connection to the airport via the Green Line, and surface street widenings on La Cienega Boulevard and Aviation Boulevard, among others.

The Supplement to the Draft EIS/EIR provides a more detailed comparison on freeway operation under the alternatives in Section 4.3, Surface Transportation in Table S4.3.2-2.

SAL00020-22

Comment:

8. People who regularly travel on the San Diego Freeway north of the Marina Freeway through Culver City and West Los Angeles often move at less than 30 miles per hour in mid-afternoon and even slower speeds during peak periods. The average speeds in Table S4.3.2-2 on page 4-252 are not achieved now. The document needs to evaluate and better explain how the addition of LAX traffic will improve the speeds over current conditions.

Response:

The speeds listed on Table S4.3.2-2 in Chapter 4.3.2 of the Supplement to the Draft EIS/EIR are average speeds. By definition, freeway speeds will sometimes be less than the average speed. At other times, these average speeds will be exceeded.

CEQA/NEPA does not require an analysis comparing the existing traffic conditions to the future with-project traffic conditions. In the Supplement to the Draft EIS/EIR, Alternative D is not being compared with current conditions, but with the No Action/No Project Alternative and other project alternatives. Table S4.3.2-2 reveals that the average freeway speeds improve slightly when compared to the No Action/No Project Alternative. Alternative D has elements that the No Action/No Project Alternative does not, such as additional remote terminal FlyAways, a consolidated rent-a-car facility that eliminates the privately operated rental car shuttles, improved connection to the airport via the Green Line, and surface street widenings on La Cienega Boulevard and Aviation Boulevard, among others.

SAL00020-23

Comment:

Congestion Management Plan (CMP) Analysis

9. Although the CMP facilities that were studied are listed on page 4-262, the results of the analyses regarding the individual facilities are hidden and not readily accessible in Attachment G of the Technical Report. That is where the reader has to go to find the impacts of LAX traffic on any of the freeways. Many readers will not have that document and will not be able to find the information in the main text document of the Draft Supplemental EIS/EIR. Please provide an executive summary of Attachment G in the main text of the Draft Supplemental EIS/EIR.

Response:

As indicated in the Introduction to Section 4.3.2, Off-Airport Surface Transportation, on page 4-243 of the Supplement to the Draft EIS/EIR, detailed information regarding existing off-airport surface transportation operations, traffic modeling efforts, and analysis of future off-airport conditions for Alternative D is provided in Technical Report S-2b, Supplemental Off-Airport Surface Transportation Technical Report. Section 6.2 of that technical report references and summarizes the data presented in Attachment G. Copies of the technical report, including Attachment G, along with all other appendices and technical reports for the Supplement to the Draft EIS/EIR were made available for public review at local libraries and several other locations. Additionally, all of these documents were available for review, and downloading if desired, on LAWA's website at www.laxmasterplan.org and on the CDs of the Supplement to the Draft EIS/EIR that were widely distributed. As such, the subject information was made available and accessible to readers having a particular interest in that topic.

SAL00020-24

Comment:

10. CMP Analysis. The intersection of Venice Boulevard and Overland Avenue is designated as a CMP Route Monitoring Location. In the Off-Airport report on page 4-290, Table S4.3.2-14, it indicates that this location will be impacted for Alternative D. The Project's Fair Share Contribution to this location is designated to be 17.7%. Overland Avenue was widened in 2001, both north and south of Venice Boulevard. It is incomprehensible as to how an intersection on the northerly City limit of Culver City is impacted when no intersections with equal or worse level of service between this location and the intersection of Centinela Avenue and Sepulveda Boulevard (at the southerly City limit) are impacted.

Response:

This comment refers to Table S4.3.2-14 on page 4-290 of the Supplement to the Draft EIS/EIR. Following procedures outlined in the Congestion Management Program (CMP) for Los Angeles County, the CMP analysis defined the area and facilities to be studied. These facilities are listed in Section 6.2 of Technical Report S-2b of the Supplement to the Draft EIS/EIR. Venice Boulevard between Lincoln Boulevard and La Cienega Boulevard is included as a CMP facility within the study area. Table S4.3.2-14 indicates that under the CMP analysis, the section of Venice Boulevard between the I-405 Freeway and Overland Avenue is found to have a CMP impact. No impact to the intersection of Venice Boulevard and Overland Avenue was identified. As required under the CMP for Los Angeles County, the table identifies an appropriate possible improvement to mitigate the CMP impact on the segment of Venice Boulevard between I-405 and Overland Avenue, and estimates that the LAX Master Plan's fair-share contribution towards signal synchronization would be 17.7 percent of the total cost. The possible improvement identified is signal synchronization to ATSAC, ATCS or equivalent, with no physical changes to the roadway or intersection. An upgrade from the existing ATSAC signal equipment to an ATCS system would reduce the V/C ratio for the segment by 0.03. This reduction will reduce the V/C to below 1.00, and thereby eliminate the CMP impact. Therefore the recommended improvement - that is, an upgrade from the existing ATSAC signal equipment to an ATCS system to enhance signal synchronization - would fully mitigate the CMP impact, even though an ATSAC system currently is in effect on Venice Boulevard.

SAL00020-25

Comment:

Traffic Mitigation Measures

11. There are no guarantees for the funding or implementation of any of the mitigation measures that are presented. On page 4-273, as the introductory sentence to the "Mitigation Measures" section, is the statement, "The following mitigation measures are applicable only to the extent that the use of airport revenues to fund such measures is permissible under federal law and policies." The airport administrators and representatives should obtain conceptual federal agency approval for funding of the recommended measures before they are presented as feasible. If any of the recommended measures cannot be implemented, the findings of the study will be invalid, and the proposed project should not proceed until feasible and fundable measures can be substituted.

Response:

A specific funding plan has not yet been prepared for the Master Plan; however, it is anticipated that a joint funding effort will be pursued, involving Federal and State grants and other efforts. Much of the project will likely be funded with airport-generated revenues, such as concession fees, landing fees, revenue bonds, leases, and passenger facility charges (PFCs). It is not anticipated that any local tax revenue would be used for this project.

LAWA and the Federal Aviation Administration discussed the proposed mitigation measures prior to their inclusion into the traffic mitigation plan. However, the FAA is not expected to make its final decision as to whether to approve the use of airport revenues for the traffic mitigation measures until its Record of Decision. The fact that a traffic mitigation may be unfunded at this time does not make it infeasible. If any of the proposed mitigation measures are not approved by the FAA for funding through airport revenues, then LAWA will either seek non-airport sources to fund the proposed mitigations or

3. Comments and Responses

develop substitute mitigation measures which would be acceptable by the FAA, LADOT and the appropriate local jurisdiction. Although traffic mitigations may currently be unfunded, this does not negate the findings of the traffic study nor LAWA's commitment to eliminate as many project-related traffic impacts as possible.

SAL00020-26

Comment:

12. At the Sepulveda Boulevard/Centinela Avenue intersection, the only study intersection in Culver City, the recommended mitigation measure is the addition of a right-turn lane on westbound Centinela Avenue. That will require roadway widening into the Caltrans right-of-way. That should be acknowledged in the report, because it will require Caltrans approval, acquisition of substantial right-of-way, construction of a retaining wall, and extensive traffic signal modifications.

Response:

It is believed that the installation of the westbound right-turn lane could be achieved through the elimination of the raised median island on Centinela Avenue from Sepulveda Boulevard to the I-405 underpass east of Sepulveda Boulevard. The westbound lanes would be shifted southerly in order to install the right turn lane. Design of the mitigation at this intersection would require approval from both the City of Los Angeles and the City of Culver City.

SAL00020-27

Comment:

13. On pages 4-278 and 4-283, mitigation measures are presented for the roadway links that will be significantly impacted. For the links within Culver City, the only measures recommended are "Fair-share contributions to regional transit service will mitigate the impacts of this link." The following information and analysis is lacking in the document and will need to be provided:

- a) Analyze how the proposed regional transit service measures will be sufficiently effective in mitigating the specific impacts on any of the links.
- b) Explain how and by whom the "fair-share contributions" will be determined. Include the City of Culver City as part the review and approval process.
- c) Identify which agencies will participate and receive funds. Explain how the funds will be spent. Will the funds be for capital improvements only, or will operating costs (particularly, for transit) be included?
- d) Explain and discuss how the compliance of the transit agency and the effectiveness of the transit measures will be monitored to assure that the impacts will be mitigated.

Response:

Since the EIS/EIR is a programmatic document, the details regarding the traffic mitigations have not fully been addressed at this point, including the specifics of the "fair-share" transit enhancements. Similarly, the compliance of the transit agency and the monitoring measures of the transit enhancements have yet to be worked out. Preliminary discussions have taken place with LADOT and LACMTA. Although LADOT will need to approve acceptance of any "fair-share" proposal, other jurisdictions and agencies may be involved in the review and approval process. It is not expected that operating and maintenance costs will be included.

Please see Response to Comment AL00008-6 regarding funding.

SAL00020-28

Comment:

14. In Table S4.3.2-14, on page 4-290, regarding Venice Boulevard, ATSAC signal equipment has been installed at each intersection for many years (before January 1994). Therefore, that cannot be included

as a mitigation measure for LAX traffic impacts. An alternative measure should be provided (the signals in that section are operated by the City of Los Angeles, not City of Culver City).

Response:

Venice Boulevard between Lincoln Boulevard and La Cienega Boulevard is included as a CMP facility within the study area. Table S4.3.2-14 on page 4-290 of the Supplement to the Draft EIS/EIR indicates that under the CMP analysis, the section of Venice Boulevard between the I-405 Freeway and Overland Avenue is found to have a CMP impact. As required under the CMP for Los Angeles County, the table identifies an appropriate possible improvement to mitigate the CMP impact on the segment of Venice Boulevard between I-405 and Overland Avenue, and estimates that the LAX Master Plan's fair-share contribution towards signal synchronization would be 17.7 percent of the total cost. The possible improvement identified is signal synchronization to ATSAC, ATCS or equivalent, with no physical changes to the roadway or intersection. An upgrade from the existing ATSAC signal equipment to an ATCS system would reduce the V/C ratio for the segment by 0.03. This reduction will reduce the V/C to below 1.00, and thereby eliminate the CMP impact. Therefore the recommended improvement - that is, an upgrade from the existing ATSAC signal equipment to an ATCS system to enhance signal synchronization - would fully mitigate the CMP impact, even though an ATSAC system currently is in effect on Venice Boulevard.

SAL00020-29

Comment:

15. Page 4-275: It is unclear how the Year 2008 impacts at the intersection of Centinela and Jefferson Boulevard will be mitigated by the I-405/Lennox interchange.

Response:

The Final EIS/EIR has been modified. The intersection of Centinela Avenue and Jefferson Boulevard will have unavoidable but temporary project impacts in 2008.

SAL00020-30

Comment:

16. Page 4-276. The mitigation measure at the Sepulveda and Centinela intersection calls for removal of the median island to accommodate a right turn lane. The width of the street may not provide enough space for this.

Response:

The removal of the raised median island will provide for a curb-to-curb street dimension of 85 feet on Centinela Avenue. This is sufficient to provide for the addition of a westbound right turn lane (there are currently a total of 7 lanes on the east leg of this intersection). The design of the mitigation at this intersection would require approval from both the City of Los Angeles and the City of Culver City.

SAL00020-31

Comment:

Construction Traffic Impacts

17. The construction of the LAX modifications will coincide with the construction of the Route I-405 HOV project and Playa Vista, approximately two miles north of the airport [page 4-273]. Both construction contractors will use Sepulveda Boulevard and the San Diego Freeway for major haul/delivery routes and for employee commuter routes. Coordination between the constructions of the two large projects is not likely to be effective, because construction companies schedule operations for their own efficiency without regard to the real impacts on the general public. As stated in the report, "... the cumulative impacts from construction activities on the off-airport surface transportation system would still be significant and temporary." The construction periods during which the two projects (airport modification and Playa Vista) will overlap will be a minimum of five years. That is a long period to be labeled "temporary".

3. Comments and Responses

Response:

Mitigation measure MM-ST-14 recognizes the need to work with other area development projects such as Playa Vista to ensure that the cumulative impacts of construction are coordinated and minimized. Cumulative impacts are not expected to exist during every quarter of the project, and thus will be temporary. However, they may periodically occur throughout the length of the Playa Vista and Master Plan projects.

SAL00020-32

Comment:

18. According to Table S4.3.2-9 on page 4-270, there will be no truck deliveries or earthmoving trucks from 7 to 11 a.m. That is not a reasonable expectation, based on observable patterns of construction activities.

Response:

A footnote has been added to the Alternative D Summary of 2008 Airport Construction Trip Generation table in the Final EIS/EIR to clarify that this table reflects a worst-case condition with respect to the number of mid-day truck arrivals and departures. Mid-day construction trucks could arrive as early as 9:30 AM and depart as late as 4:30 PM. Truck trips could also shift from the mid-day period to nighttime hours.

SAL00020-33

Comment:

19. Based on Table S4.3.2-9, the truck movements between 12 a.m. and 7 a.m. would total 6% of the total daily movements. An estimated 73% of the truck movements would occur between 11 a.m. and 3 p.m. But, ST-12 on page 4- 248 states that "Truck deliveries will be concentrated during night hours ..." The peak hour for airport traffic will be 11 a.m. to 12 noon, and 18% of the truck movements " an average of 8 entering trucks plus 8 leaving trucks per minute " will occur during that hour. They will interfere with the peak passenger traffic flows.

Response:

A footnote has been added to the Alternative D Summary of 2008 Airport Construction Trip Generation table in the Final EIS/EIR to clarify that this table reflects a worst-case condition with respect to the number of mid-day truck arrivals and departures. Mid-day construction trucks could arrive as early as 9:30 AM and depart as late as 4:30 PM. Truck trips could also shift from the mid-day period to nighttime hours.

SAL00020-34

Comment:

20. Scheduling truck deliveries to not occur during four peak hours of the day [ST-12, page 4-248] does not adequately address the peak-period truck traffic problem. Many truck drivers will travel from remote supply depots to the airport vicinity during the peak periods in order to enter the airport boundaries during the allowable periods. When leaving, they will exit before the starts of the peak periods, but they will still be traveling on the freeway/street network to the remote locations during the peak periods. Additionally, the freeways and streets serving the airport area are congested during periods far longer than four peak hours per day. Additional and better mitigation measures are needed to adequately address traffic impacts from construction activities.

Response:

This comment is similar to comment AL00018-41. Please see Response to Comment AL00018-41.

SAL00020-35

Comment:

21. Remote parking areas for construction employees located up to 50 miles away from LAX are recommended [ST-13, page 4-248]. Aside from the improbability of those remote areas being attractive to and extensively used by employees, there is no analysis of the impacts of the added traffic at those remote locations, nor is there analysis of the impacts of the shuttle traffic between those locations and the airport.

Response:

This comment is similar to Comment AL00018-42. Please see to Response to Comment AL00018-42.

SAL00020-36

Comment:

22. Although the peak hours on the traffic system may be 8 to 9 a.m. and 5 to 6 p.m., the adjacent hours are also periods of high traffic volumes and congestion. For example, the 4 to 5 p.m. hour will be a high commuter traffic hour for both LAX construction workers and employees at other developments outside the airport throughout the region. That hour cannot be ignored. Analyses of construction traffic impacts during that hour are necessary.

Response:

The impacts of construction traffic were analyzed for the times of the day that represented the worst case conditions. To determine if any construction-related impacts would occur outside the three typical peak hours, an analysis was conducted to estimate traffic conditions on select roadways during the two construction peak hours. For further details of this analysis, please see Chapter 4.3.2 of the Supplement to the Draft EIS/EIR and, in particular, Section 4.3.2.2, "General Approach and Methodology."

SAL00020-37

Comment:

On-Airport Surface Transportation

23. Page 4-217. The analysis takes summer as the peak periods to be evaluated through out the document when construction is purported to be at its peak. There is no indication that the high construction period would not slip into the end-of-the year holiday period. The holiday period between Thanksgiving and New Years is recognized as placing a maximum demand on LAX resources. There is a reasonable expectation that construction will continue through this heightened period of travel. Consideration should be given to this scenario. In addition, the schools are typically not in session during summer months providing a benefit to ambient traffic surrounding the LAX. Ambient traffic surrounding the LAX is nominally worse during the holiday periods at the end of the calendar year.

Response:

One of the plan's mitigations is the creation of a Ground Transportation Construction Coordination Office. It is expected that this office would be of particular importance in assisting with the movement of traffic during the holiday season. Additional traffic control officers, changeable message signs, public information campaigns regarding construction activities, and increased use of real-time messages on the LAX Highway Advisory Radio are a few of the enhancements that can be considered to facilitate traffic during this unique period of the year.

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SAL00020-38

Comment:

24. Airport Parking. There were 847,394 vehicles accommodated in airport parking facilities in August 2000 (Page 4-222). Figure S4.3.1.2 indicates that at present the CTA parking facilities are almost 100% occupied.

The project (Page 4-225) causes demand to regularly exceed capacity on all airport parking facilities. This is true for employee parking and car rental lots as well. The possibility of increased vehicular circulation by motorists seeking parking needs to be evaluated and analyzed in the Draft Supplemental EIS/EIR.

Response:

As stated in Section 4.3, Surface Transportation (subsection 4.3.1.4), of the Supplement to the Draft EIS/EIR, the threshold of significance for public and employee parking, is met if the project causes demand to regularly exceed the capacity of the airport.

In Alternative D, public parking demand is expected to exceed the available parking capacity by only 1.8 percent, and then only during periods of highest demand. For the vast majority of the time, there will be sufficient parking. Mitigation measures such as an electronic parking space identification system would allow drivers to locate parking spaces more quickly as they become available.

This occasional imbalance is not considered a significant environmental impact because this small excess in demand does not regularly occur.

Under Alternative D, demand for rental car space does not exceed the capacity of the consolidated rent-a-car facility.

SAL00020-39

Comment:

25. The executive summary states that the new configuration of LAX would provide about 35,000 parking spaces, but does not mention the number of current parking spaces.

Response:

The number of public parking spaces under the environmental baseline is 20,279, which includes close-in parking (short and long term), remote public parking and private parking. For further information, please see Table 4.3.1-7 of Draft EIS/EIR.

SAL00020-40

Comment:

26. Construction Operations (Page 4-225). During this period the baseline/ambient traffic conditions on the off-airport roadway network will be aggravated to the level of breakdown. The resultant spillover will resonate through the flow of traffic on surface streets and adjacent Freeway operations. There is no mention in the Draft Supplemental EIS/EIR how or if this impact would be mitigated or reduced.

Response:

The Supplement to the Draft EIS/EIR details the on-airport mitigation measures that are proposed for the peak construction year of 2008 in Section 4.3, Surface Transportation (subsection 4.3.1.8).

The Commentor is concerned about spillover traffic from airport roadways interfering with surface streets and freeway operations. This situation regularly occurs during peak traffic periods at the airport currently, and would likely continue to occur more frequently and for longer periods of time under the No Action/No Project scenario. The peak year construction analysis seeks to mitigate the project's impacts, but should not be expected to resolve existing congestion.

SAL00020-41**Comment:**

27. Transit Operations (Page 4-227). All MTA buses will use the Green Line LRT Station as a transit facility. Will other municipal buses be given the same opportunity?

Response:

Whether other municipal buses be allowed to use the Green Line LRT Station as a transit facility will be the decision of the MTA. The ITC will also accommodate some regional transit buses. Details of the specific bus operations at this facility will be addressed during the design stage of the project.

SAL00020-42**Comment:**

28. RAC vehicles (Table S4.3.1-4). The on-airport rental car facilities can accommodate 9,000 ready/return spaces. Are the vehicles considered in Table S4.3.1-4 and if so, please indicate under which category?

Response:

The RAC vehicles are not included in Table S4.3.1-4. RAC vehicles are included in the off-airport analysis.

SAL00020-43**Comment:**

29. On page ES-27, it states, "The primary landside feature of Alternative D would be the relocation of all passenger ground access facilities from the existing Central Terminal Area to the east side of the airport, near I-405." Moving the main access facilities away from LAX proper is simply going to relocate the traffic concentrations to the local streets. The mitigation measures to address this issue have not been adequately provided.

Response:

With the current access to LAX, all vehicular traffic must use a surface street to enter the airport. Under Alternative D, freeway connections are provided which will allow drivers to travel from the freeway system directly into the GTC or ITC without stopping at any traffic signals. This will encourage airport-related traffic to use the freeways to enter the airport rather than surface streets. The traffic model results support this conclusion. The Supplement to the Draft EIS/EIR addresses the traffic mitigation plan in Section 4.3, Surface Transportation (subsection 4.3.2).

SAL00020-44**Comment:**

30. Page ES-27: All internal airport ground access facilities should operate at levels of service A or B, at the very least, since all public traffic will no longer exist here.

Response:

The levels of service discussed on Page ES-27 of the Supplement to the Draft EIS/EIR refer to the proposed on-airport roadways to the GTC and ITC. These roadways will accommodate public traffic. The roadways in the existing CTA will no longer accommodate public traffic. Although the traffic study does not detail the levels of service on the CTA roadways, it is expected that these levels of service would be A or B, since so few vehicles would be permitted to use these roads.

3. Comments and Responses

SAL00020-45

Comment:

31. On page 3-25, it states, "...the Mayor of Los Angeles, noting the need to fully examine a regional approach to satisfy air transportation demand..." Since this is a regional approach, as stated, the traffic influence and demand is also regional. Yet, the traffic study is confined to the LAX area.

Response:

The Supplement to the Draft EIS/EIR analyzes the regional freeway system in the Congestion Management Plan, in Technical Report S-2b, Supplemental Off-Airport Surface Transportation Technical Report.

SAL00020-46

Comment:

Transportation - Transit Operations

32. 4.3 Surface Transportation. While the Supplement to the Draft Environmental Impact Report does provide mitigation measures at several intersections through which Culver CityBus operates service, these mitigations measures alone are not enough to greatly improve the quality of or increase the use of public transit. If transit is expected to reduce the number of vehicles passing through intersections at peak times, it must offer its users the advantage of timesavings. The Culver City Transportation Department suggests the implementation of the Transit Priority System (TPS) at all intersections along its line 6 as a mitigation measure to LAX expansion. Over 1,200 daily trips are made on Culver CityBus' line 6 to and from the LAX Transit Center. Providing these and future passengers with greater timesavings will undoubtedly encourage more people to ride transit to and from LAX. By installing TPS along line 6, LAX would reinforce the message that transit is a preferred mode of travel to and from the airport. TPS is compatible with the Adaptive Traffic Control System, which is already programmed as a mitigation measure at several line 6 intersections.

Response:

LAWA will review the advantages of the Transit Priority System and consider its application as possible alternative mitigations at project-impacted intersections. Replacement of mitigations currently proposed in the Supplement to the Draft EIS/EIR would require approval by LADOT.

SAL00020-47

Comment:

33. As a means of accommodating more vehicles at impacted intersections, the Draft Supplemental EIS/EIR recommends that existing lanes be re-striped. The Culver City Transportation Department would strongly stress that lanes be wide enough to comfortably handle transit buses (at least 10') and at the same time, be equipped for bus pullovers at designated stops.

Response:

Striping plans will seek to accommodate lane widths of 10 feet minimum. Striping designs will require approval by the appropriate jurisdiction prior to installation. Bus pullovers will be considered where appropriate.

SAL00020-48

Comment:

34. The Draft Supplemental EIS/EIR repeatedly makes reference to the provision of "...fair-share contributions towards the MTA's proposed Metro Rapid Program or other enhancements to benefit transit traveling to and from LAX." The Transportation Department would like to see the specifics of

such enhancements discussed in further detail, particularly a reference as to whether or not LAX will provide fair-share funding to both the Metro Rapid Program and local line 6 transit.

Response:

Only discussions regarding the concept of fair-share contributions have taken place between LAWA and the MTA. Please see Response to Comment AL00008-6 regarding project funding.

SAL00020-49

Comment:

35. On page 4-283, the Year 2015 Alternative D Mitigation Plan refers to the Overland Avenue link south of Venice Boulevard as a location for "Fair-share contributions to regional transit." Does this refer to Culver CityBus' local line 3?

Response:

The regional transit service referred to in the recommended mitigation plan for this location may include local bus service, MTA express bus service, Metro Rapid Bus service, or any other service enhancement that will effectively reduce the number of vehicle trips on the facility. No specific service type or route has been identified as of this time, but will be determined at a later date in consultation with LACMTA and local transit providers.

SAL00020-50

Comment:

36. Section 4.3.1 On-Airport Surface Transportation. It is unclear in the document what date was used to analyze transit systems. Culver CityBus Line 6 serving this corridor had grown over 20% in ridership since 1993 to over 2 million passengers annually. The Draft Supplemental EIS/EIR should specify and use current municipal / regional transit data in the study to best reflect the true impact of transit service in and around the airport.

Response:

The rapid growth in ridership on Culver City Municipal Bus Lines has been considered in this analysis. Technical Report S-2b of the Supplement to the Draft EIS/EIR, on pages 18 and 19, specifically identified recent change to the system as well as recent growth in ridership.

SAL00020-51

Comment:

37. Section 4.3.1.6.2 Construction Impacts. It is unclear in the document whether traffic will be diverted from Sepulveda Boulevard during construction. With the assumption of LOS F on Sepulveda Boulevard, this would greatly affect the service of Culver CityBus Line 6 serving the Metro Green Station at Aviation and Imperial via Sepulveda Blvd.

Response:

It is not expected that traffic would be diverted off of Sepulveda Boulevard except perhaps during construction of the Automated People Mover across Sepulveda Boulevard. There may be times when Sepulveda Boulevard would need to be closed at night in a particular direction. These closures have occasionally taken place in the past, when construction work has taken place in the tunnel north of Imperial Highway. Detour signs, traffic control officers, California Highway Patrol, and changeable message signs are used to help reroute traffic during these closures, and this practice would be used for any project related closures.

3. Comments and Responses

SAL00020-52

Comment:

38. Page 4-237, Consistency with other Adopted Plans. Alternative D do not mention or include information contained in the plans of Culver City (General Plan or Short Range Transit Plan) or information contained in the MTA Long Range Plan.

Response:

LAWA coordinated with Culver City and their plans were accounted for. For additional information, please see Response to Comment AL00018-58 regarding Culver City plans and MTA's Long Range Plan.

SAL00020-53

Comment:

AIR QUALITY

1. Although Alternative D would cause less negative regional air quality impacts, the Supplement to the Draft EIR still fails to evaluate localized air pollution impacts on Culver City. No mitigation measures are proposed whatsoever.

Response:

Please see Response to Comment SAL00020-10 regarding mitigation measures.

SAL00020-54

Comment:

2. With the goal of encouraging transit use, one of the recommended mitigation measure components mentioned on page 4-392 is to, "Construct on-site or off-site bus turnouts, passenger benches, or shelters; include public outreach." Because a large percentage of passengers and employees driving to LAX must pass through Culver City, the City of Culver City would recommend any mitigation measure that reduces the number of trips to and from LAX via Culver City roads. Although making public transit more accessible to patrons via capital improvements is laudable, the possibility of an employer funded fare subsidy program for use on Culver City buses could potentially decrease the number of vehicle trips through our city significantly. Coupled with improved rapid express buses and proposed increased service frequencies, such fare incentives could dramatically reduce commuting trips along heavily impacted Culver City roads.

Response:

Please see Response to Comment AL00018-61 regarding traffic mitigation and Response to Comment SAL00020-10 regarding mitigation measures affecting Culver City.

SAL00020-55

Comment:

3. Page 4-387, 4.6.7 Cumulative Impacts. The Draft Supplemental EIS/EIR must take into consideration other planned developments such as I-405 HOV project and Playa Vista. During the initial construction year (2004), Playa Vista Phase II will likely be under construction. This would increase truck traffic as well as emissions relating to construction duties.

Response:

Please see Response to Comment AL00018-60 regarding cumulative impacts. Cumulative transportation impacts were analyzed following the requirements of NEPA and CEQA. They are discussed in Section 4.3.2.8 of the Draft EIS/EIR. In addition, please see Response to Comment PC00148-2 regarding cumulative impacts associated with Playa Vista Projects.

SAL00020-56

Comment:

4. Section 4.6, Air Quality. The plan provides mitigations only for the immediate area around LAX and not for the surrounding areas which could have impacts from increased congestion and air quality from increased air and mobile sources. We can only assume from the magnitude of this project that both air pollution and traffic congestion will increase. Whether the proposed mitigation measures will ease both (air pollution & congestion) is hard to say since the mitigation measures need to be approved by other entities (i.e. shuttle services, airlines, LAX employees, hotels, etc.).

Response:

Please see Response to Comment AL00018-61 regarding traffic mitigation.

SAL00020-57

Comment:

NOISE

Overflight Noise

1. Reviewing the "Current Standard and projected Assumed Flight Tracks" for Alternatives D of the Draft Supplemental EIS/EIR indicates a change in flight tracks over Culver City. Currently, there are two departure flight tracks (airplanes headed east) and no arrival flight tracks passing over Culver City. These two departure tracks are utilized when aircraft take-off in an easterly direction from LAX. Although take-offs to the east are infrequent, the current aircraft over-flight noise level impact and flight frequency within the City of Culver City from the two departure flight paths is not addressed or provided in the documents.

2. For Alternative D, Draft Supplemental EIS/EIR proposes two arrival and one-departure flight tracks passing over portions of Culver City. There is no data in the Draft SEIS/SEIR indicating projected aircraft over-flight noise levels or flight frequency within Culver City from these flight tracks. Existing and proposed aircraft over-flight noise data is needed to evaluate the magnitude of the noise impact of the flight track route changes over Culver City.

Response:

The commentor is correct. Tracks T1 and T2 are identified in Figure S2 Existing Flight Tracks and in Table S3 Flight Track Utilization Percentages - Year 2000 Conditions under the column labeled Departures (East Flow). Both sets of tracks identify a less than 0.05 percentage of usage. The commentor is correct in identifying that no over-flight noise levels are identified for the Culver City area. They were not addressed because projected noise levels in Culver City would be below the levels of significance defined by the Federal and State regulations (i.e., Culver City is located well outside the 65 CNEL contour and single event noise contours presented in Sections 4.1 and 4.2 of the Draft EIS/EIR and Supplement to the Draft EIS/EIR). Federal Aviation Regulations define compatible land use impacts based on noise from aviation activities, using the 65 dB Community Noise Equivalent Level.

SAL00020-58

Comment:

3. Based on the 1996 baseline, there are on average approximately 2,100 existing daily flights. This results in approximately 180 additional daily flights for the No Action/No Project and Alternative D options. For Alternatives A and B, there would be an increase of approximately 600 daily additional flights. For Alternative C, there would an increase of approximately 200 additional daily flights. The Draft Supplemental EIS/EIR should include a more up to date baseline figures (i.e. 2000) for existing flight operations.

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Response:

Comment noted. The year 1996 provides the environmental baseline for the Draft EIS/EIR and Supplement to the Draft EIS/EIR. Please see TR-GEN-1 regarding the use of 1996 as the environmental baseline. Section 2.1.5, Year 2000 Conditions Fleet and Aircraft Operations of Appendix S-C1, of the Supplemental Aircraft Noise Technical Report of the Supplement to the Draft EIS/EIR provides aircraft operations for Year 2000 conditions.

SAL00020-59

Comment:

4. The documents indicate that aircraft taking off in a westerly direction for an eventual destination in the east will follow what is referred to, as Loop 1 Departure Procedure, which may potentially impact Culver City. All aircraft flying the Loop 1 Departure Procedure routes climb immediately to 5,000 feet west of the airport over the Pacific Ocean and cross the shoreline. The aircrafts will then make a sharp loop resulting in an eastbound route directly above LAX. The aircraft will then follow an easterly departure route crossing directly over Culver City. This procedure is expected to be put in place during the next decade, regardless of the disposition of the LAX Master Plan Alternatives. The degree of negative impact to Culver City is uncertain at this time, as over flight noise levels or frequency of flights within Culver City were not addressed in the Draft Supplemental EIS/EIR. Therefore inadequate information was given to effectively evaluate the noise impacts of the Loop 1 Departure route over Culver City. A complete analysis is needed to quantify the potential for over flight noise impacts on Culver City.

Response:

Comment noted. Please see Response to Comment SAL00020-8 regarding aircraft operations and noise over Culver City.

SAL00020-60

Comment:

5. The Draft SEIS/SEIR noise sections needs to expand its discussion on the effect of aircraft noise on the quality of life and health, including the effects of sleep disturbance and education, on persons within the areas impacted primarily by CNEL 65 levels. There are no CNEL 65 areas within Culver City but the discussions of sleep disturbances from aircraft over flights of Culver City should be considered as a potential impact on the health and well being of some Culver City residents.

Response:

Please see Response to Comment AL00017-52 regarding the health effects of aircraft noise. Flight tracks over the Culver City area are identified in Section 2.1.3, Flight Tracks, of Appendix D, Aircraft Noise Technical Report, and in Section 3, Future Aircraft Operating Conditions, of Appendix S-C1, Supplemental Aircraft Noise Technical Report. Also, please see Response to Comment SAL00020-57 regarding flight tracks over the Culver City area. In addition, the Supplement to the Draft EIS/EIR addressed the effects of single event aircraft noise relative to nighttime awakenings and school disruption associated with the No Action/No Project Alternative and all four build alternatives in Section 4.1, Noise, and Section 4.2, Land Use, with supporting technical data and analyses provided in Appendix S-C1 and Technical Report S-1.

SAL00020-61

Comment:

6. The critical point concerning noise and Culver City is that the 65 CNEL noise measurement customarily used in assessing noise from airports does not fully capture the noise exposure likely to be experienced by the population. It represents a weighted average, and therefore discounts single noise events, that can be much higher in sound level. This is of significant concern relative to aircraft overflights over Culver City where short term, high level noise events add little to average sound levels but can impact a large population with intrusive noise impacts. The Draft Supplemental EIS/EIR fails to adequately address and analyze this issue in the City of Culver City.

Response:

The content of this comment is essentially the same as Comment AL00018-65; please see Response to Comment AL00018-65.

SAL00020-62

Comment:

PUBLIC SAFETY

Police

1. The primary concern of the police department with the LAX Expansion Project alternatives, including the new Alternative D, is traffic congestion. Traffic congestion significantly impacts the response time of police vehicles to emergency calls, which impact the quality of life in Culver City. The only two routes for response to the Fox Hills area from the east portion of Culver City are La Cienega Boulevard and Sepulveda Boulevard. Both of those streets are currently heavily congested during peak traffic hours and impact the response time of emergency vehicles to or from these areas.

Response:

As discussed in Section 4.26.2, Law Enforcement (subsection 4.26.2.7.3) of the Supplement to the Draft EIS/EIR, Alternative D would result in fewer significantly-affected surface transportation facilities (i.e., intersections, street links, freeway segments and freeway ramps) in 2015 than the No Action/No Project Alternative, and after mitigation would have the least number of significantly-affected facilities of any build alternative. Similar to the other alternatives, with mitigation of almost all project-related traffic impacts, Alternative D would serve, in some cases, to improve regional traffic flow compared to conditions that would exist if the Master Plan were not developed. Furthermore, the continued use of emergency vehicle sirens, alternate response routes during peak periods or congested conditions, and multiple station/jurisdiction responses when necessary, would be expected to facilitate adequate emergency access and response, as occurs under existing, albeit deficient, roadway conditions.

Regarding emergency response in the Fox Hills area of Culver City, in contrast to the other build alternatives, Alternative D does not involve the LAX Expressway and associated alterations to transportation facilities in this area. Furthermore, as indicated in Section 4.3, Surface Transportation (subsection 4.3.2.10.2) of the Supplement to the Draft EIS/EIR, the three intersections that would not be fully mitigated under Alternative D are proximate to the airport and are not located in or adjacent to Culver City.

SAL00020-63

Comment:

The Draft Supplemental EIS/EIR describes traffic conditions, during peak hours of certain road segments. The segment of Sepulveda Boulevard between Venice Boulevard and Centinela Boulevard is described in the report as follows: "Low volumes; primarily free-flow operations. Density is low, and vehicles can freely maneuver within the traffic stream. Drivers can maintain their desired speeds with little or no delay." That report is not accurate. In fact, the actual traffic conditions during peak hours fit the description of the Impact Report's worst conditions, as follows. "Forced-flow operations with high approach delays at critical signalized intersections. Speeds are reduced substantially, and stoppages may occur for short or long periods of time because of downstream congestion.

Response:

Table S4.3.2-4 of Chapter 4.3.2 of the Supplement to the Draft EIS/EIR acknowledges levels of service (LOS) from C to F on Sepulveda Boulevard south of Venice Boulevard for the year 2015 Adjusted Environmental Baseline condition. This same table has levels of service ranging from A to E for Sepulveda Boulevard south of Slauson Avenue for the 2015 Adjusted Environmental Baseline condition.

A roadway may operate as LOS A or B in one direction and E or F in the other direction. Congestion created by LOS E or F volumes in one direction will often result in operations that also cause

3. Comments and Responses

congestion in the opposite direction, even though the volumes are at LOS A or B. The LOS conditions provided in the report are based on volume and are correct as reported.

SAL00020-64

Comment:

All of Culver City's major roads lead to the LAX. Alternative D will cause increased traffic congestion and delays on all of Culver City's north/south through streets. The proposed Alternative D does not address our previous concerns. That is, traffic congestion will increase during all hours, not only at peak times. There will be increased congestion not only on our major streets but also increased vehicular traffic within our residential, park, and school properties throughout the City as a result of the proposed alternative.

As a result of the LAX improvements, there will be added congestion. This will degrade police emergency response times as well as increase demand for law enforcement services and staffing.

Response:

The traffic analysis in the Draft EIS/EIR is not required to study traffic for all hours of the day. The AM, PM, and airport peak times are considered the worst times for traffic during the day, and it is expected that if these impacts are mitigated, that the times when traffic is less severe will be mitigated as well. Regardless, the traffic analysis did not reveal a notable level of increased congestion on Culver City streets. The Supplement to the Draft EIS/EIR addresses traffic mitigation measures impacted locations in the analysis in Section 4.3, Surface Transportation (subsection 4.3.2) and Technical Report S-2b, Supplemental Off-Airport Surface Transportation Technical Report.

Therefore, it is not expected that Culver City emergency response times will be impacted as a result of the project.

SAL00020-65

Comment:

Fire

1. As far as comments on Alternatives A, B and C and the No Action/No Project Alternative, previous Fire Department comments on the January 2001 Draft EIS/EIR are still valid. A copy of those comments is forwarded along with these comments.

Response:

Comment noted. The referenced attachment was not included as part of comment letter SAL00020, nor were such referenced comments received previously during the public review comment period on the Draft EIS/EIR.

SAL00020-66

Comment:

2. Alternative D is scaled down and therefore has less of an impact to Culver City as compared to the other three alternative plans. However, traffic impacts associated with Alternative D would affect the Culver City Fire Department. More congestion will slow response times of Fire Department vehicles on City streets. The impacts to Culver City's emergency response times are not addressed in the Draft Supplemental EIS/EIR.

Response:

The traffic analysis did not reveal a notable level of increased congestion on Culver City streets. Therefore, it is not expected that Culver City emergency response times will be impacted as a result of the project.

The Supplement to the Draft EIS/EIR addresses traffic mitigation measures impacted locations in the analysis in Section 4.3, Surface Transportation (subsection 4.3.2) and Technical Report S-2b, Supplemental Off-Airport Surface Transportation Technical Report.

SAL00020-67

Comment:

OTHER

1. 4.4 Social Impacts: Business assistance services from LAWA, as a result of relocation, should include coordination with Culver City. The Bullet point (fifth from the bottom) should read: "LAWA will coordinate with the County of Los Angeles and the cities of Inglewood, Hawthorne, El Segundo, AND CULVER CITY to locate properties within their jurisdictions suitable for businesses displaced by the acquisition program (4.4.2.5 Master Plan Commitments, RBR-1, Residential, and Business Relocation Program, Page 4-306).

Response:

While LAWA appreciates the City of Culver City's interest, those jurisdictions that are listed in Master Plan Commitment RBR-1 were identified as first priority relocation sites in the interest of locating businesses as proximate to the airport as possible. If suitable sites are not available, other nearby sites in the South Bay or Culver City would be considered.

SAL00020-68

Comment:

2. In response to the NOP/NOI to prepare the Draft EIS/EIR issued in June 1997, Culver City requested in a letter dated July 31, 1997, that major issues and concerns related to traffic, air quality, overflight operations, regional context, and other subject areas impacting Culver City be analyzed in the preparation of the Draft EIS/EIR. None or minimal analysis of the issues the City requested to be analyzed are contained in the January 2001 Draft EIS/EIR or the 2003 Draft Supplemental EIS/EIR. Further, Culver City's NOP/NOI comment letter is not contained in Appendix A of the 2001 Draft EIS/EIR, where copies of written comments from affected agencies are contained.

Response:

The content of this comment is essentially the same as that of Comment SAL00020-14; please see Response to Comment SAL00020-14.

SAL00021 de la Loza, James Metropolitan Transportation Authority 11/7/2003

SAL00021-1

Comment:

This letter conveys the Los Angeles County Metropolitan Transportation Authority's (MTA) comments concerning issues that are germane to our agency's statutory responsibilities.

The following issues should be addressed in the Final EIS / EIR, including transportation project programming and funding, the Metro Green Line extension, intermodal service interface and planning, facility capacity and utilization, and planning methodology.

Response:

Comment noted. Please see Responses to Comments below.

3. Comments and Responses

SAL00021-2

Comment:

1. Transportation Project Programming and Funding. The Master Plan relies on numerous transportation mitigation projects that lack sufficient detail to determine their feasibility. Los Angeles World Airports (LAWA) should clarify which transportation projects have committed funds programmed, the source of those funds, and which projects lack full funding and/or have not completed the environmental review process.

Response:

A specific funding plan has not yet been prepared for the Master Plan; however, it is anticipated that a joint funding effort will be pursued, involving Federal and State grants and other efforts. Much of the project will likely be funded with airport-generated revenues, such as concession fees, landing fees, revenue bonds, leases, and passenger facility charges (PFCs). It is not anticipated that any local tax revenue would be used for this project.

SAL00021-3

Comment:

2. Metro Green Line Extension. There is no discussion in Alternative D regarding any future extension of the Metro Green Line. The Master Plan should address a possible Green Line station located at the new Ground Transportation Center (GTC), so that airport-bound Green Line passengers coming from the north would not have to overshoot the GTC by alighting at the current Aviation Green Line station. In addition, LAWA should ensure that construction of the automated people mover (APM) would not preclude the potential extension of the Green Line. It should be noted that the proposed alignment for the APM crosses the MTA-owned Harbor Subdivision right-of-way. This is an active rail line presently operated by BNSF, which has perpetual operating rights.

Response:

Comment noted. Alternative D would not preclude the MTA from extending the Green Line northerly in its right-of-way along the west side of Aviation Boulevard. MTA staff will be invited to participate in the advanced planning of Ground Transportation Center.

Please see Response to Comment SPHL00022-2 regarding the most feasible alignment of the Green Line.

SAL00021-4

Comment:

3. Intermodal Service Interface and Planning. MTA would like to coordinate more closely with LAWA on the expansion of the Fly-Away program. In particular, Metro Rapid service interface issues and MTA's proposed hub- and-spoke bus restructuring should be explored. Specific locations for new Fly-Away routes should be identified.

Response:

LAWA welcomes the opportunity to coordinate with the MTA on expansion of the FlyAway program. In fact, discussions between LAWA and the MTA have already occurred regarding Union Station and a Metrolink Station in Chatsworth.

SAL00021-5**Comment:**

4. Transit Facility Capacity and Utilization. Alternative D states that the new GTC would handle 60% of airport-access passenger trips, while the new Intermodal Transportation Center (ITC) would handle 30% of airport-access passenger trips. Assuming that airport-access passenger trips using public transportation are now less than 5%, the Final EIR / EIS should justify this assumption about future ridership and explain how public transit agencies will meet this huge increase in new passenger demand.

Response:

The Supplement to the Draft EIS/EIR depicts the percentage of originating and departing passengers using various modes of travel in Table S17 of Technical Report S-2a, On-Airport Surface Transportation. Under Alternative D, between 4.3 percent and 4.6 percent of originating and departing passengers are expected to use public transit. The largest percentage of airport passenger trips to the ITC and GTC consists of private vehicles. See Table S18 of Technical Report S-2a for the estimated number of vehicles during the peak hours to the proposed airport facilities, by vehicle type.

SAL00021-6**Comment:**

5. Metro Rail Demand. Alternative D calls for Green Line added capacity of 30% and Blue Line added capacity of 50% by the year 2015. LAWA should clarify whether this assumes improvements beyond the Blue Line's current three-car train operation. In addition, the Final EIR /EIS should explain how the additional Green Line capacity will occur.

Response:

The capacity increases referred to in this comment came from Table S5 in Technical Report S-2b of the Supplement to the Draft EIS/EIR. This table identifies anticipated expansions of transit service throughout the study area that were incorporated into the Adjusted Environmental Baseline. These expansions are not associated with the LAX Master Plan, either as project elements or as mitigation measures, but are assumed to occur whether or not the LAX Master Plan is implemented.

As Footnote 1 for Table S5 states, the projected capacity increases are based on service objectives provided by LACMTA to the LAX Master Plan design team. It is beyond the scope of this project to determine how the MTA's objectives would be accomplished.

SAL00021-7**Comment:**

6. LAX Transit Center. LAWA proposes to eliminate the existing LAX transit center near Lot C and incorporate it into the new ITC. LAWA should coordinate with MTA on this, since this will affect MTA's operations, routing, deadheading, and operational costs.

Response:

Comment noted. LAWA will coordinate with the MTA during the design of the ITC.

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SAL00022

Schanen, Patrick

**Los Angeles Unified School
District**

11/7/2003

SAL00022-1

Comment:

Attached please find the Los Angeles Unified School District's (District) comments on the above referenced project. The focus of the our comments relate to the inadequacy of the air toxic analysis and subsequent risk assessment prepared for the proposed project.

The District also acknowledges the concerns raised by the Inglewood Unified School District (IUSD) relating to increased noise on educational facilities in proximity of its schools. The District believes that concerns raised by the IUSD are relevant to its schools located within proximity of the airport facility.

It is the District's charge to protect the health and safety of its students and staff, and the integrity of the learning environment. As such, the District requests that the document be revised to effectively address the impact of toxic air contaminants and noise on our local schools.

The District appreciates your consideration of our comments.

Response:

With respect to the commentor's specific comments on the air toxics analysis and associated human health risk assessment, please see Responses to Comments SAL00022-2 through SAL00022-6 below.

With respect to comments from the Inglewood Unified School District, please see Responses to Comment Letter SAL00017.

SAL00022-2

Comment:

Supplement to the Draft EIS/EIR-Los Angeles International Airport Proposed Master Plan Improvements: Assessment of Air Quality Impacts.

In response to your request to assess the adequacy of the air quality element for the above referenced project, the following is provided.

Upon review of available documentation provided in the supplement to the Draft EIS/EIR, staff identified a critical flaw in the dispersion model methodology utilized to characterized the generation of toxic air pollutants from aircraft operations. This technical flaw, in conjunction with the applicant's failure to characterize the generation of toxic air pollutants associated with on-road mobile source activity, underestimates the potential human health impacts from exposure to toxic air contaminants related to the implementation of the proposed project. Additionally, the Draft EIS/EIR does not provide the necessary technical documentation/information to permit a thorough review as required under CEQA guidance.

The following discussion documents staff's assertion that the assessment of toxic air pollutants is without merit and relevant documentation to permit a review of the applicant's dispersion modeling analysis was not readily available for public examination.

Response:

Comment noted. Please see Responses to Comments SAL00022-3 through SAL00022-5 below.

SAL00022-3

Comment:

The dispersion modeling methodology is flawed and fails to appropriately assess the generation of toxic emissions from aircraft operations.

To assess carcinogenic and noncarcinogenic exposures, the applicant utilized a predictive model or mathematical simulation to estimate the dispersion of toxic air emissions and quantify their relative concentrations throughout the local community. Although staff believes that dispersion modeling is the appropriate analytical approach to assess pollutants generated from an airport landing facility, the choice of model and associated input values will dictate the viability of the simulation.

For this assessment, the applicant employed the Industrial Source Complex Short Term (ISCST3) dispersion model. ISCST3 is a United States Environmental Protection Agency (U.S. EPA) "guideline" model used to predict pollutant concentrations from an array of emission sources (i.e., point, area and volume). However, to characterize each source, discrete input values must be entered by the user. For example, to account for the heat generated from jet aircraft exhaust, the applicant attempted to approximate the initial plume rise of various aircraft engines based upon a heat balance approach to produce a theoretical buoyancy flux and corresponding vertical exit velocity of the exhaust gas. The resultant exit velocity along with various source parameters (i.e., release height, exhaust temperature, stack diameter) were programmed into the model's point source algorithm to characterize "on-ground" (i.e., taxi/idle and takeoff) and "in-air" (i.e., approach and climbout) aircraft emissions. The identified release parameters utilized to assess the impact of aircraft emissions is provided in the original Draft EIS/EIR, Technical Report 4.

To assess the adequacy of the applicant's approach, staff identified the initial height of the exhaust plume for the on-ground aircraft/engine size categories (i.e., small, medium and large) corresponding to the lowest identified equivalent vertical exit velocity. This procedure was also recommended by the applicant who reports in their Technical Report, that utilizing the data "in Table VIII, plume rise can be calculated using the standard plume rise formulas presented in ISCST3 User's Guide." Results of staff's review indicate that for all aircraft/engine size categories, calculated plume heights from a horizontal source are excessive and physically impossible. Table 1 outlines the predicted plume heights for the above referenced aircraft/engine size categories. Supporting calculation worksheets are presented in Attachment A.

[see original document for calculation worksheets]

Table 1 Calculated Initial Plume Heights (units expressed in meters)

[see original document]

As noted above, the initial plume heights extend from 23.72 meters (77.8 feet) for small jet aircraft operating in the taxi/idle mode to 517.774 meters (1698.7 feet) for larger aircraft during takeoff roll. Clearly, these values are without merit. To exemplify staff's concern, the U.S. Department of Transportation, Federal Aviation Administration (FAA) released a letter report in October 2002 entitled "Preliminary Report: The use of LIDAR to characterize aircraft initial plume characteristics." Although the LIDAR study reports "significant" plume rise occurs, until an "additional follow-on analysis" is conducted, a single value of 12 meters (39.4 feet) be utilized for large commercial and commuter aircraft.

As such, this recommendation was incorporated into FAA's EDMS model version 4.1. As reported in the September 30, 2002 EDMS Reference Manual Supplement entitled Model Changes between EDMS 4.05 and EDMS 4.1, it was reported:

Previously, the release height and the initial vertical dispersion coefficient were based on best available information and good engineering judgment. Based on results of an aircraft plume behavior study performed using Light Detection And Ranging (LIDAR) aircraft plume behavior can be more accurately characterized through revised model defaults for release height and the initial vertical dispersion coefficient.

The model change bulletin continues by stating that:

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Previously, the release height was airframe dependent and set to the average engine centerline height. In EDMS 4.1, the release height has been set to 12 meters for all aircraft types. This is meant to compensate for plume rise in buoyant jet and turboprop exhaust, since the LIDAR study concluded that significant plume rise occurs and was not being accounted for.

Noting the relevance of utilizing an appropriate plume height to assess pollutant dispersion from aircraft operations, the applicant's initial height approximations are excessive and inconsistent with FAA guidance.

To exemplify, staff prepared a comparative analysis of modeled concentrations based upon the applicant's point source parameters with those currently recommended by the FAA. Due to the applicant's failure to provide relevant model input data (see discussion regarding technical documentation below) to reprogram the model utilizing the revised plume height for each source location, the analysis compared the relative difference in downwind concentrations for each on-ground aircraft/engine size category. To account for the revised plume height, the source release height was set to 12 meters and the exit velocity was limited to a nominal value of 0.001 meters per second to limit momentum flux. Additionally, the exhaust temperature was set to 0 to negate the effects of thermal buoyancy. This value will cause the ISCST3 model to set the exit temperature equal to the ambient temperature for each hour in the meteorological data set. For each source, a unitized emission rate was used to characterize the hydrocarbon exhaust stream.

A polar grid receptor network consisting of 36 direction radials was programmed to identify receptors at 500, 750, 1000, 1250 and 1500 meters. Hourly surface weather data from the South Coast Air Quality Management District's Lennox monitoring station was incorporated into the modeling exercise to represent local weather conditions and prevailing winds.

Tables 2 and 3 present the results of the comparative analysis. As noted below, the relative percentage increase from the original model configuration is considerable for all aircraft/engine size categories.

Table 2 Maximum Period Values (units expressed in micrograms per cubic meter)
[see original document]

Table 3 Maximum One Hour Values (units expressed in micrograms per cubic meter)
[see original document]

As such, staff contends that the applicant's dispersion analysis characterizing the generation of toxic air pollutants is flawed and clearly underestimates the impact of aircraft emissions on the local community. A copy of the dispersion model input and output files is presented in Attachment B.
[see original document for dispersion model input and output files]

Response:

Sensitivity analyses that address the potential impact of modified plume height from aircraft will be included in the Final EIS/EIR.

SAL00022-4

Comment:

The assessment fails to address the generation of toxic air emissions from on-road mobile sources.

Notwithstanding the questionable adequacy of the applicant's assessment of aircraft emissions, they also fail to recognize and subsequently assess the generation of toxic air pollutants from vehicular traffic associated with the proposed project.

There is a body of documentation acknowledging that vehicular sources generate toxic air pollutants. In fact, in a 1994 environmental fact sheet entitled Air Toxics from Motor Vehicles, the U.S. EPA estimated that "mobile (car, truck, and bus) sources of air toxics account for as much as half of all cancers attributed to outdoor sources of air toxics." In the recent South Coast Air Quality Management District (SCAQMD) Multiple Air Toxics Exposure Study (MATES II), it was reported that:

The contribution to risk is dominated by mobile sources (e.g., cars, trucks, trains, ships, aircraft, etc.). About 70% of all risk is attributed to diesel particulate emissions; about 20% to other toxics associated with mobile sources (including benzene, butadiene, and formaldehyde); about 10% of all risk is attributed to stationary sources (which include industries and other certain businesses such as dry cleaners and print shops.)

The California legislature (SB 352, Escutia 2003) has also recognized the potential impact associated with exposure to mobile source emissions by establishing a statutory "standard of care" for assessing the impact of toxic pollutants on students and school-based staff located near roadways.

Clearly, vehicular sources associated with the proposed project may contribute significantly to the impacts of toxic emissions throughout the local community. The applicant has the obligation to provide a comprehensive evaluation of all sources of toxic emissions associated with the proposed project. There is no basis to omit this source category from consideration.

For your reference, staff has attached the above referenced U.S. EPA fact sheet and recommends that the applicant contact representatives from the U.S. EPA's Office of Air Quality Planning and Standards, the California Air Resources Board, as well as the SCAQMD for guidance in preparing an appropriate assessment.

Response:

The Draft EIS/EIR and the Supplement to the Draft EIS/EIR addressed air quality impacts including emissions of toxic air pollutants from on-road mobile sources, in Section 4.6, Air Quality, with supporting technical data and analyses provided in Appendix G and Technical Report 4 of the Draft EIS/EIR and Appendix S-E and Technical Report S-4 of the Supplement to the Draft EIS/EIR. The Draft EIS/EIR and Supplement to the Draft EIS/EIR addressed surface transportation impacts in Section 4.3, Surface Transportation, and noise impacts in Section 4.1, Noise.

Please refer to Section 4.24.1 (subsection 4.24.1.8) of the Supplement to the Draft EIS/EIR for recommended mitigation measures. Recommended mitigation measures would reduce TAP emissions primarily by reducing exhaust emissions from mobile sources and reducing traffic congestion near the airport.

SAL00022-5

Comment:

The Draft EIS/EIR fails to provide the necessary technical documentation to permit a complete examination of the applicant's dispersion model analysis.

Section 15147 of Title 14 of the California Code of Regulations provides guidance regarding the technical detail contained within an EIR. As reported in the guidelines:

The information contained in an EIR shall include summarized technical data, maps, plot plans, diagrams, and similar relevant information sufficient to permit full assessment of significant environmental impacts by reviewing agencies and members of the public. Placement of highly technical and specialized analysis and data in the body of an EIR should be avoided through inclusion of supporting information and analyses as appendices to the main body of the EIR. Appendices to the EIR may be prepared in volumes separate from the basic EIR document, but shall be readily available for public examination and shall be submitted to all clearinghouses which assist in public review.

Although staff appreciates the applicant's attempt to disclose its "highly" technical documentation in the various appendices to the Draft EIS/EIR, an essential portion of their analysis was not available for public examination. To effectively evaluate the results of a model analysis, one must examine the actual input and output files to confirm its consistency with a prescribed methodology or identify discrepancies contrary to that methodology.

It also allows the reviewer to reprogram the model with revised input values to produce a comparative analysis which may serve as the basis to challenge its adequacy. Although staff was able to identify a serious flaw in the applicant's modeling analysis, it was limited to a review of written documentation

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without benefit of evaluating the actual model data. Staff believes that access to this information may have led to the identification of additional inadequacies in the applicant's analysis.

To underscore the relevance of staff's contention, the SCAQMD CEQA Air Quality Handbook references the assessment methodology utilized under the Air Toxic "Hot Spots" Information and Assessment Act (AB 2588, Connelly 1987) to address air toxic exposures within the context of a CEQA analysis. The guidance document entitled Air Toxic Hot Spots Program Risk Assessment Guidelines Part IV: Technical Support Document Exposure Assessment and Stochastic Analysis (OEHHA, 2000) provides detailed discussion on various aspects of air dispersion modeling including requirements for report submittal. Specifically, the guidance reports air dispersion modeling results shall include but not be limited to 1) model printouts (numbered) including annual concentrations and maximum hourly concentrations and 2) electronic media (disk) with input/output files for the air dispersion program (e.g., the ISCST3 input file containing the regulatory options and emission parameters, receptor locations, meteorology, etc.).

Although inclusion of this data is customary, the applicant did not provide nor make publicly available this information to permit a full evaluation of the impacts of toxic air emissions on the local community.

Response:

Please see Section 4.6, Air Quality, Appendix S-E, and Technical Report S-E of the Supplement to the Draft EIS/EIR for information on modeling parameters. Air emission and dispersion modeling files are included as part of the administrative record.

SAL00022-6

Comment:

Staff trusts that the preceding analysis demonstrates the inadequacy of the applicant's air toxic assessment and provides relevant documentation to challenge is adequacy.

Response:

Comment noted. Please see Responses to Comments above.

SAL00023

Brann, Don

City of El Segundo

11/3/2003

SAL00023-1

Comment:

In 1999, the City of El Segundo created the LAX Master Plan Advisory Commission, a citizen advisory panel charged with the task of reviewing and commenting on the EIS/EIR process related to the development of the LAX Master Plan. In September 2001, LAXMAC issued a detailed letter commenting on the Draft EIS/EIR issued in January of the same year. In response to the "Supplement to the Draft Environmental Impact Statement/Environmental Impact Report Los Angeles International Airport Master Plan" released by Los Angeles World Airports (LAWA) in August 2003, LAXMAC offers this comment letter.

LAXMAC is intended as a citizen body that will consider and relate the day-to-day concerns of the residents of the City of El Segundo with respect to the ongoing EIS/EIR process. Accordingly, the comments and opinions stated in this letter are generally non-technical in nature. An additional and more formal comment letter stating the City of El Segundo's technical and legal concerns with the Draft Supplement to the EIS/EIR will be sent under separate cover.

The following is an overview of the concerns identified by LAXMAC during its review of the Supplement:

Response:

Comment noted. The City of El Segundo's August 21, 2001 comment letter on the Draft EIS/EIR is identified as comment letter AL00027. For responses to these comments, please see comment letter AL00027. For responses to the City of El Segundo's comments on the Supplement to the Draft EIS/EIR, please see Responses to Comments below.

SAL00023-2

Comment:

Proposal to move southern most runway (25L) fifty-feet south will reduce quality of life of El Segundo Residents

Perhaps the most troubling proposal outlined in the Supplement for El Segundo residents is the relocation of the southernmost runway (25L) fifty-feet closer to the northern border of the City of El Segundo. Currently, the western terminus of that runway lies approximately 700 feet from residences in the City. The noise and disruption experienced by those residents is well documented. The proposed relocation of the runway will result in at least 55 additional residents being pushed into the 75 CNEL noise contour. The only mitigation proposed by LAWA to deal with the additional noise appears limited to additional residential sound insulation funding. The members of LAXMAC have determined that proposed mitigation to be a wholly inadequate response to the additional noise issues created by the runway location. Traditionally, the City of El Segundo has not accepted residential sound insulation funds from LAX because of the avigation easement requirement imposed by LAWA as a condition of residents' accepting the money. At a minimum, LAXMAC urges strongly that LAWA reconsider the policy of requiring residents to execute an avigation easement prior to receiving residential sound insulation funding provided by LAX.

Response:

The commentor is correct that the south airfield runway 7R/25L would be relocated 50 feet south of the existing centerline under Alternative D, as described on Table S3-2 of the Supplement to the Draft EIS/EIR. It is not clear how the commentor determined that at least 55 additional residents would be exposed to the 75 CNEL noise contour since no residents in the City of El Segundo would be exposed to the 75 CNEL under Alternative D, as shown on Table S49 in Technical Report S-1, Supplemental Land Use Technical Report of the Supplement to the Draft EIS/EIR.

Existing noise levels under 1996 baseline and Year 2000 conditions and noise impacts under Alternative D were presented in Section 4.1, Noise, and Section 4.2, Land Use, of the Draft EIS/EIR and Supplement to the Draft EIS/EIR. Supporting technical data and analyses are provided in Appendix D and Technical Report 1 of the Draft EIS/EIR and Appendix S-C and Technical Report S-1 of the Supplement to the Draft EIS/EIR.

Regarding the adequacy of mitigation, as analyzed in Section 4.2 (subsection 4.2.6) of the Supplement to the Draft EIS/EIR, under Alternative D no significant noise impacts would occur in the City of El Segundo and in fact, overall noise levels in El Segundo would be reduced compared to 1996 baseline, Year 2000 conditions, and the No Action/No Project Alternative (see Table S4.2-29 of the Supplement to the Draft EIS/EIR). Therefore, no additional mitigation measures are proposed to address City of El Segundo noise impacts from LAX operations. However, as stated on page 12 of Technical Report S-1, Supplemental Land Use Technical Report, the suspension of avigation easement requirements in exchange for funding of residential sound insulation for the City of El Segundo is currently under study by LAWA as a condition of the 2001 Noise Variance. In addition, with the approval of the LAX Master Plan, under mitigation measure MM-LU-1, the requirement for granting of avigation easements with sound insulation mitigation would be reevaluated by LAWA.

See also Responses to Comments PC01377-9 for further discussion of potential noise impacts on the City of El Segundo, AL00006-2 regarding current measures underway to address existing high aircraft noise levels, TR-LU-1 regarding impacts on quality of life, and TR-LU-3 regarding sound insulation under the ANMP.

SAL00023-3

Comment:

In addition, the members of LAXMAC do not fully accept the "safety" justification for relocating the runway. The Supplement indicates that the runway is being relocated to provide additional separation between 25L and 25R for the purpose in constructing additional taxiway space between the two runways. The taxiway space is said to be required because of a series of runway incursions occurring at

3. Comments and Responses

LAX. While the members of LAXMAC accept that runway incursions may have occurred on the airfield, the commission believes that they are few in number and minor in nature. LAWA has failed to document that any of the incursions are "Class A" near-miss incidents. Accordingly, LAXMAC is on record as disagreeing with the justification stated in the Supplement for relocating runway 25L further south.

Response:

The Category A runway incursion referred by the commentor is classified by Federal Aviation Administration (FAA) as the highest severity when extreme action is needed to avoid a collision or if a collision occurs. Five of the 38 runway incursions at LAX during the period of the 2002 FAA report were in this category and none of them resulted in a collision. Over 80 percent of these incursions took place on the south airfield complex. LAX ranked first as the airport that had the greatest number of runway incursions for the four-year period based on 2002 FAA Safety Runway Report. The goal of FAA is to raise awareness of runway incursions, identify solutions, and implement strategies to reduce their severity and frequency as well as the risk of a runway collision. Please see Topical Response TR-SAF-1 regarding runway incursion at LAX. Airport surface radar technology and airport infrastructure implementation at LAX are some of the strategies identified by FAA to help solve the problem. Los Angeles World Airports (LAWA) has already implemented improvements to airfield lighting, taxiway marking, runway signage, and has sponsored on-going seminars on airfield familiarization with airport users. Taxiway system configuration is one of the key infrastructure methods to solving the problem. The purpose of moving the southernmost runway approximately 55 feet south is to gain enough separation for a center taxiway to enhance safe aircraft operations and reduce the potential for runway incursion.

SAL00023-4

Comment:

Additionally, many El Segundo residents are concerned about the additional noise emanating from cargo carriers as a result of the runway relocation. LAXMAC has determined that a large number of cargo flight operations are conducted during the evening hours, and that a significant percentage of aircraft used for that purpose are pre-Stage III planes that meet the FAA guidelines due the installation of "hush kits." The committee believes the combination of a relocated runway, noisy aircraft and nighttime operations will impact deleteriously the quality of life in El Segundo. To address those issues, it is imperative to consider such mitigations as restrictions on evening cargo operations and more stringent implementation of Stage III aircraft noise standards.

Response:

The commentor is correct that under three of the four build alternatives (Alternative A, C & D) Runway 7R/25L would be relocated to the south. However, by 2015 each build alternative even with the runway relocation shows a reduction in acreage exposed to noise levels of 65 CNEL or greater in El Segundo. This information is provided in greater detail in Section 4.2, Land Use, of the Draft EIS/EIR and Supplement to the Draft EIS/EIR and the related Land Use Technical Report and S-1, Supplemental Land Use Technical Report. The fleet mix forecast (which includes air cargo) shows that each runway scenario, fleet mix, and time-of-day operations were taken into consideration. Please see TR-N-1 regarding noise modeling approach. Although loud, the hushkitted aircraft may have been originally certified as Stage 2. However, they do meet FAA criteria as Stage 3 aircraft under FAR Part 36 and are compliant with federal noise rules as defined in the Airport Noise and Capacity Act of 1990. For a local community to attempt to put a restriction on evening operations or hushkitted Stage 3 aircraft, completion of a 14 CFR Part 161 access restriction study by LAWA and its acceptance by the FAA would be required. LAWA has recently initiated a Request For Qualifications to prepare a 14 CFR Part 161 Study for Los Angeles International Airport. LAWA is seeking to establish a partial curfew at LAX that would prohibit the easterly departure of all discretionary aircraft, with certain exemptions, between the hours of 12:00 Midnight to 6:30 a.m. when LAX is in Over-Ocean Operations. During a recent 18-month period, 82 jets departed to the east when over-ocean procedures were in effect, an average of about one per week. When over-ocean procedures are not practicable for reasons of adverse weather or winds (as defined in Section 4, of LAWA's Aircraft Noise Abatement Operating Restrictions), aircraft will continue to depart to the east between midnight and 6:30. Please see Topical Response TR-N-5, regarding nighttime aircraft operations. In addition, please see Sections 4.1, Noise and 4.2, Land Use, and Appendix SC and Technical Report S-1 of the Supplement to the Draft EIS/EIR for impacts of single events on nighttime awakenings. It is anticipated that the hushkitted aircraft will be gradually phased out of the operating fleet by the end of the planning period. For additional information on this subject,

please see Topical Response TR-N-7, regarding noise abatement measures/enforcement in particular Subtopical Response TR-N-7.6, regarding ANCA phase-out of Stage 2 aircraft.

SAL00023-5

Comment:

The members of LAXMAC questioned also why the Supplement did not include an examination of the end around taxiway concept. It may be possible to meet the taxiway requirements of the airfield in the scenario painted by Alternative D by constructing end around taxiways at the western terminus of runways 25L and 25R. In such a configuration, it would likely not be necessary to provide additional separation between the runways, thus eliminating the need to relocate 25L south. The members of LAXMAC have urged the completion of a full noise study, including single event noise issues and end around taxiways. It is a concern of the members of LAXMAC that the noise created by heavy aircraft accelerating to make the grade heading south to north might create even more noise issues for the residents who make their homes near the western terminus of the runways. As mentioned previously, many live within 700 feet of the runway and there is little margin for error with respect to noise created on the airfield. Nonetheless, it is certain that the end around taxiway concept is worth additional study.

Response:

Of the two potential taxiway improvements mentioned by the commentor, the end-around taxiway was found to increase noise impacts on El Segundo residential land uses from taxiing aircraft.

Please see Response to Comment SPHF00038-3 regarding the potential noise impacts of moving Runway 7R-25L 55 feet south and discussion of a separate LAWA study addressing noise impacts from the center taxiway and the end-around taxiway.

SAL00023-6

Comment:

1996 Baseline Year not adequate for an EIS/EIR issued in 2003

In its comments forwarded in 2001, the members of LAXMAC expressed serious concerns that the 1996 baseline year established as the benchmark was not adequate for mitigations in an EIS/EIR document published five years later. Those concerns still hold - and in fact become more exacerbated with the passage of time. In addition, the problem seems to be complicated by inconsistencies within the Technical Supplements included within the Supplement. Specifically, in some instances, the baseline year appears to have been updated to the year 2000.

Spot checking throughout the document seems to indicate that the update in baseline year was made in those instances when it benefited LAWA in presenting a plan to properly mitigate known impacts. One example of such is the inclusion of year 2000 noise data in some of the appendices. That is noteworthy because aircraft following the implementation of Stage III noise mitigation measures are generally quieter than they were in 1996. While the members of LAXMAC have not undertaken a thorough examination of the Supplement to determine if such changes in baseline year analysis was made throughout, the Commission does have concerns that changes were made in some cases to conveniently ease the burden of proposed mitigations.

For the record, the members of LAXMAC believe that the baseline year for data analysis in all instances should be more recent than 1996 - irrespective of the impact on the EIS/EIR process.

Response:

Please see Topical Response TR-GEN-1 regarding baseline issues, including the adequacy of the 1996 baseline and the presentation of Year 2000 conditions in the Supplement to the Draft EIS/EIR. As indicated in the topical response, the 1996 baseline was used as the basis for conclusions regarding the significance of impacts in both the Draft EIS/EIR and the Supplement to the EIS/EIR, as well as for identifying mitigation measures. However, for updated comparative purposes, the Supplement to the Draft EIS/EIR included a description of the more current physical environmental conditions in the vicinity of the proposed project. Year 2000 conditions were considered for all environmental disciplines, not only those disciplines where use of a more current year would be beneficial in reporting project impacts.

3. Comments and Responses

For example, the total number of people exposed to project-related noise is greater when compared to Year 2000 conditions than when compared to the 1996 baseline. This is due to the reduction in noise levels in the Year 2000 with the phase out of Stage 2 aircraft. In instances where Year 2000 conditions are materially different from those of the 1996 baseline conditions, such differences are described in the Supplement to the Draft EIS/EIR, as are any material differences in the impacts that would result by using the Year 2000 conditions compared to the 1996 baseline conditions.

SAL00023-7

Comment:

Supplement does not consider that all proposed measures will not be funded

The members of LAXMAC share the concerns expressed by the County of Los Angeles that the Supplement should indicate that planned mitigations may not be feasible, and that the LAX Master Plan should be approved with overriding considerations if planned transportation projects do not come to fruition. The Supplemental discusses the construction of an off ramp at the 405 Freeway and Lennox Boulevard, improvements adjacent to the Marina Freeway and numerous local traffic signal coordination and intersection improvements. Given this current period of economic malaise, especially at the State level, it is counterintuitive to assume funding will remain available for many of those projects. LAXMAC believes this to be especially true locally with respect to several planned transportation projects. The Supplemental should be clearer in identifying available revenue sources and must include a plan should such the anticipated funding not come to pass. The commission opposes going forward with the construction of Alternative D with sufficient assurances of mitigation not based on what may be illusory future funding.

Response:

If a traffic mitigation does not receive the required approvals, an alternative mitigation will be identified. Additional environmental analysis and approval by LADOT would be required for substitute mitigations.

Please see Response to Comment AL00008-6 regarding project funding.

SAL00023-8

Comment:

Alternative D likely to create unanticipated traffic issues

The Supplement states that that an essential component of the plan's congestion relief package is the relocation of almost all passenger-related vehicle traffic to the east of the central terminal via the new ground transportation center, the intermodal transportation center and consolidated rental car facility. The rationale behind the plan is that the new facilities will be located near the I-405 and I-105 freeways, thus encouraging related airport traffic to stay on those major freeways "rather than offload onto adjacent arterial streets." In addition to the potential that several of the improvements necessary to implement the plan (most notably an off ramp at 405/Lennox and a flyover from 405 to 105 east) may not be constructed, it is simply not logical to conclude that traffic headed toward LAX will stay on the freeways.

Consider the following: LAX is currently operating at approximately 60 MAP. The capacity of the airport under Alternative D is asserted by LAWA to be 78.9 MAP. The commute on the I-405 south and the I-105 west near LAX is currently congested during peak travel hours and, of course, holiday travel periods. The City of El Segundo has learned from experience that drivers during those periods simply exit the freeway during times of congestion and access Sepulveda Boulevard, Aviation Boulevard, Imperial Highway, and other streets seeking access to the airport. Accordingly, it stands to reason that an approximate 30% increase in passenger volume handled at the airport, will lead to increased traffic on the two adjacent freeways and adjacent major arterials. It stands to reason as well, that moving the major vehicle transportation centers closer to the freeways will serve to add to the congestion on those freeways during peak travel hours, thus rendering specious the claim in the Draft Supplement that drivers will be inclined to remain on the freeway for longer periods of time. Ironically, the Supplement itself seems to provide additional evidence supporting that contention by stating that the ground

transportation center would have "direct access to Century Boulevard, La Cienega Boulevard, and Imperial Highway."

The members of LAXMAC seek not to quibble with the technical analysis here, although the City of El Segundo's technical consultant will provide specific critiques of the modeling. Rather, the Commission seeks more tangible and fully funded mitigation measures aimed at reducing traffic in the intersections of the major arterials adjacent to the airport. Those issues will be documented more thoroughly in separate comment letter on behalf of the City of El Segundo.

Response:

The traffic analysis prepared for the Draft EIS/EIR and the Supplement to the Draft EIS/EIR is based on the AM, PM, and airport peak hours. There is no direct correlation between the volume of peak hour traffic and the MAP level of the airport.

The proposed Lennox Boulevard interchange will encourage airport traffic to use the I-405 freeway over the surface streets. Airport passengers will be able to travel from the freeway to the GTC or ITC without stopping at any traffic signals. In general, the traffic model indicates that as airport-related traffic increases on the I-405 Freeway, non-airport related traffic shifts to the parallel surface streets. However, the impact of these interchanges on surface streets is limited to a small area. The project also calls for widening surface streets in the vicinity of the GTC and ITC, including Aviation Boulevard, La Cienega Boulevard, Arbor Vitae Street, and 111th Street to improve the movement of traffic on surface streets. It is not the responsibility of the project to mitigate existing freeway congestion.

The Supplement to the Draft EIS/EIR includes an alternative mitigation plan in case the Lennox Boulevard Interchange is not approved. This alternative mitigation plan contains a greater number of intersectional improvements over those proposed in the mitigation plan which includes the Lennox Boulevard Interchange.

Also, please see Response to Comment AL00008-6 regarding funding.

SAL00023-9

Comment:

Supplement does not address impacts created by construction of the project

The Alternative D proposal is an extraordinarily large project, and phasing of the construction will lessen only a portion of the inevitable impacts of the construction itself. It is clear that many of those issues would be addressed on a day-to-day basis when and if construction of the project commences. However, the members of LAXMAC believe that such issues as the re-routing of traffic and the noise of construction equipment on and adjacent to the work site have been addressed inadequately as a part of the EIS/EIR process. Those types of impacts can be anticipated, and thus planned appropriately.

Response:

Comment noted. Please see Response to Comment AL00033-210.

SAL00023-10

Comment:

Supplement does not support a truly regional airport plan

Finally, the members of LAXMAC have determined that the Supplement does not seek to seriously promote a regional airport plan despite language to the contrary in the Executive Summary. The Commission believes that the Supplement and LAWA should discuss seriously a scenario in which cargo operations are shifted to outlying facilities in Ontario and Palmdale. LAWA operates airports in those two cities and purports to seek an increase in the capacity and use of those facilities. Yet, curiously, there is no mention in the Supplement of efforts to induce airlines to utilize those facilities in lieu of LAX.

3. Comments and Responses

Frankly, it is almost inconceivable that such inducements are not discussed as potential mitigation measures addressing the impacts anticipated following the construction of the Alternative D proposal.

LAXMAC views that omission as evidence of the lack of creative thinking that went into the document. During the past five years, work has been completed on such projects as the Alameda Corridor and it is troubling to note that little effort has been made to incorporate those assets in the Master Planning process. For example, the Commission received information on a plan to build an air cargo facility at the Los Angeles Harbor, wherein goods could be shipped directly from the harbor via the Alameda Corridor. Granted, it is an unconventional proposal that would face significant obstacles prior to implementation. However, it represents the type of "out-of-the-box" thinking that seems so lacking in the Supplement.

Response:

The Draft EIS/EIR and the Supplement to the Draft EIS/EIR deal only with the proposed development of LAX. Cargo cannot be moved simply to suit the needs of the airport. Please see Topical Response TR-RC-5 regarding LAWA's efforts to encourage operations at Palmdale, planned improvements at the airport and nearby by LAWA and Caltrans, and the Master Plan update that is currently underway. LAWA is working with the all-cargo airlines and LAX freight forwarders to encourage the use of Ontario for cargo destined for or originating near the airport. LAWA cannot force these companies to use Ontario. An update of the master plan for Ontario is currently underway. The ONT Master Plan will recommend the needed improvements to meet the demand projected for Ontario as part of the Master Plan process for both passengers and cargo. The local community supports the airport's growth, and Ontario has the potential to capture a much larger share of total regional demand. Space is available for terminal and cargo facility development. Expansion at Ontario, Palmdale, or any of the other regional airports will not negate the need for modernization of LAX.

SAL00024

Agle, Andy

City of Santa Monica

11/6/2003

SAL00024-1

Comment:

The Supplement includes environmental analysis of Master Plan Alternative D, the Enhanced Safety and Security Plan, which is designed to constrain passenger and cargo capacity at LAX and enhance safety and security.

The City of Santa Monica's August 1, 2001 comment letter regarding the original Draft Environmental Impact Report / Environmental Impact Statement ("Original Report") is enclosed. Our previous letter detailed the Original Report's failure to fully analyze the environmental impacts of the Master Plan and to provide acceptable mitigation for impacts on Santa Monica. The Supplement continues to ignore environmental impacts and appropriate mitigation measures related to surface transportation, general aviation, and induced socio-economic impacts. As these concerns are detailed in our previous letter, we will not repeat them here. However, we would like to emphasize some of the analytical failures of the Supplement.

Response:

Comment noted. The City of Santa Monica's August 1, 2001 comment letter on the Draft EIS/EIR is identified as Comment Letter AL00005. For responses to these comments, please see comment letter AL00005. For responses to the City of Santa Monica's comments on the Supplement to the Draft EIS/EIR, please see Responses to Comments SAL00024-2 through SAL00024-5 below.

SAL00024-2

Comment:

First, the Supplement fails to analyze the surface transportation impacts of Alternative D. As was the case with the Original Report, the Supplement ignores transportation impacts upon any of Santa Monica's intersections, in spite of our early identification of intersections to be analyzed. The Original Report and the Supplement must analyze these intersections and identify appropriate mitigation measures.

Response:

Please see Topical Response TR-ST-2, and in particular, Subtopical Response TR-ST-2.2 regarding the facilities included in the analysis. The study area was established using appropriate methods for an intermodal transfer facility such as LAX.

SAL00024-3

Comment:

As is the case under Alternatives A, B, C, Alternative D proposes a reduction in total acreage committed to General Aviation from the current 14 acres to approximately 6 acres.

Response:

Comment noted. The reduction in GA facility acreage is associated with the apron area and not with the footprint of the buildings. All Master Plan Alternatives would accommodate two general aviation facilities. The existing 144,000 square foot facility, currently occupied by Garrett Aviation, at Imperial and Sepulveda would remain under Alternatives A, C, and D. In addition to the existing facility, Alternatives A and C would add a new facility in a different location. Alternative A would add a new 75,000 square foot facility on Imperial Highway east of Main Street. Alternative C would add a new 100,000 square foot facility located at the southeast corner of Sepulveda and Century Boulevards. Alternative B would accommodate two new 86,000 square foot facilities at the northwest corner of Century and Aviation Boulevards. Alternative D would add a new 121,000 square foot facility on north of Imperial Highway and west of Sepulveda Boulevard. Under all build alternatives, all forecast GA demand is projected to be met.

SAL00024-4

Comment:

As detailed in our previous letter, the continued displacement of General Aviation operations from LAX will have significant environmental consequences for Santa Monica Airport and the City of Santa Monica. The Original Document and the Supplement must evaluate these impacts, especially in the areas of noise, surface transportation, airspace safety and air quality, and propose appropriate mitigation measures.

Response:

Increased activity at other airports would be in response to projected market demands, not the proposed Master Plan improvements. Please see Topical Response TR-GEN-4 regarding potential impacts on other airports as a result of the LAX Master Plan.

SAL00024-5

Comment:

In addition, business concerns about the effectiveness of the security measures proposed under Alternative D could increase the number of business travelers who choose private jet travel, resulting in even greater use of Santa Monica Airport and associated environmental impacts.

Response:

Comment noted. Please see Topical Response TR-GEN-4 regarding potential environmental impacts at surrounding other airports as a result of the LAX Master Plan and Topical Response TR-SEC-1 regarding security issues.

3. Comments and Responses

SAL00025 Stern, Douglas City of Rancho Palos Verdes 11/6/2003

SAL00025-1

Comment:

The future of LAX and its impact upon traffic congestion, noise and air pollution, and human safety in the air and on the ground are of great interest to the City Council and residents of Rancho Palos Verdes. The City Council submitted a comment letter dated September 20, 2001 regarding the LAX Master Plan Draft EIS/EIR.

On November 5, 2003 the City Council of Rancho Palos Verdes reviewed key components of the Draft Supplemental Environmental Impact Report for the LAX Master Plan, Alternative "D". On behalf of the City Council and residents of Rancho Palos Verdes, I respectfully submit the following new concerns for consideration in the final EIS/EIR.

Response:

Comment noted. The City of Rancho Palos Verdes' September 20, 2001 comment letter on the Draft EIS/EIR is identified as Comment Letter AL00043. For responses to these comments, please see comment letter AL00043. For responses to the City of Rancho Palos Verdes' comments on the Supplement to the Draft EIS/EIR, please see Responses to Comments SAL00025-2 through SAL00025-5 below.

SAL00025-2

Comment:

1. 1996 Baseline Data inadequate for EIS/EIR

The draft EIS/EIR document predominately utilizes 1996 data as the benchmark for mitigation considerations and comparisons between Alternatives. However, in some instances the baseline year has been updated to year 2000. We feel the EIS/EIR should establish a consistent baseline year throughout the document and that year should be the most current available.

Response:

Please see Topical Response TR-GEN-1 regarding baseline issues, including the adequacy of the 1996 baseline and the presentation of Year 2000 conditions in the Supplement to the Draft EIS/EIR. As indicated in the topical response, the 1996 baseline was used as the basis for conclusions regarding the significance of impacts in both the Draft EIS/EIR and the Supplement to the EIS/EIR. However, for updated comparative purposes, the Supplement to the Draft EIS/EIR included a description of Year 2000 conditions.

SAL00025-3

Comment:

2. Supplemental EIR Non-Compliance with CEQA

While the City applauds Mayor James Hahn's initiative to develop Alternative "D", in response to the September 11th terrorist attacks, the City believes the proposed plans under Alternative "D" are significantly different from the other LAX Master Plan Alternatives "A", "B", and "C" and therefore incomparable in purpose and vision. The City concurs with the South Bay Cities Council of Governments that a new revised draft EIS/EIR should have been prepared to review Alternative "D" and it's comprehensive impacts instead of addressing Alternative "D" in a Supplement to the 2001 Draft EIS/EIR.

Response:

Please see Response to Comment SAL00013-31 regarding the suitability and appropriateness of using the Supplement to the Draft EIS/EIR for addressing Alternative D.

SAL00025-4

Comment:

3. Capping Growth at 78 Million Annual Passengers

The goal of limiting passenger capacity through design control measures seems implausible given that the runway designs of Alternative "D" are similar to Alternative "C". While both Alternatives lengthen both north runways and the separation distance in between, Alternative "D" actually extends one runway (RW 6L/24R) nearly 1,000 feet more than Alternative "C". We believe the capacity of the Alternative "D" runways is underestimated at 78.9 million annual passengers and more comparable to Alternative "C" projection of 89.6 million passengers. In addition, the proposed runway improvements of Alternative "D", unlike Alternative "C", accommodates the new Super Jumbo A380 aircraft with about 600 seats, which will increase the number of passengers per aircraft operation. Considering the capacity growth potential of these runway improvements, the City is unclear how forecasts in 2015 (121.06 passengers per air carrier operation) can be lower than the actual number of passengers per air carrier operation in year 2002 (123.18 passengers).

Response:

Please see Response to Comment SPHF00021-3 regarding Alternative D runway operations.

Alternative D would accommodate the same number of commercial passenger design day aircraft operations as Alternative C. However, the annual passenger totals accommodated by Alternative D is constrained to 78.9 MAP due to assumed market/airline response to constrained gate facilities. Though the ability to increase aircraft size, thereby increasing passenger levels, would be limited by the number and type of available gates in Alternative D, market forces provide the ultimate constraint.

The source of the commentor's figure of 123.18 passengers per operation for 2002 is unclear.

SAL00025-5

Comment:

4. Security Measures

The enhanced security measures and improvements advocated by Alternative "D" seem counterintuitive. The emphasis of centralizing major components, such as passenger check-in and parking structures, may potentially create unfavorable conditions for a single point of possible disruption, i.e. the proposed People Mover circulation system. The RAND Corporation conducted an independent study of the proposed security measures and determined that security would not increase from current LAX safety levels. The City requests LAWA and the FAA to take into consideration the RAND Corporation Study findings.

Response:

This comment does not raise or pertain to any environmental issues that are subject to NEPA or CEQA review requirements. Notwithstanding, please see Topical Response TR-SEC-1, which addresses the most frequently raised security-related issues pertaining to the design and ability of Alternative D to enhance existing safety and security at LAX.

SAL00025-6

Comment:

As a member of the LAX Community Noise Roundtable, the City supports the attached comment letter, which more fully addresses the omissions and deficiencies of the Supplement to the Draft EIR.

Response:

Comment noted. Please see responses to comment letter SPC00236.

3. Comments and Responses

SAL00025-7

Comment:

Lastly, the City Council of Rancho Palos Verdes believes a regional solution for addressing increased passenger and air cargo demand is essential for Southern California and again requests LAWA and the FAA to consider a regional airport system as a viable alternative in the discussion of the LAX Master Plan.

Response:

The decision whether to develop an airport or not, is the responsibility of local government, not the federal government. The FAA does not have the authority to create a regional system plan. FAA's statutory responsibility is to ensure the safe and efficient use of navigable airspace.

LAWA only controls the operations and potential improvements at LAX, Ontario, Palmdale, and Van Nuys airports. Other jurisdictions are responsible for developing the other regional airports. Master plan updates are currently underway for both Ontario and Palmdale airports in order for these airports to address their part of the projected regional demand. LAWA has planned Alternative D to be in compliance with SCAG's 2001 and Draft 2004 RTP allocations to LAX. It is up to the other regional airport operators to meet a larger percentage of the regional demand. See Topical Response TR-RC-1 regarding LAX and the other airports in the region, and Topical Responses TR-RC-1 and TR-RC-5 regarding planning for Ontario and Palmdale.

SAL00026

Okazaki, James

City of Los Angeles

11/7/2003

SAL00026-1

Comment:

The City of Los Angeles Department of Transportation (LADOT) has reviewed the Supplement to the Draft Environmental Impact Statement / Environmental Impact Report (DEIS/DEIR) for the LAX Master Plan project. LADOT has worked closely with Los Angeles World Airport (LAWA) staff and their consultants to develop an acceptable off-site traffic impact analysis for the preferred project alternative (Alternative D) and to prepare a transportation mitigation program designed to address the anticipated traffic impacts of the proposed modernization of the Los Angeles International Airport. Also, LADOT will continue to work with LAWA staff, their consultants and Caltrans in the development of any necessary Project Study Reports for the proposed freeway system improvements.

Since this is a supplement to a Program DEIS/DEIR, several detailed design matters will be evaluated and finalized at a later date. It is during the development of the engineering plans that the feasibility of several of the key infrastructure improvement proposals can be determined. For these reasons, LADOT and the Department of Public Works should be consulted in the preparation and evaluation of the final designs of the key transportation elements of the preferred LAX Master Plan alternative, including the proposed:

- Automated People Mover System
- Internal Airport Roadway System
- I-405 Freeway / Lennox Boulevard Interchange
- Inter-Modal Transportation Center
- Ground Transportation Center
- Commercial Vehicle Holding Area
- Consolidated Rental Car Facility

LADOT offers the following comments on the LAX Master Plan DEIR/DEIS:

Response:

Comment noted. Surface transportation impacts were addressed in Section 4.3, Surface Transportation, of the Draft EIS/EIR and Supplement to the Draft EIS/EIR, with supporting technical data and analyses provided in Technical Reports 2 and 3 of the Draft EIS/EIR and Technical Reports S-2a and S-2b of the Supplement to the Draft EIS/EIR. In addition, please see Response to Comment AL00043-3 regarding proposed traffic improvements for off-airport roadways and Topical Response TR-ST-2 regarding surface transportation analysis methodology.

SAL00026-2

Comment:

GENERAL COMMENTS

1. MITIGATION PHASING PLAN

To ensure that the full build-out of the LAX Master Plan project does not take place until all of the required transportation improvements are implemented, a mitigation implementation plan showing when transportation improvements will be guaranteed and constructed commensurate to the level of development has been developed (Table S4.3.2-13 on page 4-284 of the Main Document) was prepared in consultation with LADOT. Any changes to the phasing plan shall require approval by LADOT.

Response:

Comment noted.

SAL00026-3

Comment:

2. PROJECT DESIGN / QUEUING ANALYSIS

LADOT should be consulted early in the advanced planning and design process of the key infrastructure features of Alternative D. It is recommended that queuing analyses, subject to review and approval by LADOT, be conducted before the final designs of the new internal airport roadways that provide access to/from the Intermodal Transportation Center, the Ground Transportation Center, the consolidated Rental-Car facility, and the Commercial Vehicle Holding Area. The queuing analyses will assist in determining the need for future traffic signals, intersection turn lanes, acceleration and deceleration lanes, and necessary transition lengths. The private airport roadways shall be designed in a manner to provide adequate merge/weave distances, lane storage capacities and turn radii to avoid queuing and spill-over problems onto the public roadway system.

Response:

LAWA will work closely with LADOT during the planning and design of the key infrastructures features.

SAL00026-4

Comment:

The automated people mover (APM) system should be designed and constructed to minimize disruption and vehicle delay on the public roadway and transit system. The APM system should be elevated above street level and there should be no at-grade crossing of public roadways.

Response:

Agreed. It will be the responsibility of the Ground Transportation Construction Coordination Office, proposed as a mitigation to the project, to facilitate traffic on surface streets during project construction.

It is not expected that the proposed APM would cross any surface street at-grade.

3. Comments and Responses

SAL00026-5

Comment:

The parking and driveway plans for the consolidated Rental-Car (RAC) facility should be designed to comply with LADOT standards and to minimize any possible conflicts between users of the RAC facility and users of the abutting street system. The site plans for the RAC facility are subject to review and approval by both LADOT and the Bureau of Engineering.

Response:

Comment noted.

SAL00026-6

Comment:

3. RELATED PROJECTS - PLAYA VISTA

The Notice of Preparation for the second phase of the Playa Vista project was released in November 2002. The proposed land use for this project is now significantly reduced from an earlier project description. The traffic forecasts for the LAX Master Plan traffic impact analysis assume the earlier, larger Playa Vista Phase 2 land use definition. In doing so, the LAX Master Plan traffic analysis may significantly and conservatively overstate the projected traffic volumes along the I-405 Freeway, Jefferson Boulevard, Lincoln Boulevard, Centinela Avenue, and Sepulveda Boulevard. It is recommended that an additional traffic model assignment be prepared to reassess the anticipated LAX Master Plan project impacts along these key corridors and at the Alternative D study intersections. This would require that the future environmental baseline and Alternative D scenarios be re-analyzed to include the correct project definition for Playa Vista Phase 2.

Response:

Comment noted. LAWA acknowledges that the mitigation plan proposed in the Supplement to the Draft EIS/EIR may overstate the projected volumes on the I-405 Freeway and major arterials near Playa Vista; hence, the mitigation plan currently proposed for Alternative D is conservative.

SAL00026-7

Comment:

4. LINCOLN CORRIDOR TASK FORCE

The Lincoln Corridor Task Force (LCTF) was formed to join several agencies in an effort to address the increasing congestion along a five-mile stretch of Lincoln Boulevard between Manchester Avenue and the Santa Monica (I-10) Freeway and to determine the long-term transportation needs of the corridor. The LCTF includes representatives from Caltrans, the County of Los Angeles, the Cities of Los Angeles, Culver City and Santa Monica, the Los Angeles County Metropolitan Transportation Authority, the Southern California Association of Governments, and the California Coastal Commission. Ultimately, the LCTF's goal would be, with consensus from the participating agencies and input from the public, to develop a mutually agreeable transportation improvement plan for Lincoln Boulevard which may include an array of capacity enhancing measures, transit enhancement strategies, and improved corridor aesthetics.

If and when the agencies of the LCTF are successful in adopting a mutually agreeable set of transportation improvements for the Lincoln Boulevard corridor, the proposed LAX Master Plan improvements along the corridor should be reexamined to explore the option of constructing some or all of the LCTF improvements in lieu of the LAX Master Plan improvements if it is determined by LAWA and LADOT that (1) the LCTF improvements are regionally superior, and (2) they fully or partially mitigate the project-related traffic impacts of the LAX Master Plan project. By contributing to the implementation of the improvement plan developed by the LCTF, the LAX Master Plan can address the

project-related impacts along Lincoln Boulevard by fully or partially reducing traffic impacts with the improvements developed by the LCTF.

Response:

LAWA would welcome the recommendations of the Lincoln Corridor Task Force and would be willing to review their implementation as an alternative to the proposed mitigation plans where appropriate and subject to approval by the FAA with respect to use of airport revenue.

SAL00026-8

Comment:

5. AVIATION BOULEVARD RIGHT OF WAY

The proposed reconfiguration of the airport should preserve the right-of-way for the existing BNSF rail structure along the west side of Aviation Boulevard. To allow for future connectivity of transit rail lines, preserving this right-of-way would maintain the opportunity for MTA or other agency to connect rapid transit corridors to the north.

Response:

Alternative D preserves the MTA's right-of-way along the west side of Aviation Boulevard.

SAL00026-9

Comment:

6. TAXICAB GENERAL PRIORITIES FOR THE COMMERCIAL VEHICLE HOLDING AREA

LADOT staff should be consulted early in the design process of the Commercial Vehicle Holding Area (CVHA). Key elements that should be considered when planning and designing the CVHA are:

- The taxicab holding lot should have a capacity of at least 125 vehicles.
- To operate effectively and efficiently, the taxicab holding lot and dispatching booth must be in close proximity to the taxi stands serving LAX.
- Taxi stands must be in close proximity to baggage claim area exits.
- Currently, there are fewer than 60 vehicle spaces for taxicabs in the CTA. We recommend no fewer than 75 spaces - either in the CTA or, if required to use the Ground Transportation Center, in close proximity to passenger exit areas.
- There must be adequate (i.e., easily discernable and strategically placed) signage inside and outside the terminal building(s) directing passengers to taxicabs.
- There should not be any co-mingling (i.e., there must be separation) of private vehicles and taxicabs.
- There should be separation of vehicles of the different types of commercial ground transportation operators. Buses, limousines, vans, hotel/motel and rental car courtesy vehicles and taxicabs must each have their own separate locations for picking up passengers - which they can enter and exit without conflicting with each other. Note: buses, limousines and vans can coexist peacefully, as they do now, in a general holding lot area.
- There should be a phone line(s) from the taxi stands to the taxicab holding lot facility for potential off-peak passenger service.

In addition, special consideration should be made to allow City-franchised taxicabs limited access to the Central Terminal Area (CTA). With extensive driver background checks and a state of the art screening system for each taxicab entering the CTA, the overall project goal of safety and security can be achieved. Allowing secure City of Los Angeles taxicabs to serve the CTA may further reduce traffic

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demands at the Ground Transportation Center (GTC) and at the Intermodal Transportation Center (ITC).

Response:

LAWA will consult with LADOT staff early in the planning and design stages of the Commercial Vehicle Holding Area. Please see Response to Comment SAL00026-23 regarding allowing taxicabs in the Central Terminal Area under Alternative D.

SAL00026-10

Comment:

7. PROJECT TRIP GENERATION - THRESHOLD

The amount of airport traffic generated during peak commuter hours, not airport Million Annual Passengers (MAP), is the indicator used by LADOT to determine significant traffic impacts and surface street congestion levels. If Alternative D is approved, LADOT recommends that LAWA staff, in consultation with LADOT, develop "trip monitoring and management" strategies to: (1) further reduce the airport-bound vehicle trips; and/or (2) provide additional transportation improvements when established peak hour trip generation threshold levels are exceeded. These strategies can include additional Fly-Away Shuttle locations, Intelligent Transportation Systems improvements, intersection improvements, and/or Transportation Demand Management (TDM) strategies promoting ride-sharing for airport employees. To efficiently and accurately monitor the threshold levels, pavement embedded detector loops or equivalent should be installed to electronically record vehicle entry/exit rates at key entry/exit points to airport facilities including, but not limited to, the Ground Transportation Center (GTC), Intermodal Transportation Center (ITC), Rental Car Facility, etc.

Response:

Comment noted.

SAL00026-11

Comment:

8. INTELLIGENT TRANSPORTATION SYSTEMS

To enhance the transportation infrastructure improvements associated with the proposed project, Intelligent Transportation Systems (ITS) should play a key role in the overall modernization of the airport. ITS strategies (including computerized signal and surveillance systems, changeable message signs, and highway advisory radio) can provide improved incident management and route guidance for airport-bound motorists. Also, an effective ITS program can help to appropriately direct airport-bound traffic on the principal roadways designed to carry heavy volumes of traffic and off of the local residential streets.

Response:

LAWA agrees that Intelligent Transportation Systems should be incorporated into the design of the overall ground transportation system of Alternative D.

SAL00026-12

Comment:

COMMENTS ON CHAPTER 4 (MAIN DOCUMENT)

9. ALTERNATIVE D LEVELS OF SERVICE

Some of the intersection level-of-service (LOS) results summarized in Table S4.3.2-4 (page 4- 254 to 4-258) do not match with the results that were approved by LADOT prior to the release of this report. LAWA staff and traffic consultants should work with LADOT to remedy these discrepancies.

Response:

LAWA and LADOT staff, together with members of the consultant team, met to review the LOS results and resolve any apparent discrepancies. Per LADOT's request, a reanalysis has been performed for some intersections in which ATSAC/ATCS improvements have been added to the Adjusted Environmental Baseline and have been removed from the recommended mitigation plan. Other reviews have been performed as well, including a re-examination of all intersections with fair-share transit contributions and the incorporation of new intersection analyses requested by other commentors. As a result of this reanalysis, some modifications have been made to Attachments D, E, and F of Technical Report S-2b. These modifications do not change the number of significant impacts, although they do cause minor changes to some of the recommended mitigation measures. Modifications to Attachments D, E, and F of Technical Report S-2b as well as supporting LOS calculation worksheets are provided in Appendix F-C, Errata to the Draft EIS/EIR and the Supplement to the Draft EIS/EIR, of this Final EIS/EIR. A summary of the revised traffic impact analysis and mitigation plan is provided in Section 4.3.2, Off-Airport Surface Transportation, of this Final EIS/EIR.

SAL00026-13

Comment:

10. CONGESTION MANAGEMENT PROGRAM

Starting on page 4-261, in the Congestion Management Program (CMP) Analysis, the report identifies the CMP arterials and the CMP Freeway Monitoring Locations. However, the CMP Arterial Monitoring Stations are not listed. These intersections should be identified in the CMP Analysis and should be analyzed consistent with the CMP guidelines for transportation impact analysis. This comment also applies to the Technical Report 2b and is repeated below.

Response:

The CMP analysis for Alternative C was prepared and documented in Section 6 of Technical Report 3b of the Draft EIS/EIR. A list of CMP arterial monitoring intersections was provided in the documentation. However, not all of those CMP intersections were studied in the analysis. Those intersections that are located within the LAX Tier I study area were analyzed in detail as part of the project's traffic impact study, and are shown with an asterisk. The CMP analysis for Alternative D is consistent with the CMP analysis for Alternative C in that it studied CMP intersections in the Tier I study area. So as to not imply that every intersection in the list of CMP monitoring intersections was studied in detail, the list of CMP monitoring intersection locations was removed in the documentation of the CMP analysis for Alternative D in Technical Report S-2b. However, to address the Commentor's concern, the list of intersections that were analyzed as part of the project's traffic impact analysis which are also CMP arterial monitoring intersections has been included as a footnote to Table S4.3.2-6 in the Final EIS/EIR.

SAL00026-14

Comment:

11. TRANSIT ENHANCEMENTS

In Tables S4.3.2-11 and S4.3.2-12 (pages 4-275 to 4-284), it is indicated that several of the significant traffic impacts resulting from Alternative D can be mitigated through a fair-share contribution to MTA's Metro Rapid Bus Program or to other regionally significant transit enhancements. Many of these significant traffic impacts are expected along Lincoln and Sepulveda Boulevards, which are two corridors included in MTA's 5-year plan for deployment of the Metro Rapid Bus Program. Expansion of the existing transit system, through additional buses and improved signal operations providing priority treatment for buses, can serve as an effective vehicle trip-reduction measure. However, it is unclear if the proposed transit enhancements would augment existing bus routes operated by other providers, by new service offered by the airport, or by a combination of the two. LAWA should work with MTA, LADOT and with the other local-area bus service providers to investigate these options.

A key aspect of the proposed Alternative D project is the expansion of the LAX Fly-Away program. New remote locations are being evaluated in Downtown Los Angeles, Norwalk, and in the Cities of Long Beach and Inglewood. Also, a second Fly-Away terminal is being considered in the San Fernando Valley area. Since Alternative D would restrict CTA access to all vehicles other than the Fly-Away

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buses, there is a clear incentive for airport-bound travelers to travel to LAX via the Fly-Away buses. Therefore, should the proposed fair-share transit enhancements described above not be implemented, expansion of the Fly-Away program, beyond the proposed remote terminals described above, can serve as a reasonable substitute mitigation measure to provide an attractive alternative for airport-bound passengers through limited-stop service using buses equipped with luggage racks that travel along the Lincoln and Sepulveda corridors.

It should be noted that the future transit mode-split assumptions in the development of the year 2015 Alternative D traffic forecasts are conservative. With the door-to-door convenience afforded to the passengers of the Fly-Away buses, the true trip-reduction benefit of the program may be higher than assumed in the traffic impact analysis.

Response:

Comment noted. LAWA appreciates LADOT's suggestion that increasing the number of airport passengers using FlyAways above the conservatively low percentage used in the traffic model could be used as an alternative mitigation to the fair-share transit contributions now proposed in the traffic mitigation plan. LAWA and LADOT will work together as needed to calculate the acceptable mitigation credit for increasing the percentage of FlyAway passengers beyond what was assumed in the traffic study (6.4 percent of domestic originating and terminating passengers and commuters, 9.5 percent of international originating and terminating passengers).

SAL00026-15

Comment:

12. MITIGATION PROPOSAL FOR FACILITY #45

In Table S4.3.2-11, on page 4-276, the mitigation proposal for the intersection of the I-105 Freeway ramp/Continental City and Imperial Highway (facility #45) includes the upgrade of the traffic signal to operate under LADOT's Adaptive Traffic Control System (ATCS). However, the implementation of ATCS at this location is already programmed by LADOT and is, therefore, not an available mitigation measure. The proposal of ATCS should be removed from the mitigation description.

Response:

A separate analysis has been performed in which ATSAC/ATCS improvements have been added to the Adjusted Environmental Baseline and have been removed from the recommended mitigation plan for this intersection. These changes, combined with corrections to the turning movement volumes that were included in the LOS worksheets for this intersection in Attachment I to Technical Report S-2b of the Supplement to the Draft EIS/EIR, result in full mitigation of impacts in the recommended mitigation plan (with Lennox) during all peak hours. In the alternative mitigation plan (without Lennox), the impacts are also fully mitigated for all peak hours. Please see Appendix F-C, Errata to the Draft EIS/EIR and the Supplement to the Draft EIS/EIR, of this Final EIS/EIR for modifications to Attachments D, E, and F of Technical Report S-2b. Appendix F-C also includes the corrected LOS worksheets. A summary of the revised traffic impact analysis and mitigation plan is provided in Section 4.3.2, Off-Airport Surface Transportation, of this Final EIS/EIR.

SAL00026-16

Comment:

13. 2015 ALTERNATIVE D MITIGATION PLAN

In Section 4.3.2.10.2, on page 4-295, it is indicated that three of the study intersections are expected to remain unmitigated after implementation of the proposed transportation mitigation program. However, upon review of the traffic impact analysis in the report, six intersections would still remain significantly impacted. While mitigations are proposed for these six locations, the project impacts, although reduced, still exceed LADOT's significant impact threshold. The volume-to-capacity ratios are appropriately disclosed in the report; however, it appears that the results were incorrectly summarized in this section. This comment also applies to the Technical Report 2b and is repeated below. The six intersections that would remain significantly impacted are:

- Airport Boulevard & Century Boulevard
- Centinela Avenue & Sepulveda Boulevard
- I-105 Freeway/Continental City Drive & Imperial Highway
- Lincoln Boulevard & Jefferson Boulevard
- La Cienega Boulevard & Imperial Highway
- La Cienega Boulevard & Century Boulevard

Response:

Please see Response to Comment SAL00026-12 regarding the resolution of some discrepancies in LOS results. Please also see Response to Comment SAL00026-15 regarding modification to the turning movement volumes at the intersection of I-105 Freeway/Continental City Drive & Imperial Highway. After making the modifications described in these responses, impacts at the intersection of Airport Boulevard & Century Boulevard and at the intersection of I-105 Freeway/Continental City Drive & Imperial Highway are fully mitigated for all peak hours in the recommended mitigation plan as well as in the alternative mitigation plan. It is acknowledged that in order for the intersection of Sepulveda Boulevard and Centinela Avenue to be fully mitigated in all peak hours, a "fair-share" contribution towards a transit enhancement project would need to remove 50 northbound left-turning vehicles from the intersection in the AM peak hour. This would successfully mitigate project impacts for all peak hours in both the recommended and alternative mitigation plan. In order for the intersection of Sepulveda Boulevard and Centinela Avenue to be fully mitigated in all peak hours, a contribution to Metro Rapid Bus or other regional transit improvement is needed, sufficient to effectively reduce the number of northbound left turns by 50 vehicles during the AM peak hour. This leaves only three intersections partially unmitigated in the recommended mitigation plan, as documented in the Supplement to the Draft EIS/EIR.

SAL00026-17

Comment:

COMMENTS ON TECHNICAL REPORT 2b

14. MITIGATION MEASURES FOR ALTERNATIVE D

In Section 5.2, on page 36, it is indicated that three of the study intersections are expected to remain unmitigated after implementation of the proposed transportation mitigation program. However, upon review of the traffic impact analysis in Attachment E of Technical Report 2b, six intersections would remain significantly impacted. While mitigations are proposed for these six locations, the project impacts, although reduced, still exceed LADOT's significant impact threshold. The volume-to-capacity (V/C) ratios for the intersections are correctly reflected in the individual intersection V/C worksheets in the report; however, it appears that the results were incorrectly summarized in this section. These intersections are listed in comment #13 above.

Response:

Please see Response to Comment SAL00026-12 regarding the resolution of some discrepancies in LOS results. Please also see Response to Comment SAL00026-15 regarding modification to the turning movement volumes at the intersection of I-105 Freeway/Continental City Drive & Imperial Highway. After making the modifications described in these responses, impacts at the intersection of Airport Boulevard & Century Boulevard and at the intersection of I-105 Freeway/Continental City Drive & Imperial Highway are fully mitigated for all peak hours in the recommended mitigation plan as well as in the alternative mitigation plan. It is acknowledged that in order for the intersection of Sepulveda Boulevard and Centinela Avenue to be fully mitigated in all peak hours, a "fair-share" contribution towards a transit enhancement project would need to remove 50 northbound left-turning vehicles from the intersection in the AM peak hour. This would successfully mitigate project impacts for all peak hours in both the recommended and alternative mitigation plan. In order for the intersection of Sepulveda Boulevard and Centinela Avenue to be fully mitigated in all peak hours, a contribution to Metro Rapid Bus or other regional transit improvement is needed, sufficient to effectively reduce the

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number of northbound left turns by 50 vehicles during the AM peak hour. This leaves only three intersections partially unmitigated in the recommended mitigation plan, as documented in the Supplement to the Draft EIS/EIR.

SAL00026-18

Comment:

15. CHAPTER 6 - CONGESTION MANAGEMENT PROGRAM

Starting on page 45, in the Congestion Management Program (CMP) Analysis, the report identifies the CMP arterials and the CMP Freeway Monitoring Locations. However, the CMP Arterial Monitoring Station are not listed. These intersections should be identified in the CMP Analysis and should be analyzed consistent with the CMP guidelines for transportation impact analysis.

Response:

Please see Response to Comment SAL00026-13.

SAL00026-19

Comment:

16. ATTACHMENT C - LOS SUMMARIES FOR ALTERNATIVE D

It should be noted that the intersection volume-to-capacity (V/C) ratios summarized in Attachment C do not match the V/C ratios listed in the report. By year 2015, all of the study intersections within the City of Los Angeles will operate under the Adaptive Traffic Control System (ATCS). The V/C ratios listed in Attachment C do not reflect the 0.03 credit (V/C reduction) afforded by the ATCS traffic signal operating system.

Response:

This comment is similar to comment SAL00026-12. Please see Response to Comment SAL00026-12.

SAL00026-20

Comment:

17. ATTACHMENT E - PROPOSED TRANSPORTATION IMPROVEMENTS

In the report, it is indicated that the project would result in a significant traffic impact at the intersection of Sepulveda Boulevard and Centinela Avenue (facility #22). An intersection improvement has been proposed to mitigate the impact. However, the report does not disclose that while the mitigation does reduce the project impact, it does not reduce it to a level of insignificance. To fully mitigate the impact at this intersection, LADOT recommends that, in addition to the proposed intersection improvement, a fair-share contribution to MTA's Metro Rapid Bus Program or other transit enhancement be provided by LAWA. Since there are several impacted intersections along the Sepulveda Corridor that are already proposed to be mitigated through expansion of the existing transit system providing service to this roadway, the residual impact at the intersection of Sepulveda Boulevard and Centinela Avenue can be fully mitigated. Doing so will reduce the number of intersections that remain significantly impacted after implementation of the mitigation program from six to five.

Response:

Per LADOT's request, a reanalysis has been performed for Sepulveda Boulevard and Centinela Avenue in which ATSAC/ATCS improvements have been added to the Adjusted Environmental Baseline and have been removed from the recommended mitigation plan for this intersection. Even with these changes, a contribution to Metro Rapid Bus or other regional transit improvement is needed to effectively reduce the number of northbound left turns by 50 vehicles during the AM peak hour. This would successfully mitigate project impacts for all peak hours at this intersection in both the recommended (with Lennox interchange) and alternative (without Lennox interchange) mitigation plans. This mitigation has been added to the traffic mitigation program. As a result of this review, some

modifications have been made to Attachments D, E and F of Technical Report S-2b of the Supplement to the Draft EIS/EIR. A summary of the results for this and other locations is provided in Chapter 4.3.2 of the Final EIS/EIR.

SAL00026-21

Comment:

The V/C results shown in the table for the intersection of the I-105 Freeway ramp/Continental City and Imperial Highway (facility #45) are not consistent with the results that were reviewed and approved by LADOT before release of the DEIR supplement, nor are the results consistent with the V/C ratios that are presented in the individual level-of-service worksheets in Attachment I of Technical Report 2b. The intersection improvement proposed for this intersection does not fully mitigate the project's traffic impact. Also, since the implementation of ATCS is already programmed by LADOT at this intersection, it is not an available mitigation measure. The proposal of ATCS should be removed from the mitigation description. Therefore, to account for the incorrect V/C ratios reported and the unavailability of ATCS as a mitigation, the report should disclose that the intersection of the I-105 Freeway ramp/Continental City and Imperial Highway would remain significantly impacted even after implementation of the mitigation program.

Response:

An error was found in the turning movement volumes that were included in the LOS worksheets for this intersection in Attachment I to Technical Report S-2b of the Supplement to the Draft EIS/EIR. This error was corrected. In addition, per LADOT's request, ATSAC/ATCS improvements have been added to the Adjusted Environmental Baseline and have been removed from the recommended mitigation plan for this intersection. As a result of this review, some modifications have been made to Attachments D, E and F of Technical Report S-2b of the Supplement to the Draft EIS/EIR. A summary of the results for this and other locations is provided in Chapter 4.3.2 of the Final EIS/EIR.

SAL00026-22

Comment:

CONCLUSION

We look forward to working with LAWA in the further development of a comprehensive ground access plan to the Los Angeles International Airport, and in the advance planning process for Alternative D. During this process, we recommend that LAWA, in consultation with LADOT and Caltrans, address the results of the Congestion Management Program analysis by investigating regional solutions to freeway mainline congestion. In the event that freeway mainline improvements above and beyond what have already been explored or programmed (like the I-405 High-Occupancy-Vehicle Lane project) cannot be identified, it may be necessary to explore improvements to key regionally-significant roadways to provide airport-bound motorists with additional and enhanced arterial route choices. One example may be grade-separating key intersections along the La Cienega corridor, which may help to relieve the delays that are expected to increase along the I-10-to-I-405 route to the airport.

Response:

The traffic study addresses the feasible improvements to mitigate the identified significant impacts of the project at those intersections which were required to be studied by LADOT. The traffic study did not reveal that project-related traffic was significantly impacting the La Cienega Boulevard corridor to the extent that grade separations could be justified, or even approved by the FAA based on federal law regarding airport revenue diversion for off-airport improvements.

SAL00026-23

Comment:

Also, during the advance planning of Alternative D, LADOT requests that LAWA investigate the possibility of also allowing taxicabs into the Central Terminal Area (CTA) to pick-up arriving passengers only. This can serve to reduce the number of vehicles at the Ground Transportation Center (GTC) and

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the Intermodal Transportation Center (ITC), which would further reduce traffic congestion and improve the overall operation of these terminals. Taxicabs, as the only form of commercial ground transportation at the airport that is franchised and thoroughly regulated by the City, deserves special consideration, along with the Fly-Away buses operated by LAWA, to be allowed access to the CTA. Authorized Taxicab Management, the current taxicab dispatching and supervising company at LAX is ready and willing to work with LADOT and LAWA to establish a state of the art screening system for every driver and vehicle dispatched into the CTA to insure that the security goals of Alternative D are not compromised.

Response:

One of the guiding principles of Alternative D is to permit only LAWA-operated FlyAway buses and service vehicles into the existing Central Terminal Area. Allowing taxicabs to pick-up arriving passengers would require the establishment of a taxicab holding area near the CTA. Under Alternative D, the commercial vehicle holding area is located in the Ground Transportation Center. Since the Automated People Mover stations in the CTA will be located adjacent to the baggage claim area, it will not be a burden for arriving passengers to travel the APM to the GTC to hire a taxicab.

SAL00027 Murphy, Alan John Wayne Airport 11/5/2003

SAL00027-1

Comment:

Document reference location:

- Document: Appendices A, B, C, D, E, F, G and H
- Section: S-B. Existing Baseline Comparison Issues - 1996 to 2000
- Sub-section: 2.2 Regional Trends
- Page: 3
- Table: S1 bottom half which lists "Aircraft Operations and Market Share" for SNA (John Wayne Airport)

Comment:

- The 1996 SNA Aircraft Operations count of "468,811" is incorrect. The correct count is "452,955." This revised 1996 count results in a change to the SNA percentage for "AAG" (Average Annual Compound Growth Rate) from the incorrect value of "-4.6%" to the correct value of "-3.8%." And, this correct 1996 operations count also results in a change to the SNA percentage for "1996 Market Share" from "19.7%" to "19.1%."

Response:

The noted corrections are incorporated into Appendix F-C, Errata to the Draft EIS/EIR and the Supplement to the Draft EIS/EIR, of this Final EIS/EIR.

SAL00028 Rauch, Barbara City of Rolling Hills Estates 11/6/2003

SAL00028-1

Comment:

While the City of Rolling Hills Estates may not be directly impacted by LAX, in terms of direct impacts that are associated with ground-related adjacencies, the City is often impacted from air traffic overhead, including but not limited to aircraft noise, air pollution, and potential safety concerns with smaller aircraft from Torrance airport.

The City Council of Rolling Hills Estates has taken a position to state that any improvements to LAX must carefully consider flight patterns over the Palos Verdes Peninsula, such that aircraft must not "cross" over the Peninsula, particularly at relatively low altitudes, as is presently often the case.

Response:

The Palos Verdes Peninsula is impacted by aircraft from a variety of airports and not just limited to aircraft operations from LAX. Operations from Long Beach Airport, Compton Airport, Torrance Airport

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and Hawthorne Airport may contribute to the South Bay overflights that the commentor is referencing. However, aircraft operations from Torrance Airport is not a comment on the contents of the Draft EIS/EIR. The Draft EIS/EIR and Supplement to the Draft EIS/EIR addressed noise impacts in Section 4.1, Noise, and Section 4.2, Land Use, and air quality in Section 4.6, Air Quality. Supporting technical data and analyses are provided in Appendix D, Appendix G, and Technical Reports 1 and 4 of the Draft EIS/EIR and Appendix S-C, Appendix S-E and Technical Reports S-1 and S-4 of the Supplement to the Draft EIS/EIR. Please see Topical Response TR-N-3 regarding aircraft flight procedures. Additionally, please see Response to Comment PHM00002-3 regarding why the Palos Verdes Peninsula is not identified in the noise impact area and Response to Comment PHM00014-2 regarding nighttime easterly departures circling over the South Bay area.

SAL00028-2

Comment:

The City Council has also taken a position to support the comments and questions submitted to you by both the County of Los Angeles (report prepared by A.C. Lazzaretto and Associates, dated October 2003) and by the South Bay Cities Council of Governments (SBCCOG). Further, the City of Rolling Hills Estates is in support of the comments and questions submitted to you by adjacent Peninsula Cities and other south bay cities.

Lastly, the City Council agrees with others who have stated that the document is inadequate to understand the full scope of impacts to ground access surrounding the airport, to the communities adjacent to the airport and in the flight path and to demonstrating enhanced safety and security. Additionally, we join with those who favor a binding agreement to cap the airport's growth at 78 MAP.

We understand that LAX needs to be modernized. We do not oppose these efforts. However, we want to be assured that the safeguards delineated in the plan are realistic and achievable.

Response:

Comment noted. The County of Los Angeles' comment letter, prepared by A. C. Lazzaretto & Associates dated October 2003, is identified as comment letter SAL00013. For responses to the County of Los Angeles' comment letter, please refer to Responses to Comments SAL00013-2 through SAL00013-168. The South Bay Cities Council of Governments' (SBCCOG) comment letter dated November 6, 2003 is identified as comment letter SAR00006. For responses to the SBCCOG's comments, please see Response to Comment letter SAR00006.

SPC00001

Torres, Ken

None Provided

7/17/2003

SPC00001-1

Comment:

THERE SHOULD BE ONE MAIN TERMINAL FOR THE WEST SIDE & ONE FOR THE EAST. THIS TERMINAL SHOULD BE MANY LEVELS (MALL, CHECK IN, ARRIVAL, DEPARTURE). THE OUTER TERMINALS SHOULD NOT HAVE RESTURANTS BUT ONLY FOR BOARDING. MOVING WALK WAYS TO & FROM THE TERMINALS INTO THE MAIN TERMINAL. SUBWAY (LONDON TYPE) DIRECTLY UNDER MAIN TERMINAL.

Response:

East and West terminals were evaluated as part of the Master Plan process. Alternatives A, B, and C each include a west terminal in addition to maintaining the existing central terminal area as described in Chapter 3 of the Supplement to the Draft EIS/EIR. It was determined to be more cost effective to retain and significantly modify the existing terminals in the CTA rather than build an entirely new terminal in the east. The terminals proposed in Alternatives A, B and C would have multiple levels, each with a given purpose such as ticketing and check-in or baggage claim. Concessions, including restaurants, would be present in both the terminal and concourse facilities to improve the level of passenger service. Alternatives A, B, C and D would each feature a subterranean APM.

3. Comments and Responses

SPC00002 Torres, Ken None Provided 7/17/2003

SPC00002-1

Comment:

THE GREEN LINE DOES NOT WORK AND THEREFORE L.A. SHOULD HAVE A LONDON TYPE TUBES SYSTEM THAT RUNS DIRECTLY INTO THE AIRPORT. THIS SUBWAY COULD BE AN EXTENTION THE GREEN LINE INTO THE AIRPORT BUT GO NORTH, UP PERSHING AND FOLLOW THE WATERWAY BETWEEN PLAYA & MARINA.

SEE #2 ATTACTMENT (LONDON TYPE SUBWAY) LONDON TUBES GO TO WERE TOURIST/LOCALS WANT TO GO.

Response:

It is impractical to connect the Green Line directly to the CTA, as discussed in Response to Comment SPH00004-6. Also, please see Response to Comment SPHL00022-2 regarding the most feasible alignment of the Green Line and Response to Comment SPHL00026-1 regarding the Green Line/People Mover interface.

SPC00003 Torres, Ken None Provided 7/17/2003

SPC00003-1

Comment:

THERE SHOULD BE A ROAD THAT ALLOWS FOR CARS TO TRAVEL FROM SEPULVEDA TO PERSHING DR. UNDER THE TAXIWAY. THIS WOULD ALLOW FOR MORE AIRCRAFT PARKING, LESS AIRCRAFT CONGESTION, AND FOR CARS TO TRAVEL IMPERIAL HWY & WESTCHESTER PKWY TO THE AIRPORT.

SEE ATTACHMENT (#1 ROADS-ADDITIONALS)

Response:

It is unclear how constructing a road linking World Way West with the CTA, which would connect Sepulveda and Pershing Boulevards, would provide additional aircraft parking or reduce aircraft congestion. Though construction of such a link would be convenient for a small number of airport users, it would not be cost effective given that there are two existing unimpeded links between Pershing and Sepulveda Boulevards. Imperial Boulevard to the south of LAX and Westchester Parkway to the north of LAX each provide convenient routes between Pershing and Sepulveda Boulevards. These roads would not be affected if Alternative D were constructed.

SPC00004 Harlan, J. None Provided 7/21/2003

SPC00004-1

Comment:

BEVERLY HILLS PUBLIC LIBRARY DOES NOT HAVE ALT-D ADDENDUM ON FILE.

Response:

Comment noted. The Supplement to the Draft EIS/EIR, including the Appendices and Technical Reports, was delivered to the Beverly Hills Library on July 9, 2003.

SPC00005

Hayes, Theresa

None Provided

7/22/2003

SPC00005-1

Comment:

What Steps are being taken to Include The Sound Proofing Project - East of Van Ness into the South Los Angeles Areas which have seen Increased Noise Levels. The homes in the current program were based on a 1992 Study of the 25 Monitors utilized for the current program, only one monitor is located in L.A. @ Van Ness & 96th St (Arbor Vitae on Inglewood Side) Homes beyond that to the East are suffering with Excessive Noise Levels.

Response:

LAWA acknowledges the concern of the commentor and is working to address noise complaints from LAX operations to the degree feasible within practical and funding limitations. As shown on Figure 4.2-5 of the Draft EIS/EIR areas east of Van Ness and within South Los Angeles are eligible for soundproofing and are located within the current ANMP boundary. The ANMP boundary is based on the 1992 fourth quarter 65 CNEL noise contour. The 65 CNEL noise contour is the applicable standard for high noise levels as defined by FAR Part 150 and Title 21 (see Section 4.1, Noise (subsection 4.1.4) of the Draft EIS/EIR). Priority for sound insulation is given to residential properties within the highest noise level band above the 65 CNEL contour.

Of the 1100 dwelling units eligible for soundproofing in South Los Angeles, 600 units have received residential sound insulation and, in conformance with the 2001 Noise Variance, the 500 units remaining in South Los Angeles are scheduled to receive sound insulation by March 2008 (LAWA Residential Soundproofing Bureau).

Since publication of the Supplement to the Draft EIS/EIR, LAWA has notified all property owners within the City of Los Angeles ANMP boundaries of their eligibility to participate in the program. Meetings to explain the concepts of soundproofing and the process for participation in the program have also been held in these areas.

Areas exposed to high noise levels have decreased in South Los Angeles from 1992 conditions, as depicted on Figure 4.2-5 of the Draft EIS/EIR and Figure S1 in Technical Report S-1, Supplemental Land Use Technical Report of the Supplement to the Draft EIS/EIR. In addition to the noise monitor referenced by the commentor (Noise Monitor IN 6) there is another noise monitor located to the northeast in South Los Angeles at Cimarron Street and West 84th Place (Noise Monitor LA 1).

See Topical Response TR-LU-3, for a description of monitoring methods used to validate the current 65 CNEL contour and for a description of how approval of the LAX Master Plan would revise the ANMP, including expanding and upgrading the current monitoring system. Note that under Alternative D, and as shown on Figures S4.2-16 and S4.2-18 of the Supplement to the Draft EIS/EIR, no areas in South Los Angeles would be newly exposed to 65 CNEL noise levels or high single event noise levels (defined by the 94 dBA SEL) compared to 1996 baseline conditions. See Response to Comment AL00006-2 regarding current measures underway to address existing noise levels and Topical Response TR-N-2 regarding the difference between single event and CNEL noise levels.

SPC00005-2

Comment:

- What construction & Long Term Jobs will be required as part of the AFP's to provide opportunities to minorities & people of color. Job Training Programs?

Response:

Please see Response to Comment SPHF00032-1 regarding construction jobs, long term jobs, and job programs that offer opportunities to minority and low-income populations.

3. Comments and Responses

SPC00006 Barnes, Cecelia None Provided 7/23/2003

SPC00006-1

Comment:

I, Cecelia M. Barnes at 403 W. 102nd st. observed that I am not considered in your map encircling LAX sound proof Area but I experience same noise as others listed in sound proof area. I there fore am here by requesting your reevaluation of my residence. There are Two Houses on one corner Lot. They are :

1. 403 W. 102nd st.
2. 10115 So Grand Ave L A. 90003

Both are in noise path.

Response:

FAA and LAWA acknowledge the concern of the commentor and are working to address noise complaints from LAX operations. As shown on Figure S1 in Technical Report S-1, Supplemental Land Use Technical Report, of the Supplement to the Draft EIS/EIR the commentor's properties are located outside the boundary of residential properties eligible for soundproofing. The noise impact area which determines residential uses eligible for sound insulation under the ANMP and monitoring methods used to validate the current 65 CNEL contour are described in Subtopical Response TR-LU-3.4. The 65 CNEL is the applicable standard for high noise levels as defined by FAR Part 150 and Title 21 (see Section 4.1, Noise (subsection 4.1.4) of the Draft EIS/EIR). Priority for sound insulation is given to residential properties within the highest noise level band above the 65 CNEL contour. Although this is a comment on existing noise levels and conditions, the general focus of the document, pursuant to NEPA and CEQA, is to evaluate the potential future environmental effects of the project and to provide feasible mitigation measures to address significant impacts. See Subtopical Responses TR-LU-3.4 regarding how eligibility for soundproofing is determined and TR-LU-3.14 for a description of how approval of the LAX Master Plan would affect the ANMP. See Response to Comment AL00006-2 regarding current measures underway to address existing high aircraft noise levels. See Topical Response TR-N-2 regarding the difference between single event and CNEL noise levels.

SPC00007 Gomez, Erica None Provided 7/23/2003

SPC00007-1

Comment:

Sub. Noise , Program Boundaries

As I look at the map I'm right out side the boundries of the map that is draft. But the big problem is I'm right in the location of the noise it Self, and it needs to be looked into the map needs to be revised.

Response:

FAA and LAWA acknowledge the concern of the commentor and are working to address noise complaints from LAX. As shown on Figure S1 in Technical Report S-1, Supplemental Land Use Technical Report, of the Supplement to the Draft EIS/EIR the commentor's property (located at 9221 South Harvard Boulevard) is outside the boundary of residential properties eligible for soundproofing. The noise impact area which determines residential uses eligible for sound insulation under the ANMP and monitoring methods used to validate the current 65 CNEL contour are described in Subtopical Response TR-LU-3.4. The 65 CNEL is the applicable standard for high noise levels as defined by FAR Part 150 and Title 21 (see Section 4.1, Noise (subsection 4.1.4) of the Draft EIS/EIR). Priority for sound insulation is given to residential properties within the highest noise level above the 65 CNEL contour. Although this is a comment on existing noise levels and conditions, the general focus of the document, pursuant to NEPA and CEQA, is to evaluate the potential future environmental effects of the project and to provide feasible mitigation measures to address significant impacts. See Subtopical Responses TR-LU-3.4 regarding how eligibility for soundproofing is determined and TR-LU-3.14 for a description of how approval of the LAX Master Plan would affect the ANMP. See Response to Comment AL00006-2

3. Comments and Responses

regarding current measures underway to address existing high aircraft noise levels. See Topical Response TR-N-2 regarding the difference between single event and CNEL noise levels.

SPC00008 Pigford, Michelle None Provided 7/23/2003

SPC00008-1

Comment:

I want to make sure my voice is heard regarding the airplane noise over my home. It is so loud, I often need to close doors & windows just to hear the TV or converse with friends. Even then, the noise is LOUD and intrusive.

Response:

Comment noted. FAA and LAWA acknowledge the concern of the commentor and are working to address noise complaints from LAX operations. Please see Response to Comment AL00006-2 regarding current measures underway to address existing high aircraft noise levels. See also Topical Response TR-LU-3 regarding the Aircraft Noise Mitigation Program and Topical Response TR-LU-4 regarding outdoor noise levels.

SPC00009 Winn, James None Provided 7/23/2003

SPC00009-1

Comment:

Air plane are flying so low you can see the name of the compony on the plane my window's raddle. I have spend over ten thousand dollar on my leval window. Door raddling, wall's cracking inside in outside. The Impack on the noise in my home and neighbor hood I cannot afford to have my window doors or house fix with my income

Response:

Comment noted. The commentor's residence is located approximately four miles east of LAX and may be subject to low frequency noise caused by arriving and departing aircraft. While low frequency noise may be annoying studies have shown that it is unlikely that structural damage will occur as a result of aircraft operations. Please see Topical Response TR-N-8 regarding noise based vibration

SPC00010 Cannon, Serina None Provided 7/23/2003

SPC00010-1

Comment:

My deed says that my property is in the flight path. Every day I experience the sound of loud noises and pray that a plane doesn't fall on my house. At times, I have to ask the person over the phone to hold on until the plane flies by. I see a lot of plane flying diganl and not straight. I feel that this Master Plan (LAX) should be evaluated in terms of the noise level. It appears that this will increase the Number of flights. It is unfair for you to expect us to adopt this plan and not consider working with the community to reduce noise by sound proofing homes that are in the flight path. Appealing to the community in terms of how this would be a benefit. I request that my property be placed on this list among other's in my neighborhood for sound proofing.

Response:

FAA and LAWA acknowledge the concern of the commentor and are working to address noise complaints from LAX operations. As shown on Figure S1 in Technical Report S-1, Supplemental Land Use Technical Report, of the Supplement to the Draft EIS/EIR the commentor property (located at 8807 South Wilton Place) is outside the boundary of residential properties eligible for soundproofing. The noise impact area which determines residential uses eligible for sound insulation under the ANMP and monitoring methods used to validate the current 65 CNEL contour are described in Subtopical

3. Comments and Responses

Response TR-LU-3.4. The 65 CNEL is the applicable standard for high noise levels as defined by FAR Part 150 and Title 21 (see Section 4.1, Noise (subsection 4.1.4) of the Draft EIS/EIR). Priority for sound insulation is given to residential properties within the highest noise level band above the 65 CNEL contour. A discussion of aviation incidents and accidents from aircraft operations and potential impacts from development of the LAX Master Plan is presented in Section 4.24.3, Safety of the Draft EIS/EIR and Supplement to the Draft EIS/EIR. Noise impacts are addressed in Section 4.1, Noise, and Section 4.2, Land Use, of the Draft EIS/EIR and Supplement to the Draft EIS/EIR. Supporting technical data and analyses are provided in Appendix D and Technical Report 1 of the Draft EIS/EIR and Appendix S-C1 and Technical Report S-1 of the Supplement to the Draft EIS/EIR. See Subtopical Responses TR-LU-3.12 regarding how to file a noise complaint and TR-LU-3.14 for a description of how approval of the LAX Master Plan would affect the ANMP, which included incorporating residential dwelling units newly exposed to high single event noise levels into the ANMP. See Topical Responses TR-N-3 regarding aircraft flight procedures and TR-N-2 regarding the difference between single event and 65 CNEL noise levels. See Response to Comment AL00006-2 regarding current measures underway to address existing high aircraft noise levels.

SPC00010-2

Comment:

What are you giving back to the community, noise and constant traffic?

Response:

The Draft EIS/EIR and Supplement to the Draft EIS/EIR identify impacts associated with the Master Plan alternatives, including beneficial impacts, in Chapter 4, Affected Environment, Consequences, and Mitigation Measures. In addition, please see Topical Response TR-EJ-2 regarding environmental justice-related mitigation and benefits. The Draft EIS/EIR and Supplement to the Draft EIS/EIR addressed noise impacts in Section 4.1, Noise, and Section 4.2, Land Use and traffic impacts in Section 4.3, Surface Transportation. Supporting technical data and analyses are provided in Appendix D and Technical Reports 1, 2, and 3 of the Draft EIS/EIR and Appendix S-C and Technical Reports S-1, S-2a, and S-2b of the Supplement to the Draft EIS/EIR.

SPC00011 McGinnis, Anthony None Provided

7/23/2003

SPC00011-1

Comment:

There is a need to re-evaluate the sound proofing program. Even though the 2002 DATA WAS TAKEN, RESIDENTS LIKE MYSELF, NORTH OF TARGET AREA, ARE STILL SUBJECT TO EXCESSIVE JET NOISE. PLEASE RESPOND TO THIS COMMUNITY CONCERN.

AT LARGE MEMBER SOUTHWEST NEIGHBORHOOD COUNCIL

Response:

FAA and LAWA acknowledge the concern of the commentor and are working to address noise complaints from LAX operations. The noise impact area which determines residential uses eligible for sound insulation under the ANMP and monitoring methods used to validate the current 65 CNEL are described in Subtopical Response TR-LU-3.4. The 65 CNEL is the applicable standard for high noise levels as defined by FAR Part 150 and Title 21 (see Section 4.1, Noise (subsection 4.1.4) of the Draft EIS/EIR). Priority for sound insulation is given to residential properties within the highest noise level band above the 65 CNEL contour. Although this is a comment on existing noise levels and conditions, the general focus of the document, pursuant to NEPA and CEQA, is to evaluate the potential future environmental effects of the project and to provide feasible mitigation measures to address significant impacts. See Subtopical Responses TR-LU-3.4, for a description of how eligibility for soundproofing is determined and TR-LU-3.14 for an explanation of how approval of the LAX Master Plan would revise the ANMP, including expanding and upgrading the current monitoring system and incorporating residential dwelling units newly exposed to high single event noise levels into the ANMP. See also Response to Comment AL00006-2 regarding current measures underway to address existing high

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aircraft noise levels and Topical Response TR-N-2 regarding the difference between single event and CNEL noise levels.

SPC00012 Stone, Russell None Provided 6/24/2001

The content of this comment letter is identical to comment letter PC00543; please refer to the responses to comment letter PC00543.

SPC00013 Uchima, Ansho Uchima Commercial Real Estate 7/21/2003

SPC00013-1

Comment:

I own apartment buildings near Arbor Vitae and Airport Boulevards and support plan 1 the "No Action/No Project Alternative". I am very opposed to "Alternative D". I feel this will not enhance public safety, and will have the opposite effect. I believe concentrating all passengers in one central screening area subjects them to a large-scale terrorist attack. The Rand study recently confirms this.

Response:

Comment noted. As addressed in Appendix I of the Draft LAX Master Plan Addendum, Alternative D would involve the use of multiple concentric rings of security that provide security measures around each primary LAX facility. The establishment of these multiple concentric rings of security will allow LAX to begin its security process long before any passenger or vehicle enters the CTA. Please see Topical Response TR-SEC-1 which addresses the most frequently raised security-related issues pertaining to the design and ability of Alternative D to enhance existing safety and security at LAX.

SPC00013-2

Comment:

The estimated costs of 9 billion dollars for Alternative D is way too expensive and will result in higher fees for the airlines, taxpayers and air travelers. Lower cost alternative must be explored first, before taking this extreme measure.

Response:

Comment noted. The Draft LAX Master Plan examined a full range of concepts. The Draft EIS/EIR presented the selected concepts that included the No Action/No Project Alternative, and Alternatives A, B, and C, as required in both the federal National Environmental Policy Act (NEPA) and the state California Environmental Quality Act (CEQA). Subsequent to the publication of the Draft EIS/EIR, in response to directives from the mayor and public comments on the Draft EIS/EIR, a new alternative, Alternative D, was developed. Alternative D provides an emphasis on safety and security improvements and is designed to serve a future (2015) airport activity level comparable to that of the No Action/No Project Alternative.

The proposed Master Plan improvements under all of the alternatives would be funded with a combination of FAA Airport Improvement Fund grants, passenger facility charges, general airport revenue bonds, airline fees, and other state/federal grants. No taxpayer dollars will be used to pay for any of the proposed on-airport improvements.

SPC00013-3

Comment:

Implementation of Alternative D will have a significant impact to the environment. Traffic congestion will increase. Currently, many of our tenants walk to work from their apartments. Demolishing our apartment building and others in the area will eliminate affordable housing for airport workers and create more commuter traffic from tenants forced to drive into LAX.

3. Comments and Responses

Response:

Comment noted. The environmental effects of Master Plan Alternative D were analyzed in detail in Chapter 4, Affected Environment, Consequences, and Mitigation Measures, of the Supplement to the Draft EIS/EIR. Traffic impacts were addressed therein in Section 4.3, Surface Transportation. A summary of off-airport surface transportation impacts following implementation of all proposed mitigation measures was provided in Section 4.3.2, Off-Airport Surface Transportation (subsection 4.3.2.10). As indicated, traffic impacts would be mitigated to less than significant levels at all but three intersections affected by airport operations under Alternative D. Please refer to Topical Response TR-RBR-1 for a discussion of affordable housing. As noted therein, no residential acquisition is proposed under Alternative D.

SPC00013-4

Comment:

Please submit this letter for the record during the public hearings.

Response:

This letter has been entered as an official comment letter on the LAX Master Plan Supplement to the Draft EIS/EIR as comment letter SPC00013. Responses to individual comments in this comment letter are provided above.

SPC00014 Lurvey, Lawrence None Provided

SPC00014-1

Comment:

I am writing in support of Alternative D for LAX. Specifically, I am in favor of the cap on passenger activity level to 78.9 MAP in 2015 comparable to current levels. This would force a regionalization of transportation that needs to happen. Further, alternative D would link the airport to current public transportation specifically the Green Line.

Please register my support for Alternative D in your decision making.

Response:

Comment noted.

SPC00015 Uchima, Ansho Uchima Commercial Real Estate 7/21/2003

The content of this comment letter is identical to comment letter SPC00013; please refer to the responses to comment letter SPC00013.

SPC00016 Lurvey, Lawrence None Provided

The content of this comment letter is identical to comment letter SPC00014; please refer to the response to comment letter SPC00014.

3. Comments and Responses

2015 is a short planning horizon for a major long-lived infrastructure project such as an airport. Furthermore 2015 is not used consistently. For example, the DEIS/EIR Section 1.3 Meeting the Demand for Transportation in the Region discusses freeway congestion in 2020. Section 1.1.3.3 Future Demand also looks at 2020.

Section 1.3.4 Telecommunications and Video Conferencing discusses those technologies' impact on air travel in 2030.

The Southern California Association of Governments employs a 2030 time line for evaluating aviation demand in the region.

- Calculate the disparity in jobs under the several Master Plan alternatives for 2020 and 2030.
- For each of the years 2015, 2020, and 2030 identify the loss of jobs under Alternative D versus A or B by city, county, and ethnic group.
- Incorporate this loss of jobs by ethnic group in the DEIS/EIR discussion of environmental justice.
- Justify adopting the Alternative D with the greatest number of lost jobs.

2. Planning horizon and economic loss.

The Executive Summary of the Supplement to Draft EIS/EIR, Impact Comparison ES-10, shows LAX-Related Economic Activity for Entire LA Region in 2015 will be \$63.7 billion under Alternative D versus \$83.7 billion for Alternatives A and B. This is a loss of \$20 billion of economic activity.

2015 is a short planning horizon for a major long-lived infrastructure project such as an airport. Furthermore 2015 is not used consistently. For example, the DEIS/EIR Section 1.3 Meeting the Demand for Transportation in the Region discusses freeway congestion in 2020. Section 1.1.3.3 Future Demand also looks at 2020.

Section 1.3.4 Telecommunications and Video Conferencing discusses those technologies' impact on air travel in 2030.

The Southern California Association of Governments employs a 2030 time line for evaluating aviation demand in the region.

- Calculate the disparity in economic activity under the Master Plan alternatives far 2020 and 2030.
- For each of the years 2015, 2020, and 2030 identify the loss of economic activity under Alternative D versus A or B by city and county.
- Justify adopting Alternative D with the greatest loss of economic benefit.

Response:

Comment noted. The year 2015 is, and has been, the planning horizon used throughout the formulation and evaluation of all five alternatives being considered for the Master Plan (i.e., No Action/No Project Alternative and the build Alternatives A through D). The year 2015 was selected in 1995 as a 20-year planning horizon at the initiation of the LAX Master Plan efforts. The 2015 planning horizon provides a common basis by which impacts in all of the environmental disciplines can be compared equally between the five alternatives. Chapter 1, Regional Context, of the Draft EIS/EIR included information from the Southern California Association of Governments (SCAG) and other sources relative to 2015 and, in cases where comparable information for 2015 is not available, data for other time periods beyond 2015. The latter types of data is for general information purposes only, such as telecommunications and video conferencing practices projected to occur in 2030; however, for the purposes of formulating, evaluating, and comparing the various alternatives, both the Draft EIS/EIR and the Supplement to the Draft EIS/EIR used the 2015 horizon year.

The comparative provision of job opportunities under each of the five alternatives has been included in sufficient detail to enable the decision makers to weigh the respective benefits of each alternative. Please see Section 4.4, Social Impacts, of the Final EIS/EIR. The EIS/EIR is called upon to assess primarily environmental impacts, not economic impacts associated with a quantification of comparative job opportunities generated by each alternative.

SPC00018-2

Comment:

3. Failure to provide sufficient regional airport capacity.

An April 11, 2003 memorandum from Los Angeles Deputy Mayor Troy Edwards and Airport Commission President Ted Stein to U.S. Department of Transportation Secretary Norman Mineta states that failure to provide sufficient aviation capacity will have a detrimental effect on the economy of the region and the State of California.

- Justify reducing the number of gates at LAX in Alternative D and restricting the airport's capacity for providing passenger and cargo service in terms of Edwards and Stein's analysis. Quantify the detrimental effect of Alternative D versus Alternatives A and B on the economy of the region and the State of California.

- Calculate the loss of jobs and economic benefit associated with the Alternative D reduction in the number of airport gates at LAX.

Response:

The economic impacts of all LAX Master Plan alternatives are presented in the EIS/EIR using the same analysis approach and presentation format. The analysis of Alternatives A, B, C and No Project were included in the Draft EIS/EIR (see in particular, Technical Report 5, Section 5). The analysis of Alternative D is included in the Supplement to the Draft EIS/EIR (see in particular, Technical Report S-3). The economic impacts of all LAX Master Plan alternatives are compared in Table A2, Technical Report S-3 of the Supplement to the Draft EIS/EIR. The economic impacts of the LAX Master Plan alternatives are not based on the number of terminal gates, but rather each alternative's scale of annual air passengers and annual air cargo tonnage, as explained in detail in Section 3 (Methodology for Assessing Economic Impacts), Technical Report 5 of the Draft EIS/EIR.

SPC00018-3

Comment:

- Justify the selection of Alternative D over A or B, both of which provide for more of the capacity which the referenced memo says is needed.

- Identify any studies that show that the region can meet its aviation capacity needs in 2030 by utilizing existing airports (LAX, LGB, BUR, SNA, PSP, ONT, PMD, and SBD) under the capacity constraints of Alternative D. For this purpose, consider only existing or currently authorized regional airports with Airport System Master Plans and with approved passenger service.

- According to the minutes of the January Q, 2003 meeting of the Southern California Association of Governments Aviation Task Force, Mr. Jim Ritchie, Director of Long-Range Planning of LAWA stated that the runway capacity of LAX will be 89 million annual passengers under Alternative D. Explain why the airport is to be limited to 78 MAP under Alternative D if a potential shortage of airport capacity is predicted.

Response:

In the 2001 Draft EIS/EIR and the 2003 Supplement neither FAA nor LAWA has made a selection of one alternative over another. This is not to be confused with Alternative D being the LAWA staff-preferred alternative. While Alternative D is the LAWA Staff preferred alternative, it has not been selected to be implemented. This decision will be made by the Los Angeles City Council.

As indicated in Chapter 3, Alternatives (subsection 3.5), of the Supplement to the Draft EIS/EIR, Alternative D is the LAWA staff-preferred alternative because it promotes a regional solution to air transportation demand, increases the level of passenger service, enhances safety and security, and addresses both community and environmental concerns better than the No Action/No Project Alternative. Alternative D is consistent with public comment calling for a regional approach alternative and would be consistent with the activity level for LAX that was identified in the scenario adopted by

3. Comments and Responses

SCAG's Regional Council for the 2001 RTP in which 78 MAP is allocated to LAX. An analysis of regional aviation capacity needs is provided in SCAG's RTP.

As described in Chapter 3 of the Supplement to the Draft EIS/EIR, Alternative D is designed to constrain passenger activity beyond 78.9 MAP through the limited development of aircraft gate frontage at the terminals. Runway capacity would exceed gate capacity at LAX with implementation of Alternative D. Implementation of Alternative D would provide airport facilities that would allow LAX to serve approximately the same passenger levels as the No Action/No Project Alternative.

SPC00018-4

Comment:

- Calculate the loss of jobs and economic benefit associated with the Alternative D failure to utilize the 89 MAP capacity of the runways.

Response:

Please see Response to Comment SAL00018-2 regarding comparisons between the economic impacts of the LAX Master Plan alternatives that were included in the Draft EIS/EIR and the Supplement to the Draft EIS/EIR.

SPC00018-5

Comment:

4. Reliance on inclusion of MCAS El Toro.

The DEIS/EIR assumes the use of the former MCAS El Toro to meet the region's aviation needs. See for example, Table 1-13 LA Region Airport System Scenarios for 2015. The voters of Orange County, the County of Orange Board of Supervisors, and the Department of Navy have stated that El Toro will be reused for non-aviation purposes and will not be a commercial airport. The Southern California Association of Governments has signed an agreement with the federal government to discontinue planning for an airport at El Toro and is in the process of removing that former military base from its 2004 Regional Transportation Plan.

The Supplement fails to update the DEIS/EIR Regional Context, Section 1.2.2.4 MCAS El Toro, and related maps, tables and narrative sections to eliminate use of El Toro.

- Revise the Supplement to reflect the removal of El Toro airport from consideration.
- Recalculate all job and economic data in the Supplement to the DEIS/EIR to reflect the fact that El Toro will not be a commercial airport.
- Using data from the Southern California Association of Governments modeling for the Regional Transportation Plan, show the effect of using LAX Master Plan Alternative D versus Alternatives A or B on regional aviation capacity.

Response:

Section 1.4, Potential Areas of Controversy and Issues to be Resolved, of the Supplement to the Draft EIS/EIR discussed Measure W, the elimination of El Toro as a viable commercial service airport, and SCAG's Draft 2004 RTP that will reallocate regional demand that was planned to be accommodated at El Toro. Section 4.2, Land Use, of the document also discussed SCAG's planned update of the 2001 RTP. Please see Topical Response TR-RC-4 regarding the elimination of the proposed conversion of El Toro to a commercial service airport, and Topical Response TR-RC-1 regarding the regional allocation of demand in the Draft 2004 RTP.

SPC00018-6

Comment:

5. Failure to use latest planning data.

The DEIS/EIR and Supplement utilize outdated planning data. For example, 1996 passenger data is used when Los Angeles World Airports conducted extensive passenger surveys at LAX and Ontario airports in 2001. Over 20,000 passenger surveys were collected in order to determine the domestic and foreign destinations of passengers and the California counties of origin for passengers using those airports.

- Revise the DEIS/EIR and Supplement to use LAWA's 2001 data on passengers in lieu of 1996 and other outdated data.

Response:

Passenger data for Year 2000 are provided in Table S1, Passenger and Operations Comparison, 1996 vs. 2000 of Appendix S-B, Existing Baseline Comparison Issues - 1996 to 2000, of the Supplement to the Draft EIS/EIR. Related aircraft operations data for Year 2000 are also provided. These data are used throughout the Supplement to the Draft EIS/EIR to identify project impacts compared to Year 2000 conditions. Please also see Topical Response TR-GEN-1 regarding baseline issues.

SPC00018-7

Comment:

6. Failure to incorporate technological advances that will increase airport capacity.

No increase in capacity has been included for-improvements in airfield capacity arising from technological factors such as improved weather forecasting and new air traffic control procedures. For example the FAA Airports Capacity Benchmarks Report - 2001 states:

"Technology and procedural improvements are expected to improve the Los Angeles capacity benchmark by 11% (165-167 flights per hour) over the next 10 years, while the adverse weather capacity benchmark will increase by 4% (132-133 flights per hour)."

- Calculate the capacity of the airport under the physical conditions of Alternative D but without artificial constraints on the number of passengers served. Consider technological factors such as the above and the likely trend in aircraft seating.

Response:

Please see Response to Comment AL00036-30 regarding technological improvement impact on airport capacity.

SPC00018-8

Comment:

7. Failure to consider the trend to quieter and less polluting aircraft.

Alternative D seeks to limit the number of passengers to 78 Million per Year. With newer aircraft this cap will result in a decrease in the amount of noise and air pollution over time.

- Calculate the noise and air pollution impact of Alternative D in 2015, 2020 and 2030 versus baseline conditions.

Response:

The noise and air quality impacts analyses presented in Sections 4.1, Noise, 4.2, Land Use, and 4.6, Air Quality, of the Draft EIS/EIR and the Supplement to the Draft EIS/EIR account for changes in noise and air pollutant emissions from aircraft due to improvements in control technologies. Please see Response to Comment SPC00018-1 regarding the use of 2015 as the horizon year for formulating, evaluating, and comparing the five alternatives currently being considered for the Master Plan.

3. Comments and Responses

SPC00019 None Provided

Eyes of Justice

8/2/2003

SPC00019-1

Comment:

1) A full accounting and review of the City of Inglewood's Residential Sound Insulation Program re the following:

- a) Funding Appropriated over 30 years ago through LAX from the FAA, etc., and how it has been used
- b) Why the program has not been fully implemented;
- c) Remaining funding and added funding available to complete the program on an absolute, unequivocal deadline.

Response:

This is not a comment on the contents of the Draft EIS/EIR or Supplement to the Draft EIS/EIR. The focus of the Draft EIS/EIR and Supplement to the Draft EIS/EIR is to analyze the potential environmental impacts that would result from the development of the proposed LAX Master Plan improvements and not to provide a history of the ANMP program administered by Inglewood. However, as indicated on page 4-88, in Section 4.2, Land Use, of the Supplement to the Draft EIS/EIR, as of June 2002, in the City of Inglewood 577 units have received sound insulation and 1,591 units have been acquired under the ANMP. The following obstacles have slowed implementation of the ANMP in the City of Inglewood: a preference of acquisition rather soundproofing residential units (which is a longer process), substandard or non-code compliant housing stock, and residential properties located in areas zoned for non-residential use (inconsistency zoning). Although the 2001 Aircraft Noise Mitigation Program, prepared by LAWA, authorizes the mitigation of incompatible residential properties regardless of zoning designation it is not the policy of Inglewood to provide sound insulation for such properties. A description of estimated funding needed by each jurisdiction to complete noise mitigation under the ANMP and the anticipated timeframe for completion of the ANMP is provided in the 2001 ANMP. Concerns about the progress and funding of the ANMP in Inglewood should be directed to the City of Inglewood, Residential Sound Insulation Program (310/412-5289). Please also see Topical Response TR-LU-3 regarding the Aircraft Noise Mitigation Program.

SPC00019-2

Comment:

2) That the federal government via the EPA etc., be approached to Continuation of Comment 2); commit to building a mass transportation route via the 405 freeway/San Diego using either above ground or BELOW GROUND (this idea was conceived, by me, PROUDLY, at this meeting) The contributing congestion from the 405 north (and South) would make mitigation at the airport (however well planned, commendatory, but considerably ineffective) The EPA has set environmental mandates for us, let them contribute to a VIABLE SOLUTION UNDER GROUD - I like it!!!

Response:

Comment noted.

SPC00020 Wallace, Mae

None Provided

7/30/2003

SPC00020-1

Comment:

To Whom this Concerns I recived this Card from you. I dont quite unstand. will you please write me or call me. 323:759-3611 I haven Recived No letter or Form So please contact me and explaine this to me. You said Recently mailed me a LAX Master plan. of notification of (NOA) please let me hear from you soon? So I can unstand what this is about. is this about the Plans that Flying over our House? Hope to hear from you soon.

Response:

Comment noted. The same mailing list was used for the Notice of Availability and the postcards. Nevertheless, a second copy of the Notice of Availability was mailed upon receipt of the author's letter.

SPC00021 Stevens, Cynthia None Provided 8/2/2003

SPC00021-1

Comment:

I recently received a postcard stating that I should have already received an LAX Master Plan Notification of Availability. I am writing to inform you that I don't recall having received any such thing.

Please resend the information and/or respond by e-mail detailing what the NOA is and how it effects me. Thank you.

Response:

Comment noted. The same mailing list was used for the Notice of Availability and the postcards. Nevertheless, a second copy of the Notice of Availability was mailed upon receipt of the author's letter.

SPC00022 Ehret, John None Provided

SPC00022-1

Comment:

In reviewing LAX (D) and LAX (E) I find them full of holes and VERY EXPENSIVE.

Response:

Comment noted. Please see Responses to Comments below.

SPC00022-2

Comment:

1. Leave the terminals and existing access as is. This allows people to drop off and pick up the elderly and handy capped right at their terminals. This scatter of terminals is safer than the proposed concentration.

Response:

Comment noted. If the existing terminals are not modified, they will not accommodate the forecast future volume of passenger traffic without significantly delaying landside activities such as ticketing and check-in. All passenger and public facilities constructed as part of the LAX Master Plan would fully comply with the Americans with Disabilities Act of 1990 as required by Federal and State laws. As described in the Draft LAX Master Plan Addendum, Alternative D would separate the commercial and private vehicle landside component from the passenger terminal facilities and gates in the CTA. This would eliminate the threat of blast in close proximity to large congregations of queuing passengers at functions such as ticketing and baggage claim.

SPC00022-3

Comment:

2. Moving runways and putting a taxiway between them has not improved wing tip clearance versus 45 degree holding between existing runways. Nobody shows which way the airplanes would be going in those center taxiways. This very unsafe.

3. Comments and Responses

Response:

The center parallel taxiways proposed as part of Alternative D are not necessarily designed to increase wingtip clearance between aircraft versus the existing layout. The runway and taxiway relocations and reconstructions proposed as part of Alternative D are designed to provide separations recommended in FAA Advisory Circular 150/5300-13 - Airport Design. The existing LAX airfield separations are not generally considered to be inadequate for the existing fleet mix.

Typically, aircraft taxiing on the center parallel taxiway in the north or south airfield would be traveling in the same direction as runway traffic. However, this is not a requirement nor is it considered to be a safety hazard. Aircraft on the airfield are under the control of the ATCT.

SPC00022-4

Comment:

3. The time and cost moving a runway will effect a shortage of operational runways for a long time and with the existing air traffic will cause a real problem.

Response:

The commentor is correct in anticipating the current LAX capacity would be reduced to a certain extent while the runways are under construction; however, on-airport construction projects, whether for improvement or maintenance are a usual and on-going circumstance. The potential reduction in capacity during construction cannot be avoided, but it would be temporary. The construction sequencing plan for Alternative D is intended to minimize the interruption in operations (see Section 2.10, Construction Sequencing Plan - Alternative D, of the Draft Master Plan Addendum). The actions taken may include local or national air traffic flow control restrictions, amended flight schedules and scheduling of construction during non-peak hours. The Los Angeles International Airport Air Traffic Control Tower staff and Los Angeles World Airports (LAWA) Airport Operations personnel are very familiar with managing construction project to ensure the safety of the flying public. Once the construction period is over the capacity would revert back to previous levels, and the operational efficiency and safety levels would be increased from the proposed improvements.

SPC00022-5

Comment:

4. The location of the new tower solved the visibility problem that occurred on the north runway and taxiway that one time. NO PROBLEMS SINCE.

Response:

Comment noted.

SPC00022-6

Comment:

5. With the financial shortage in Federal, State and City, leave as is except to improve the security in the existing terminals.

Response:

Comment noted.

SPC00022-7

Comment:

6. I went to the library to review the airport plan D and was shocked by the extent of the environmental study. About 6 feet of books full of GOBBLED-GOOK When there wasn't an acceptable plan to evaluate. What a waste of taxpayer funds.

Response:
Comment noted.

SPC00022-8

Comment:
7. Cargo truck traffic mixed with passenger traffic could be solved by utilizing Ontario airport where the truck traffic can come and go in all directions and not restricted to approach only in one direction.

Response:
Much of the cargo at LAX arrives and departs in the belly of passenger aircraft, not just on freighters. Cargo cannot be moved simply to suit the needs of the airport. LAWA is working with the all-cargo airlines and LAX freight forwarders to encourage the use of Ontario for cargo destined for or originating near the airport. LAWA cannot force these companies to use Ontario. An update of the master plan for Ontario is currently underway. The ONT Master Plan will recommend the needed improvements to meet the projected demand for both passengers and cargo. The local community supports the airport's growth, and Ontario has the potential to capture a much larger share of total regional demand. Space is available for terminal and cargo facility development.

**SPC00023 Robert, John Wilshire Center Neighborhood
Center**

SPC00023-1

Comment:
Support Mayor Hahn's Alternative D plan on behalf of our neighborhood Center, the Largest in LA with 100,00 members.

Have the following concerns:

Response:
Comment noted. Please see Responses to Comments below.

SPC00023-2

Comment:
1 How will it affect businesses on Century Blvd

Response:
Business acquisition and relocation impacts were addressed in Section 4.4.2, Relocation of Residences or Businesses, of the Draft EIS/EIR and Supplement to the Draft EIS/EIR. The properties to be acquired under Alternative D were illustrated in Figure S3-14, 2015 Alternative D - Proposed Property Acquisition Areas, in Chapter 3, Alternatives, of the Supplement to the Draft EIS/EIR and listed in Table 2.7-2, Alternative D - Parcel Detail of Acquisition Areas, in Chapter 2.7 of the Draft Master Plan Addendum. As indicated, a limited number of businesses along Century Boulevard would be affected under Alternative D, all of which are located immediately northeast and southeast of the Century Boulevard/Aviation Boulevard intersection and many of which are targeted for relocation to on-airport sites or within the LAX Northside development. The Proposed Relocation Plan to be implemented by LAWA (refer to Appendix P to Chapter V of the Master Plan and Chapters 2.7 and 2.8 of the Master Plan Addendum) would provide all affected businesses with an array of relocation assistance that would meet and may exceed requirements under state and federal law, and may include special assistance for displaced businesses in finding relocation sites within nearby areas of the City of Los Angeles, including LAX Northside/Westchester Southside.

3. Comments and Responses

SPC00023-3

Comment:

2 How will it affect taxis

Response:

In Alternative D, taxis and most other commercial vehicles would use a new Commercial Vehicle Holding Area on the southeast corner of the Arbor Vitae Street/Aviation Boulevard intersection, with direct connections to the commercial vehicle curbing lanes in the GTC. Further details were provided in the Supplement to the Draft EIS/EIR, Section 4.3.1, and in Technical Report S-2a.

SPC00023-4

Comment:

3 Looks Like I will be walking more under new plan

Response:

Comment noted.

SPC00023-5

Comment:

4 Do I have to go through full security to visit passengers

Response:

Meeters and greeters along with passengers would be subjected to a first level security screening process at the GTC. Meeters and greeters would be allowed to use the APM to meet their parties at the main terminal in the reconfigured CTA or would also be allowed to meet their parties within the arrivals level lobby of the individual piers.

SPC00024

Kim, Young

None Provided

8/4/2003

SPC00024-1

Comment:

ALTERNATIVE D IS A TESTAMENT TO MAYOR HAHN'S COMMITMENT TO THE CITY OF LOS ANGELES.

BY DEVELOPING LAX TO A STATE OF THE ART FACILITY, IT WILL CREATE A NEW FACE FOR THE CITY OF L.A.

IN THE PROCESS, IT WILL IMPROVE THE QUALITY OF LIFE FOR THE CITIZENS OF L.A. AS A WHOLE, & FOR THE 49,000 WORKERS RECEIVING PREVAILING WAGES FOR THEIR WORK.

THE CITIZENS OF THE CITY OF L.A., THE COMMUNITY, & THE WORLD WILL BENEFIT FROM ALTERNATIVE "D"

Response:

Comment noted.

SPC00025 Kim, Erica Korean-American Chamber of Commerce of Los Angeles 8/11/2003

SPC00025-1

Comment:

I am here to support the Mayor's Alternative D of the LAX Master Plan. I am currently the president of Korean American Chamber of Los Angeles.

The developnt of the Alternative is a significant accomplishment for the City of Los Angeles.

I do not need to emphasize the importance of LAX to greater Los Angeles, and to our Korean American Community. This airport has been the gate way to Pacific Rim, which has greatly and positively impacted Los Angeles business commty.

It is very critical to continue to attract foreigners, including but not limited to Pacific Rim, by having much more efficint, safe and secure airport.

Response:

Comment noted.

SPC00026 Bran, Frederick None Provided 8/11/2003

SPC00026-1

Comment:

LAX & Los Angeles sets the trend for this great country and the world. In my opinon and experience we are the only major airport without a People mover rail system. LAX greatly needs to take the next step in the modernization of the airport for safty. For our culture and our economy.

Response:

Comment noted. An APM is an integral feature of LAX Master Plan - Alternative D.

SPC00027 Gabbard, Dana None Provided 8/11/2003

SPC00027-1

Comment:

Support consolidating rental car outlets.

Response:

Comment noted.

SPC00027-2

Comment:

Design of remote sites shouldn't prevent Northern extension of Green Line in I405 corridor. (connecting to eventual Expo light rail line) LAX should fund all costs associated with Green Line connecting with People Mover (BART SFO extension provides precedent for airport funds spent in adjacent transportation facility of regional significance).

3. Comments and Responses

Response:

Comment noted. The facilities proposed in Alternative D will not preclude the extension of the Green Line to the north, although the LAC-MTA does not have current plans to do so within the I-405 corridor. The proposed people mover connection from the ITC to the existing Green Line station at Aviation Boulevard and Imperial Highway is a project component and would be funded as part of Alternative D. However, federal law regarding airport revenue diversion would prohibit LAWA from using airport revenues to fund an extension of the Green Line to the north, especially since such an extension would not be for the exclusive use of airport passengers and employees. Please see Response to Comment PC02220-6 regarding funding.

SPC00027-3

Comment:

Design should take into account possible future LAX connection with proposed statewide High Speed Rail network.

Response:

Please see Topical Response TR-RC-3 regarding high-speed rail as a solution to airport capacity and demand.

SPC00028

Mercer, Annette

None Provided

8/11/2003

SPC00028-1

Comment:

Although, Mayor Hahn's recent proposed LAX Master Plan Alternative was intended to focus on "safety and security" issues, it has become apparent that there are very serious flaws in this proposal. A recent Rand Corp. study has indicated that congregating all commercial passengers in one location increases the risk and harm to a greater number of people by a terrorist attack. In addition, the added inconvenience of additional time required to be screened and transported to the airline terminals encourages business and wealthy travelers to engage private business jets, charters, and fractional share aircraft for transportation. These general aviation options are not regulated as strictly as commercial aircraft nor are the aircraft or their passengers screened for security purposes at LAX or any general aviation airport in the area.

Los Angeles World Airports (LAWA) must address the lack of security at the general aviation passenger access to LAX at the Imperial entrance. In addition, more space should be given to general aviation uses in order to avoid "spillover" GA traffic into Santa Monica Airport.

Response:

General aviation security is maintained through the limited access of the general aviation facilities. Fixed based operators, aircraft owners/operators and pilots work together to ensure safety of their passengers. In the case of LAX, the general aviation facilities are physically separated from the commercial passenger terminal areas to provide ease of operation by both and to limit security risks. FAA and TSA are responsible for security standard related to general aviation and both agencies have been addressing this issue in recent regulations that apply to the entire industry. In addition, as shown in Table A-17 of the Appendix A of the Draft LAX Master Plan Addendum, GA accounted for 19,412 (approximately 2.5 percent) of total 767,473 operations. Under Alternative D, an adequate GA space would be provided in order to accommodate projected future GA activities at LAX. LAX has longer runway than Santa Monica Airport, therefore, Santa Monica Airport will attract only those aircraft that can operate there.

SPC00028-2

Comment:

LAWA and the City of Los Angeles should also do what they can to encourage airlines to promote the use of regionally diverse airports such as Ontario, John Wayne, and Burbank. I do not believe that LAX

needs to be larger and that increasing the capacity of the airport will only adversely affect our roadways and air quality. Development of airport capacity should follow regional housing development, i.e., in the Inland Empire and eastern portions of the county.

Response:

LAWA only controls the operations and potential improvements at LAX, Ontario, Palmdale, and Van Nuys airports. Other jurisdictions are responsible for developing the other regional airports. Alternative D for LAX, as detailed in the Supplement to the Draft EIS/EIR, emphasizes safety and security improvements, rather than capacity increases. By not increasing the capacity of LAX, it is incumbent on the other airports in the region to serve a larger percentage of the regional demand. Master plan updates are currently underway for both Ontario and Palmdale airports. The master plans will recommend improvements to meet the projected demand. Expansion at Ontario, Palmdale, or any of the other regional airports will not negate the need for modernization of LAX and necessary improvements to safety and security.

Please see Topical Response TR-RC-1 regarding the LAX Master Plan role in the regional approach to meeting demand.

SPC00028-3

Comment:

I do not like the concept of everyone going to the Manchester Square facility. RAND says it is unsafe. I also think it would add considerably to the time required to get from home/hotel to your airline gate. It would also require several changes of travel modes which (1) is a disincentive, and (2) is hard with children, baggage, or disabilities. It seems like the potential for lost luggage, missed connections, etc. would be increased. I suggest that a direct rail/LRT connection be made to the airline terminals so that if you use the train you get right into the terminal (an incentive!). If you drive to the airport, you need to do a remote check in at a Manchester Sq. facility. But some parking needs to be available near the terminals. And some check in facilities will still be available in the terminals (for connecting flights if nothing else) and problem solving for missed flights, etc. will be easier and congestion will be less if there are various facilities to choose from.

Response:

Comment noted. As described in the Draft Master Plan Addendum, Chapter 2.2.8 - Ground Transportation Center (GTC), the GTC is designed to address a variety of safety and security issues as well as improve the landside system that currently existing in the CTA. Alternative D would separate the commercial and private vehicle landside components from the passenger terminal facilities and gates in the CTA. This would eliminate the threat of blast in close proximity to large congregations of queuing passengers at functions such as ticketing and baggage claim.

Please see Topical Response TR-SEC-1 regarding security and the Rand issue paper.

All airport facilities would be required by state and federal law to meet the Americans With Disabilities Act of 1990 rendering all passenger facilities fully accessible.

E Kiosk check-in and skycap baggage check-in are major functions anticipated to be available at the GTC. Traditional baggage check-in and ticketing facilities would be located in the CTA. The RAC, GTC and ITC would provide LAX passengers with several facilities from which to choose depending on their mode of transport to and from the airport helping to ease congestion and enhance safety and security at LAX.

The existing light rail transit system in Los Angeles County, of which the Green Line is a part, is a non-secure system. Extending the system into the secure environment at LAX would present a security threat thus failing to meet the stated policy and planning objective of ensuring the safety of all airport users.

In addition to security issues, a Green Line connection into the existing CTA would be very complex and expensive. Reasons include 1) the extension would have to be spur that would extend into the CTA and then back out on the same alignment. The existing Green Line technology is not conducive that type of "pinched loop" system. 2) The right-of-way along Aviation and Century Boulevards would be

3. Comments and Responses

very expensive. 3) It would be very disruptive to construct any rail along Century, whether overhead, at-grade, or underground. 4) Getting over/under Sepulveda Boulevard would be very difficult, 5) Retrofitting the new rail system into the existing CTA would be very difficult and expensive. 6) Operating such a system would be very confusing or inconvenient for Green Line passengers. For example, should everyone--even those passengers that do not want to go to LAX--have to take the Green Line into the airport, adding as much as 10 to 15 minutes onto their trip? If not, two different lines would have to be provided. How would the passengers know which line to use? What would happen if someone gets on the wrong line? LAWA is working directly with the MTA and other transportation agencies on the best solution to the transportation problems as part of the master plan alternatives.

SPC00028-4

Comment:

Finally, I encourage the separation of the runways/taxiways as required for safety reasons but I disagree that we should be building the airport only for super sized planes. A balance of sizes would seem to be more appropriate and more generally useful in the long run.

Response:

Comment noted. The airport facilities such as gates, taxiways, and runways are planned and constructed to handle anticipated aircraft fleet mix at the airport in the future, which includes a wide range of aircraft sizes, from small commuter aircraft to the new Airbus 380. Providing a center taxiway between the two parallel runways allows aircraft to queue and maneuver without blocking runway operations. At the same time, the proposed center taxiway in the north airfield complex would be designed to accommodate New Large Aircraft (NLA) such as A-380 (classified as FAA Design Group VI), based on the forecast which anticipates NLA operations in the future. In addition, the proposed center taxiway in the south airfield complex would be able to accommodate Group V aircraft to minimize noise impacts.

SPC00028-5

Comment:

I think we want this design of the airport to be good well past 2015, which is coming right up - and may be past by the time construction is done. Let's plan for 2050!

Response:

Please see Response to Comment SPC00018-1 regarding the use of 2015 as the horizon year for formulating, evaluating, and comparing the five alternatives currently being considered for the Master Plan for facilities and operations at LAX in the year 2050 would be very speculative at this time, but is likely to occur subsequent to the current Master Plan efforts as LAWA would continue to anticipate and plan for long-term future conditions.

SPC00029

Crosby, Mark

None Provided

8/7/2003

SPC00029-1

Comment:

If implemented as planned I would never again use LAX for personal or business travel!

Response:

Comment noted.

SPC00029-2

The remainder of this comment letter is identical to form letter SPFA; please refer to the response to form letter SPFA.

SPC00030 Louberssac, None Provided 8/15/2003
Bernard

SPC00030-1

Comment:

- WOULD LIKE TO FIND OUT MORE SPECIFICS ON WHAT WILL HAPPEN TO EXISTING ANCILLARY FACILITIES ON THE SOUTH SIDE OF 25L R.W. (IMPERIAL HWY).

Response:

As described in the Draft Master Plan Addendum, LAX Master Plan - Alternative D would not impact any existing ancillary facilities on the airfield south of Runway 25L except for the LAWA Police Lost and Found, which would be relocated to the new LAWA police headquarters, constructed as part of LAX Master Plan - Alternative D.

SPC00030-2

Comment:

- 405 & 105 WHAT WILL BE DONE TO IMPROVE TRAFFIC.

Response:

The impacts and mitigation measures to I-405 and I-105 are discussed in the Draft EIS/EIR (Alternatives A, B and C) and the Supplement to the Draft EIS/EIR (Alternative D), Section 4.3.2, and in Technical Report S-2b. Please see Topical Response TR-ST-4 regarding airport area traffic concerns.

SPC00030-3

Comment:

- SURFACE STREET: WHAT WILL BE DONE TO IMPROVE TRAFFIC (SEPULVEDA.).

Response:

The impacts and mitigation measures to surface streets are discussed in the Draft EIS/EIR (Alternatives A, B and C) and the Supplement to the Draft EIS/EIR (Alternative D), Section 4.3.2, and in Technical Report S-2b. Please see Topical Response TR-ST-6 regarding neighborhood traffic impacts.

SPC00031 Whitaker, Martha None Provided 8/18/2003

SPC00031-1

Comment:

I ask that my house get soundproofed due to the loud noises from the airplanes. I am 81yrs old and the noise is so loud that I am not able to relax at times. I cannot hear when I watch television nor can hear when I am on the phone. But most importantly is I lose a lot of sleep. I can't rest during the day as my doctor ask because the planes make my house tremble and are so very loud. When I do fall asleep the

3. Comments and Responses

noise awakes me and it scares me. I try to go to bed at 7:30 pm but I can't fall asleep as I should until several hours later, basically once the planes calm down and are not coming over my house anymore at night. Again I am an elderly woman and I am in desperate need of this work being done to my home. In concern of my age so that I may rest as I should. I would kindly appreciate it if my comments would be taken into deep consideration.

Response:

FAA and LAWA acknowledge the concern of the commentor and are working to address noise complaints from LAX operations. As shown on Figure S1 in Technical Report S-1, Supplemental Land Use Technical Report, of the Supplement to the Draft EIS/EIR the commentor's property (located at 9447 South Hobart Boulevard) is outside the boundary of residential properties eligible for soundproofing, as defined by the 1992 fourth quarter 65 CNEL noise contour.

Note that as shown on Figure S4.2-16 of the Supplement to the Draft EIS/EIR, the commentor's property would not be newly exposed to 65 CNEL or greater noise levels under Alternative D, compared to 1996 baseline conditions.

The noise impact area which determines residential uses eligible for sound insulation under the ANMP and monitoring methods used to validate the current 65 CNEL contour are described in Topical Response TR-LU-3. The 65 CNEL is the applicable standard for high noise levels as defined by FAR Part 150 and Title 21 (see Section 4.1, Noise (subsection 4.1.4) of the Draft EIS/EIR). Priority for sound insulation is given to residential properties within the highest noise level band above the 65 CNEL contour. Although this is a comment on existing noise levels and conditions, the general focus of the document, pursuant to NEPA and CEQA, is to evaluate the potential future environmental effects of the project and to provide feasible mitigation measures to address significant impacts.

See Topical Response TR-LU-3, regarding how eligibility for soundproofing is determined and for a description of how approval of the LAX Master Plan would affect the ANMP. See also Response to Comment AL00006-2 regarding current measures underway to address existing high aircraft noise levels, Topical Response TR-N-2 regarding the difference between single event and CNEL noise levels and why the 65 CNEL is considered the standard for determining noise impacts, and Topical Response TR-N-8 regarding noise-based vibration.

SPC00032 Young, Byrd None Provided 8/18/2003

SPC00032-1

Comment:

(We) Would like for you to extend the Contract of Coverage for repair of home on Hobart Blvd. We still have high noise level, with results/proper damage from fly over of planes.

Response:

The commentor appears to be asking to have her home soundproofed under the ANMP. FAA and LAWA acknowledge the concern of the commentor and are working to address noise complaints from LAX operations. As shown on Figure S1 in Technical Report S-1, Supplemental Land Use Technical Report, of the Supplement to the Draft EIS/EIR the commentor's property (located at 9416 South Hobart Boulevard) is outside the boundary of residential properties eligible for soundproofing, as defined by the 1992 fourth quarter 65 CNEL noise contour.

Note that as shown on Figure S4.2-16 of the Supplement to the Draft EIS/EIR, the commentor's property would not be newly exposed to 65 CNEL or greater noise levels under Alternative D, compared to 1996 baseline conditions.

The noise impact area which determines residential uses eligible for sound insulation under the ANMP and monitoring methods used to validate the current 65 CNEL contour are described in Topical Response TR-LU-3. The 65 CNEL is the applicable standard for high noise levels as defined by FAR Part 150 and Title 21 (see Section 4.1, Noise (subsection 4.1.4) of the Draft EIS/EIR). Priority for sound insulation is given to residential properties within the highest noise level band above the 65 CNEL contour. Although this is a comment on existing noise levels and conditions, the general focus of the

3. Comments and Responses

document, pursuant to NEPA and CEQA, is to evaluate the potential future environmental effects of the project and to provide feasible mitigation measures to address significant impacts.

See Topical Response TR-LU-3, regarding how eligibility for soundproofing is determined and for a description of how approval of the LAX Master Plan would affect the ANMP. See also Response to Comment AL00006-2 regarding current measures underway to address existing high aircraft noise levels, Topical Response TR-N-2 regarding the difference between single event and CNEL noise levels, and Topical Response TR-N-8 regarding the potential for property damage from noise-based vibration.

SPC00033 Wiggins, Ruth None Provided 8/18/2003

SPC00033-1

Comment:

My concern is the noise and pollution in the area that I live. In spite of discussions on noise abatement and pollution is still evident. I was told that one report states the noise that I experience in Carlton Sq. is from the vehicle traffic on Century Blvd. This is hard to accept when the debris that falls on my flowers and trees come from above.

Response:

Comment noted. The Draft EIS/EIR and Supplement to the Draft EIS/EIR addressed noise impacts in Section 4.1, Noise, and Section 4.2, Land Use, and air quality in Section 4.6, Air Quality. Supporting technical data and analyses are provided in Appendix D, Appendix G, and Technical Reports 1 and 4 of the Draft EIS/EIR and Appendix S-C, Appendix S-E and Technical Reports S-1 and S-4 of the Supplement to the Draft EIS/EIR. In addition, please see Topical Response TR-LU-5 regarding noise mitigation.

Also, please see Topical Response TR-AQ-1 which refers to two LAX-area deposition studies conducted by the South Coast Air Quality Management District (2000a,b: Air Monitoring Study in the Area of Los Angeles International Airport; and Inglewood Particulate Fallout Study Under and Near the Flight Path to Los Angeles International Airport). These studies identified the major components of the deposited material to be rubber dust (from car and truck tires), minerals (such as talc, gypsum and quartz), and biological material (such as pollen, wood, cellulose and plant fibers). Oil soot particles were identified in both studies but "no discernable pattern of either carbon mass or total fallout mass under LAX's flight path which would indicate a predominant influence from aircraft fallout" (2000b) was identified.

SPC00034 Franklin, Annie None Provided 8/18/2003

SPC00034-1

Comment:

I am a resident of Carlton Square and my livelihood, health and inconvenience has been impacted by LAX. Carlton Square community does not qualify for soundproofing. Day and Night I can watch and hear planes that fly directly over my home. I am not against improvement and new technology.

Please, help me!

I cannot grow fruit or flowers because of the residue from planes and traffic. I have to turn my TV or radio up loud in order to enjoy a program.

Response:

Comment noted. Please see Topical Response TR-HRA-3 regarding human health impacts, Topical Response TR-LU-1 regarding impacts on the quality of life of surrounding communities, Topical Response TR-LU-3 regarding the Aircraft Noise Mitigation Program including soundproofing, Topical Response TR-LU-4 regarding outdoor noise levels, and Response to Comment PC00383-2 regarding current measures underway to address existing high aircraft noise levels.

3. Comments and Responses

Also, please see Topical Response TR-AQ-1 which refers to two LAX-area deposition studies conducted by the South Coast Air Quality Management District (2000a,b: Air Monitoring Study in the Area of Los Angeles International Airport; and Inglewood Particulate Fallout Study Under and Near the Flight Path to Los Angeles International Airport). These studies identified the major components of the deposited material to be rubber dust (from car and truck tires), minerals (such as talc, gypsum and quartz), and biological material (such as pollen, wood, cellulose and plant fibers). Oil soot particles were identified in both studies but "no discernable pattern of either carbon mass or total fallout mass under LAX's flight path which would indicate a predominant influence from aircraft fallout" (2000b) was identified.

SPC00035 Teeter, Lawrence Coalition Against the Pipeline 8/18/2003

SPC00035-1

Comment:

I write on behalf of the Coalition Against the Pipeline and Michele Grumet in opposition to the project.

Response:

Comment noted.

SPC00035-2

Comment:

1. The DSEIR/DSEIS, ("EIR") fails to define a true no project alternative. The document does not discuss the existing status quo. Manchester Square is still inhabited by many apartment dwellers as well as some occupants of single family dwellings. Most structures in Manchester Square are viable and occupied. The EIR treats the no project alternative as though under that alternative, residential structures in Manchester Square have been demolished, but this is not the case. The City claims that such demolition is necessary as a noise mitigation measure and will occur in any event. But there is no substantial evidence to support a finding that insulation would not address the problem. Indeed, residents who have requested insulation were told that they were not eligible for insulation because their area had been targeted for acquisition. This means that the use of Manchester Square has been decided upon by the City even before the environmental review process is complete. In other words, the EIR is a sham post-hoc rationalization for a preconceived policy decision. This violates the very core of CEQA and NEPA. CEQA and NEPA require that the agencies analyze the existing status quo and compare the various proposed alternatives with the existing situation, which is characterized by the existence of Manchester Square as a viable residential community the occupants of which are eligible for insulation as offered to other communities not targeted for acquisition.

Response:

Please see Topical Response TR-GEN-2 regarding No Action/No Project Alternative assumptions. Please see Topical Response TR-MP-3 regarding the use of Manchester Square, and how property acquisition within Manchester Square was initiated, and will continue to occur, separate from the Master Plan. Please see Topical Response TR-GEN-1 regarding baseline issues. As indicated in that response, in accordance with the State CEQA Guidelines, conclusions regarding the significance of impacts for all the build alternatives are based on the 1996 baseline or the adjusted environmental baseline, not on the No Action/No Project Alternative. The 1996 baseline includes all dwelling units within Belford and Manchester Square prior to any acquisition.

SPC00035-3

Comment:

2. CEQA and NEPA require the agencies to analyze a reasonable range of feasible alternatives.

Response:

Please see Topical Response TR-ALT-1 regarding range of alternatives analyzed in the Draft EIS/EIR and Supplement to the Draft EIS/EIR. Please also see Responses to Comments SPC00035-4 through SPC00035-7 below.

SPC00035-4

Comment:

(a) Alternative E has been proposed by some area residents but has been improperly dismissed by the agencies without meaningful analysis.

Response:

Alternative E is a concept for improving LAX that was developed by local residents who object to certain aspects of Alternative D. The concept would keep the north runway complex and terminals intact, but Runway 25L would not be moved closer to El Segundo as in Alternative D. No new terminal would be built west of the Tom Bradley International Terminal. This concept designates two areas for passenger check-in, one at Century and Aviation Boulevard and another at the location of Lot C. A convention center would be located at Manchester Square. The consolidated rental car facility would be located in the Continental City area. Alternative D and Alternative E both would have trains linking consolidated rental car and check-in facilities with the CTA.

Alternative E is not a Master Plan alternative and its analysis is not required. A critical review of this notional facility layout option was conducted by the Master Plan team and the concept was found to create an unacceptable displacement of existing land uses and impacts to airport operations, local traffic circulation, local landowners and local businesses. Problems associated with the residents' concept include the inadequate space for GTC requirements, displacement of limited air cargo facilities, building height restrictions near Runway 25R, road access and traffic impacts to hotels and businesses, and added traffic congestion by the unplanned convention center at Manchester Square.

The area designated by the residents' concept for the Ground Transportation Center is too small and constrained (approximately 58 acres) to meet the space requirements for this airport use (Manchester Square is approximately 140 acres). The Master Plan team studied the area suggested by the residents' concept during the original planning process and during the development of Alternative D. This location was rejected both times because of site limitations, impacts to nearby land uses and businesses and traffic circulation problems.

The proposed location for the GTC in the residents' concept would displace additional cargo warehouse space that is already highly constrained in Alternative D. Impacted facilities would include the U.S. Postal Service facility, Asiana/Virgin Cargo, Fire Station No. 95, Air Freight #11 (older United Cargo building), Air Freight #10 (American Cargo), Air Freight #8, and Air Freight #1 and #3. This concept does not offer a replacement of these facilities but instead suggests that cargo can be further consolidated into the remaining cargo buildings. On the contrary, Alternative D already assumes a significantly higher utilization rate of the existing cargo warehouse space to meet the SCAG projected demand for cargo at LAX.

Building heights and roadway locations would be strictly limited in the area near Runway 25R. In addition to this setback, building height would be limited to 35 feet above the runway centerline elevation. The parking facilities associated with the GTC are planned for three to five levels based on the size and configuration of the site available at Manchester Square and would require many more levels of parking to accommodate the parking requirement. If additional levels of parking were planned to be underground, they would be difficult to nearly impossible to access with constrained access roadways.

Airport landside access requirements include roads connecting the airport to the regional road system, curbfront areas for dropping off and picking up passengers, parking areas for airport users and access for cargo service users. Each of these landside uses must be planned in accordance with both airport and local community needs to ensure that the uses are compatible. In the case of Alternative D, significant land use planning effort was applied to improve roadway access to the landside areas of the airport, reduce traffic impacts to surrounding residential communities, and maintain roadway access to

3. Comments and Responses

nearby businesses and hotels around the airport. The residents' concept does not consider these local impacts of their notional road alignments.

While residents have stated that their intent is to plan a park as the reuse of the land at Manchester Square, their concept identifies the development of a convention center at Manchester Square. Presently, each of the hotels in the community provides convention services. The traffic generated by these existing uses has been planned into the local street network and community plans. No plans have been made for a convention center at Manchester Square in addition to all of the other land uses in the area.

SPC00035-5

Comment:

(b) Moreover, the agencies failed to consider use of people movers from the existing parking lots to speed the arrival and departure process as an alternative to the acquisition of Manchester Square.

Response:

Lot C is a considerably large area. However, without significant redevelopment of the area, bringing a people mover to this parking lot would necessitate only a limited number of stops (stations) and therefore, would significantly increase the average walking distance for airport users. People mover stations would also require significant curbside, further reducing the number of parking spaces in the lot. Both of these problems would decrease passenger convenience. In addition, an elevated people mover would also conflict with the current aircraft approach surfaces and penetrate the 14 CFR Part 77 imaginary surfaces. Lot C is also in the Runway Protection Zone for the approach end of both Runway 24R/L.

Consolidated parking and curbside areas at the proposed GTC in Manchester Square would improve the landside level of service at LAX. Please see Subtopical Response TR-MP-3.4 regarding the purpose of the GTC in Manchester Square under Alternative D.

SPC00035-6

Comment:

(c) Nor have the agencies considered building multi-story parking structures in the presently available off-site lots, including lot C.

Response:

FAA guidelines limit construction of multi-story structures near airport to protect the surrounding airspace for low flying aircraft on approach or departure. Lot C is located directly underneath the approach paths for Runways 24R and 24L where there are confining limitations on structure height and the height of construction equipment such as cranes. Alternative D would incorporate the consolidated RAC in Lot C, and would have multi-story parking garages adjacent to the GTC and ITC, where the parking demand is highest.

SPC00035-7

Comment:

The EIR's alternatives analysis is colored by prejudice and is illegal.

Response:

Comment noted.

SPC00035-8

Comment:

3. Adoption of a Statement of Overriding Considerations is illegal unless all feasible alternatives and mitigation measures have been considered and properly rejected. This has not been done for reasons described above.

Response:

The commentor applies an incorrect standard in stating that all feasible alternatives must be evaluated. Section 15126.6 of the State CEQA Guidelines states that "An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision-making and public participation." As indicated in Topical Response TR-ALT-1, the Draft EIS/EIR and Supplement to the Draft EIS/EIR properly consider a reasonable range of alternatives.

The Draft EIS/EIR and Supplement to the Draft EIS/EIR recommend a wide range of Master Plan commitments and mitigation measures to address a variety of potential environmental impacts (see Chapter 5, Environmental Action Plan, of the Supplement to the Draft EIS/EIR). All feasible measures to mitigate potentially significant impacts have been considered. In addition, many comments have suggested mitigation measures as well, all of which have been considered and many of which have been adopted in the Final EIS/EIR.

Please see Responses to Comments SPC00035-4 through SPC00035-7 for responses to the commentor's specific comments regarding consideration of alternative project designs.

SPC00035-9

Comment:

4. The EIR fails to comply with the Government Code's requirement of assuring correlation and consistency between growth and transportation infrastructure. This project will have substantial growth-inducing impacts outside the project area. No mechanism has been considered for limiting such growth so that it does not outstrip the area's ability to expand its transportation infrastructure to keep pace with such growth. The EIR does not consider the adequacy of existing infrastructure outside the project area.

Response:

Comment noted. The general approach and methodology of the growth inducement analysis were described in Section 4.5, Induced Socio-Economic Impacts (Growth Inducement) (subsection 4.5.2), of the Draft EIS/EIR. As discussed therein, the consistency of the Master Plan alternatives with SCAG's regional growth forecasts was assessed to determine the extent to which growth induced by the project is likely to be accounted for in the region. As stated, SCAG's forecasts incorporate input from cities and counties regarding planned and expected growth within their individual jurisdictions, and regional transportation and other planning efforts are based on this data. The evaluation of the Master Plan's potential for physical impacts focused on whether project-induced growth would foster the need for, among other things, substantial new infrastructure, particularly if such growth is not accounted within SCAG's forecast.

In addition, Section 4.2, Land Use, of the Draft EIS/EIR and Supplement to the Draft EIS/EIR included an analysis of the potential for the Master Plan alternatives to result in physical impacts caused by inconsistencies with applicable land use plans, policies, or regulations. Included were evaluations of project consistency with applicable SCAG plans, including the 1998 and 2001 Regional Transportation Plans (RTP) and the 2002 Regional Transportation Improvement Program (RTIP). The RTP is a performance-based plan aimed at providing a long-range, coordinated approach to transportation improvements in the SCAG region. The RTIP is a capital listing of transportation projects proposed in the SCAG region over the next 6-year period. Under each of the Master Plan build alternatives, significant impacts relative to consistency with these SCAG plans and relevant policies would not occur.

3. Comments and Responses

SPC00035-10

Comment:

5. The agencies have failed to consider the impact of airport expansion in promoting an increase in airport noise outside areas already impacted by heavy take-off and landing traffic.

Response:

The commentor is incorrect. Please see Section 5, Location Impact Analysis particularly Table S13 Regular and Special Grid Point Assessment-Aircraft CNEL, Comparison of Build Alternatives to 1996 Baseline, Year 2000 Conditions, and 2015 No Action/No Project Alternative of Appendix S-C1 of the Supplement to the Draft EIS/EIR where 646 individual sites located off airport were identified for additional evaluation and sites outside the 60 dB CNEL are identified. Please see Subtopical Response TR-N-2.3 regarding the evaluation of impacts should extend beyond the 65 CNEL contour to all sensitive areas under flight tracks and TR-N-1 Noise Modeling Approach. For noise contours that depict newly exposed areas and other changes from Year 2000 conditions to Alternative D in 2015 please see Figure S10, Alternative D 2015 vs. Year 2000 Conditions Areas Newly Exposed of Technical Report of Technical Report S-1 of the Supplement to the Draft EIS/EIR. Additionally, noise impacts are addressed in Section 4.1, Noise, and Section 4.2, Land Use, of the Draft EIS/EIR and Supplement to the Draft EIS/EIR. Supporting technical data and analyses are provided in Appendix D and Technical Report 1 of the Draft EIS/EIR and Appendix S-C1 and Technical Report S-1 of the Supplement to the Draft EIS/EIR.

SPC00036

Abbott, Dwight

None Provided

8/14/2003

SPC00036-1

Comment:

This review finds deficiencies in three important areas: passenger convenience, safety and security, and costs.

Response:

Please see Responses to Comments SPC00036-2 through SPC00036-7 below.

SPC00036-2

Comment:

Passenger Convenience

The purpose of airports is to serve the using passengers and the airlines. This plan fails to address passenger convenience, and, instead, imposes great inconvenience.

The FAA now recognizes passenger convenience as an important airport design factor and defines it in terms of time to move the passenger from the parking lot of the departure airport to the parking lot of the arrival airport - not simply airline gate to airline gate as previously defined. The LAX Master Plan will greatly increase the parking lot to parking lot time required over that of the current LAX configuration.

The proposed Ground Transportation Center (GTC) is nearly a mile removed from the terminal area. It is connected via a train (people mover) that passengers must ride between the ticket counter and the terminal. The passengers must carry any carry-on baggage and packages by hand or with a cart on the train. This will be a great inconvenience to any mobility-challenged passengers. The current LAX configuration imposes no such inconvenience.

The proposed new Intermodal Transportation Center (ITC) is even more inconvenient. For a Green Line rail passenger to get from the ITC to the new west terminals requires taking a moving sidewalk, then the train (people mover) that stops at the Rental Car Facility, then to the new Central Terminal Area, then to

the underground people mover to the new west terminals. This is inconvenience at its worst. And what of the non-passenger(s) accompanying the passenger that has to immediately retrace this route?

This master plan clearly needs to be replanned with a criterion to minimize parking lot to parking lot time for the using passengers.

Response:

Comment noted. As stated at www.faa.gov the mission of FAA is as follows: FAA provides a safe, secure, and efficient global aerospace system that contributes to national security and the promotion of US aerospace safety. As the leading authority in the international aerospace community, FAA is responsive to the dynamic nature of customer needs, economic conditions, and environmental concerns.

The existing airport landside facilities cannot accommodate the 78 Million Annual Passengers forecast for 2015. The time it will take to reach the CTA during peak periods with this level of activity would exceed the transit time to the CTA via APM from the GTC, RAC or ITC. As described in the Draft LAX Master Plan Addendum on Page 2-72, the total typical trip between the CTA and GTC would be less than 6 minutes aboard the APM. A typical trip time between the ITC and western CTA station, including headway, would be less than 9 minutes. Those individuals that are not passengers but are accompanying a ticketed passenger to the CTA would be able to return to the ITC from the CTA in approximately the same amount of time. All passenger facilities constructed at LAX would fully comply with all state and federal laws with regard to accessibility as required the Americans with Disabilities Act of 1990.

SPC00036-3

Comment:

Safety & Security

Aircraft collisions during taxi, takeoff and landing can result in more casualties than any terrorist attack. Avoiding such collisions must be first priority. The proposed reconfiguration of the runways is aimed at this goal. NASA Future Flight Center simulations of aircraft operations with the new position of runways 25L and 24L and a new center taxiway indicate that the proposed reconfiguration is better than the current LAX configuration. I do not believe studies have been so complete as to conclude that the proposed reconfiguration of runways is the best. I believe that the proposal to move the runway 25L only 50 feet to the south is short sighted. Moving it farther south would provide greater aircraft separation, less wake turbulence interference between runways, and provide growth potential to handle larger aircraft on the southern runways (25) as will the northern runways (24).

Response:

The relocation of the south runway is to meet FAA Airport Design Standards. There is insufficient space on the airport to move the runway further south, than is proposed due to the proximity of Imperial Highway at the west end of the south complex at the airport. Please see Response to Comment SPHSP00003-3 regarding the proposed runway and taxiway configuration in the south airfield complex.

SPC00036-4

Comment:

The location of the new Rental Car Facility very near the end of the newly positioned runway 24L is unsafe. This is a runway configured to handle the new super-jumbo size aircraft (Airbus A380). An aircraft landing short of the runway or not successfully taking off when the runways are operating in an easterly departure pattern will risk impacting with the proposed Rental Car Facility.

Response:

As indicated in Figure S.4.24.3-7 of the Supplement to the Draft EIS/EIR, The public garage portion of the new Consolidated Rental Car facility is outside of the Runway Protection Zones (RPZ) for Runways 24L and 24R. RPZ defines trapezoidal areas of land centered on the extended centerline of runways where the use of land is restricted. FAA Advisory Circular 150/5300-13 Change 6 (Paragraph 212.b.2.a) states: "While it is desirable to clear all objects from the RPZ, some uses are permitted,

3. Comments and Responses

provided they do not attract wildlife (see paragraph 202.g., Wildlife Hazards), are outside of the Runway Object Free Area (RFA), and do not interfere with navigation aids. Automobile parking facilities, although discouraged, may be permitted, provided the parking facilities and any associated appurtenances, in addition to meeting all of the preceding conditions, are located outside of the object free area extension. Fuel storage facilities should not be located in the RPZ."

The portion of the new rental car facility that is within the Runway Protection Zone meets the FAA definition of a permitted use. LAWA intends to assure that uses within the RPZ do not interfere with the operation of navigation aids and that parking will only occur outside the extended object free areas. Further, this portion of the facility will not be open to the general public and will only be used for the long-term storage of rental cars.

SPC00036-5

Comment:

The master plan puts high importance on security as it should, but the importance is way over balanced with all other important factors. It apparently assumes that security will always be dependent on today's technology and procedures. As security technologies and procedures mature, a future-thinking plan will provide an airport that can benefit from them.

The master plan has several factors that appear to reduce security. Centralizing passenger check-in at the proposed Ground Transportation Center provides a single location that if incapacitated will shut down the entire airport operations. The current multi-terminal, decentralized check-in configuration does not have this weakness. Incapacitation could come from earthquake, fire, electrical outage, and other factors as well as from terrorist activity.

The train (people mover) is also a potential single point failure that can shut down airport operations. A small bomb, bomb scare, mechanical failure, or even protestors on the tracks could bring the airport operations to a halt.

Any airport plan with centralized features will have inherent vulnerabilities to potential full shutdowns from these features. Such major vulnerabilities are not existent in decentralized designs.

The proposed greatly expanded physical size of the airport presents a much greater area that must be secured.

A RAND Corporation study of the security afforded by the proposed LAX Master Plan found that the proposed changes would not increase security compared to the current LAX configuration.

Response:

Please see Response to Comment SAR00006-6 regarding concerns related to the GTC and the APM. Please see Topical Response TR-SEC-1 regarding the RAND Corporation issue paper.

SPC00036-6

Comment:

Cost

The proposed cost at \$9 billion is high and many sources indicate that the real cost is even higher. Reports indicate that the following costs have not yet been included:

- Buying houses and moving 6,000 people out of a Westchester neighborhood
- Financing costs, interest and insurance on revenue bonds
- Tax revenue loss after buying up 77 acres of commercial property
- Purchasing property and the rights to build 2 freeway interchanges
- Cost of the FlyAway lots and service included in the plan
- Environmental mitigation that could require up to one quarter of the budget.

3. Comments and Responses

The high cost should provide some major benefits. The only claimed major benefit is security - and issues of the foregoing discussion compromise that promise. There is no proposed benefit in airport capacity expansion. The proposed airport is designed to handle 78 million passengers per year, the same as the current LAX configuration. Certainly, the passenger convenience is diminished. The parking lot to parking lot time is lengthened.

The plan totally ignores the great economic value in getting passengers to/from homes and offices quickly. The economic costs of inefficient passenger service can outweigh the benefits of costly and ineffective security measures. Because the City of Los Angeles is not bearing these high costs, airport users will ultimately pay them through fees and higher ticket costs. It does not appear that sufficient benefit to the passenger will be returned for the cost.

Response:

Comment noted. The acquisition of Manchester Square is a separate Program from the LAX Master Plan that is currently being implemented by LAWA and will continue to be implemented whether or not the LAX Master Plan is approved. As stated on page 4-96, in Section 4.2, Land Use, of the Draft EIS/EIR, the Voluntary Residential Acquisition and Relocation Program for the Manchester Square and Belford area was established based on interest from homeowners and residents who requested that LAWA purchase their properties in lieu of soundproofing.

As noted by the commentor, the passenger and cargo capacity of LAX under Alternative D is approximately equal to the capacity of the existing facility. The current constraint on LAX passenger capacity fall directly on the passenger due to its congested access system, terminal roadways, curb frontage, and parking facilities, as well as its improperly sized terminal and gate facilities. Without the program improvements, landside access to the airport will be extremely difficult, and during some times, will be in virtual gridlock. Alternative D presents a workable, long-term solution that provides a major benefit to the users by reworking the landside configuration and moving the constraining factor to limited aircraft gates, making the use of LAX a tolerable experience to its passengers.

Property acquisition, financing costs, and environmental mitigation costs, as well as a significant contingency are included in the estimated cost of Alternative D.

SPC00036-7

Comment:

Summary

The foregoing points indicate that the LAX Master Plan is not well conceived. Media reports state that the airlines don't favor it. The communities near the airport do not favor it. Certainly the user passengers can not favor it due to the high costs it will impose on them, the lengthened parking lot to parking lot time, the greater inconvenience, and the dubious added security.

Los Angeles County Supervisor Don Knabe has called the LAX Master Plan unacceptable. Congresswoman Jane Harmon also does not support the plan. These and other officials who have done studies of the proposed plan find it unacceptable.

A lower cost alternate is preferred. This alternative should be based on the runway reconfiguration for added safety and on utilizing most of the existing terminal infrastructure with added modifications for enhanced security. It is believed that such an alternative could add security, little, if any, passenger inconvenience, be more acceptable to local communities, have less environmental impacts, and be accomplished with half the costs or less.

Response:

Comment noted. LAX Master Plan - Alternative D, the fifth Master Plan alternative, was developed after the Draft LAX Master Plan and Draft EIS/EIR document were published in 2001. Alternative D was developed in response to the feedback and public comments received on the No Action/No Project Alternative and Alternatives A, B and C.

The comments regarding the support or lack thereof on the part of LA County Supervisor Don Knabe and Congresswoman Jane Harmon are noted.

3. Comments and Responses

As described in the Draft Master Plan Addendum, the existing terminal infrastructure will be retained and significantly modified. Modifications such as new terminal facilities where the existing parking garages are located, the GTC and the ITC will provide a safe and secure airport environment. The Enhanced Safety and Security Plan will also improve passenger convenience by improving airport ingress and egress and providing efficient passenger processing facilities.

SPC00036-8

Comment:

Conclusion

The proposed LAX Master Plan is unacceptable.

The proposed LAX reconfiguration will add great inconvenience and cost to the using passengers.

The added security is dubious. The proposal includes vulnerabilities from centralized facilities not existent in the current LAX configuration.

The anticipated costs are not justified by the potential benefits.

Other lower cost, more effective alternatives are believed to exist.

Response:

Comment noted. Please see Responses to Comments SPC00036-2 through SPC00036-7 above.

SPC00037 Moxley, Tom None Provided 8/14/2003

SPC00037-1

Comment:

I SUPPORT PLAN "D" - IT'S TIME WE BRING LAX UP TO DATE AS AN AIRPORT. SECURITY, SAFETY IS A MAJOR CONCERN OF MINE. PLANE ARE BIGGER, TODAY WHEN THE AIRPORT WAS BUILT. IMPROVING TO FLOW OF PASSENGERS IN & OUT IS GREATLY NEEDED. NOW SINCE 9/11 SECURITY IS A MAJOR ISSUE. WE HAVE STALLED TOO LONG - LET'S GET GOING.

Response:

Comment noted.

SPC00038 Mnego, Brenda None Provided 8/14/2003

SPC00038-1

Comment:

PLEASE TAKE INTO CONSIDERATION PERIMETER SECURITY OF LAX WHICH (RIGHT NOW) IS LIKE SWISS CHEESE . . .

HAVE YOU TAKEN INTO CONSIDERATION STAFFING & TRAINING FOR ADDITIONAL LAW ENFORCEMENT (LAX LAPD)

HOW WILL THIS IMPACT STAFFING OF TSA SECURITY PERSONNEL?

Response:

Comment noted. Perimeter security has been a focus at LAX even prior to September 11, 2001. An extensive array of closed circuit cameras are used to monitor the airport's perimeter. Those entrance

3. Comments and Responses

points that are in close proximity to passenger and cargo terminal areas are closely guarded with extensive security procedures to check each individual entering the perimeter. These procedures not only secure the facility they help provide for the safety of the airfield by ensuring that people and vehicles do not enter the airfield area.

Additional airport police have been hired and trained to respond to the range of unique incidents that make the airport different from other parts of the City. LAPD Officers have also been trained to provide support to the Airport Police during heightened levels of security and during peak holiday periods.

The proposed approach to security in Alternative D has been designed to allow focused use of TSA Security Screeners in the reconstructed CTA. The new Level 2 (TSA) passenger checkpoints would be properly sized to ensure the highest level of passenger convenience while still meeting passenger screening protocols. With sufficient space and proper design, these checkpoints will allow for flexible staffing to meet the passenger flows. This would allow for opening more check lanes during peak periods and consolidation of check areas and lanes during non-peak periods.

SPC00039 King, Erin None Provided 8/7/2003

SPC00039-1

Comment:

Please make all passengers, both commercial and general aviation passengers go through all the proper screening procedures at the off site screening location.

General aviation passengers usually are the wealthy elite - that shouldn't preclude them from following the same security procedures as commercial airline passengers!

Response:

Comment noted. The TSA is developing improved procedures for GA security screening. Presently, fixed base operators (FBO's) or the location where GA aircraft are parked, are required to control access to the Airport Operations Area (AOA). These procedures ensure that only aircraft owners, pilots and their passengers have access to GA aircraft. At LAX, in particular, the FBO's are located along Imperial Highway and away from the commercial passenger terminals.

SPC00039-2

The remainder of this comment letter is identical to form letter SPFA; please refer to the response to form letter SPFA.

SPC00040 Waters, Maxine U.S. House of Representatives 8/20/2003

SPC00040-1

Comment:

Thank you for the opportunity to speak and submit a statement regarding the Draft Environmental Impact Statement/Environmental Impact Report for Alternative D Enhanced Safety and Security.

As the Member of Congress for the 35th Congressional District, I represent over 638,000 constituents who live in the cities and communities of Inglewood, Westchester, Playa del Rey, Gardena, Hawthorne, Lawndale and portions of South Los Angeles. Since the release of the prior Master Plan in January 2001 and the release of the new Supplement to the Master Plan Alternative D, the views and concerns of my constituents have not changed.

3. Comments and Responses

Response:

Comment noted.

SPC00040-2

Comment:

Thousands of residents are still heavily impacted by airplane noise on a constant basis. Thousands of residents are still impacted by pollutants and toxins from aircraft emissions that fly overhead. Thousands of residents have suffered the consequences of increased traffic congestion in their neighborhoods. Thousands of residents are still suffering from hearing loss, sleep deprivation, hypertension, respiratory ailments, anxiety and stress. Residents should not have to live under such conditions.

Response:

The Draft EIS/EIR and Supplement to the Draft EIS/EIR address noise impacts in Section 4.1, Noise, and Section 4.2, Land Use, air quality in Section 4.6, Air Quality, human health in Section 4.24.1, Human Health Risk Assessment, and traffic in Section 4.3, Surface Transportation. Supporting technical data and analyses are provided in Appendix D, Appendix G, and Technical Reports 1, 2, 3, 4, and 14a of the Draft EIS/EIR and Appendix S-C, Appendix S-E, and Technical Reports S-1, S-2a, S-2b, S-4, and S-9a of the Supplement to the Draft EIS/EIR. The Supplement to the Draft EIS/EIR addresses the effects of single event aircraft noise relevant to nighttime awakening in homes in Section 4.1, Noise, and Section 4.2, Land Use, with supporting technical data and analyses provided in Appendix S-C and Technical Report S-1. Please see Response to Comment AL00017-246 regarding the fact that existing and future noise levels at and around LAX are projected to be well below OSHA and CalOSHA standards that serve to protect against hearing loss. In addition, please see Topical Response TR-HRA-3 regarding human health impacts and Topical Response TR-LU-1 regarding quality of life.

SPC00040-3

Comment:

With the release of Alternative D, new issues of concern have arisen. I have talked to many residents and elected officials regarding Alternative D. The primary focus of the plan is enhanced safety and security imposed as a result of the possible threat of terrorism in the aftermath of the September 11th attacks.

Although I am highly in favor of ensuring all passengers and employees at LAX and other airports are as safe as possible, there are evident flaws in Alternative D. Specifically, my objections to the proposed plan hinge on the following:

Response:

Comment noted. Please see Responses to Comments below.

SPC00040-4

Comment:

1) The new alternative increases the passenger cap from 78 million annual passengers (MAP) to 78.9 MAP as illustrated in the Table ES-1 of the Executive Summary, Supplement to the Draft EIS/EIR Volume 1. This is a clear deviation and violation of the Mayor's promise and pledge to constrain passenger capacity within LAX to the existing facilities which he signed on March 26, 2001.

On July 16, 2002, I introduced The Careful Airport Planning (CAP) for Southern California Act (H.R. 5144). This legislation would cap LAX traffic at 78 million passengers a year and prevent LAX from expanding beyond its current capacity. The County Board of Supervisors and the Los Angeles City Council has supported this legislation which is currently pending.

Response:

The content of this comment is the same as Comment SPHM00031-4; please refer to the Response to Comment SPHM00031-4.

SPC00040-5

Comment:

2) Alternative D sounds more like expansion than safety and security given the fact part of the plan is to utilize the Manchester Square area as a Ground Transportation Center (GTC). If LAWA is relocating residents out of the Manchester Square area and clearing the land of over 568 properties to build this new Center, I would definitely call that expansion. This site has been opposed by the community, elected officials and there is no substantive proof that it will make the airport more secure.

Response:

Please see Response to Comment SPHM00031-5.

SPC00040-6

Comment:

3) Based on a recent analysis completed earlier this year by the RAND Corporation, to simply reconfigure the airport does not mean the airport is safer than before. It would actually make the airport less safe in certain instances. The RAND analysis states that "The greatest risks are in high density areas such as lines for ticketing, baggage claim and the security check points. These risks are not likely to be reduced by Alternative D, which simply moves these targets of opportunity to the Ground Transportation Center (Manchester Square) and the people mover."

Response:

This comment does not raise or pertain to any environmental issues that are subject to NEPA or CEQA review requirements. Notwithstanding, please see Topical Response TR-SEC-1, which addresses the most frequently raised security-related issues pertaining to the design and ability of Alternative D to enhance existing safety and security at LAX.

SPC00040-7

Comment:

4) During these tough economic times, it is not prudent to increase passenger facilities charges and to use any surplus funds on untested ideas. We must take a lesson from the State of California and not allow ourselves to create a deficit in the billions of dollars on plans and ideas of uncertainty.

There are major airlines who are also opposing Alternative D due to the current decline in air travel and the increased costs that would be incurred such as landing fees, to pay for much of the project.

Response:

Alternative D will improve the safety and security of the airport, reduce traffic congestion, change the airfield and terminal airside to accommodate new aircraft, improve the efficiency of terminal operations, and eliminate the remote aircraft parking.

Funding for Alternative D projects will not come from the state of California General Fund nor will they come from the United States General Fund from income taxes. The proposed master plan improvements would be funded with a combination of FAA Airport Improvement Fund grants, passenger facility charges, general airport revenue bonds, and other state/federal grants.

3. Comments and Responses

SPC00040-8

Comment:

Alternative D is simply a ploy and continuation of former Mayor Richard Riordan's plan to expand the airport under the name of safety and security.

Response:

The content of this comment is the same as Comment SPHM00031-8; please refer to the Response to Comment SPHM00031-8.

SPC00040-9

Comment:

In addition, Alternative D provides Los Angeles World Airport (LAWA) Commission President Ted Stein and Mayor Hahn an opportunity to assist their fat cat developer friends in securing large city contracts in return for re-election campaign contributions.

Response:

Comment noted.

SPC00040-10

Comment:

I am opposed to Alternative D. I believe that now is the time to seriously look at developing a more regional approach to air travel so that airports such as Ontario International and Palmdale Regional can begin to accept their fair share of air traffic.

I am asking all constituents of the 35th Congressional District and the South Bay communities to oppose Alternative D.

Response:

Comment noted. LAWA only controls the operations and potential improvements at LAX, Ontario, Palmdale, and Van Nuys airports. LAWA is developing plans for all three of its potential commercial service airports. Alternative D for LAX, as detailed in the Supplement to the Draft EIS/EIR, emphasizes safety and security improvements, rather than capacity increases. By not increasing the capacity of LAX, it is incumbent on the other airports in the region to serve a larger percentage of the regional demand. Master plan updates are currently underway for both Ontario and Palmdale airports. The master plans will recommend improvements to meet the projected demand. Expansion at Ontario, Palmdale, or any of the other regional airports will not negate the need for modernization of LAX. For further information regarding the role of the LAX Master Plan in a regional approach to meeting demand, please see Topical Response TR-RC-1. Also, please see Topical Responses TR-RC-1 and TR-RC-5 regarding other airports in the region generally, and the airports at Ontario and Palmdale specifically.

SPC00040-11

Comment:

Congresswoman Waters: Security and Public Safety Must Come First at LAX

Lawmaker Introduces Legislation to Prohibit Construction of a Remote Check-in Facility at Manchester Square Unless It Provides Increased Security, Public Safety

Washington, D.C.- Immediately prior to adjournment of Congress for the August recess, Rep. Maxine Waters (D-CA) introduced H.R. 2985, a bill to prohibit construction of a new Ground Transportation

3. Comments and Responses

Center (GTC), a remote passenger check-in facility at Los Angeles International Airport (LAX), unless it has been determined that such a facility would improve the safety and security of the public.

"The safety and security of LAX is an issue of tremendous importance to me and the people I represent," said Congresswoman Waters. "I am deeply concerned that the proposed GTC at Manchester Square will actually make the airport less secure than it is now."

Supporters of Los Angeles Mayor James Hahn's \$9.6 billion LAX modernization plan claim the proposed GTC will improve airport security and make LAX less vulnerable to terrorist attacks. However, a recent study by the RAND Corporation concluded that reconfiguring LAX will do nothing to improve public safety; it will only relocate the target of an attack to the remote check-in facility.

"According to the Rand Study, passengers and airport personnel would be more vulnerable to terrorist attacks because of the concentration of passengers at the GTC," Waters explained. "Moreover, the study found that by consolidating passengers and vehicles at a check-in center a mile from the airport, the mayor's plan could greatly increase the number of casualties that result from firearms or small bombs concealed in luggage if such attacks were to occur."

Waters' bill would prohibit the construction of the GTC unless there is a determination that such a remote check-in facility will, in fact, improve public safety and security. The bill would require a review of the proposed facility by the Department of Homeland Security prior to its construction. If the Secretary of Homeland Security determines that the facility will not protect the safety and security of air passengers and the general public more effectively than the existing facilities at LAX, the Federal Aviation Administration (FAA) would not be allowed to approve its construction.

"LAX is the third largest airport in the United States and a potential target for terrorists," said the Congresswoman. "I will not support an LAX modernization project that compromises public safety and security."

On July 23, 2003, Congresswoman Waters sent letters to the Chairman and Ranking Member of the House Appropriations Committee to request that the Transportation-Treasury Appropriations Act for Fiscal Year 2004 include a provision to condition the construction of the proposed remote passenger check-in facility on a security determination. On the same day, she sent letters to the Chairman and Ranking Member of the House Transportation Committee to request that the conference report for H.R. 2115, the FAA Reauthorization Act, include a comparable provision.

"Security must come first," Waters said. "I will continue to use every available opportunity provided by the legislative process to ensure that this controversial LAX expansion project does not compromise the safety and security of LAX and the surrounding community."

Response:

This comment does not raise or pertain to any environmental issues that are subject to NEPA or CEQA review requirements. Notwithstanding, please see Topical Response TR-SEC-1, which addresses the most frequently raised security-related issues pertaining to the design and ability of Alternative D to enhance existing safety and security at LAX.

SPC00040-12

Comment:

Firms With LAX Ties Aid Hahn

Some critics see a conflict of interest in fund-raisers set up by possible contractors.

By Patrick McGreevy Times Staff Writer

Two weeks after Mayor James K. Hahn proposed spending \$9 billion to modernize Los Angeles International Airport, contractors likely to benefit from the massive public works project are lining up to raise money for his reelection campaign.

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Airport contractors have scheduled Hahn fund-raisers for Monday, Tuesday and Wednesday, with admission set at \$1,000 per person.

Critics of the LAX renovation and advocates of new ethics rules at City Hall said they were troubled that airport contractors would help Hahn raise money so soon after the release of his plan.

"It is no surprise that the mayor is developing an opportunity to dole out \$9 billion worth of favors to people who are contributing to his campaign," said Denny Schneider, an officer of the Westchester-Playa del Rey Neighborhood Council. "It's a pay-to-play system at this point. I feel very frustrated and betrayed."

Rep. Maxine Waters (D-Los Angeles), who opposes the project, also said she believes there is a link between the plan and Hahn's political ambitions.

"As far as I am concerned, this is about contracts and the exercise of power by the mayor to create more opportunity for his contributors," Waters said.

Bill Carrick, a political advisor to Hahn, denied any connection between the modernization plan and the fund-raisers.

"There isn't any link," Carrick said. "The fund-raising operation has been planning these events for a while, long before the mayor's plan was announced."

Other observers said that Hahn's plan for LAX faces an uphill battle for approval, so the mayor may not be able to deliver the large public works contracts, even if he wants to. The proposal, including reconfiguration of the central terminal area and construction of a new passenger check-in facility a mile east of the airport, would need approval from the city Airport Commission, the City Council and the Federal Aviation Administration after a 45-day public comment period.

"If the mayor's plan is D.O.A., then the quid in quid pro quo goes away," said a political consultant, Larry Levine, who is not affiliated with the Hahn campaign.

Contractors said they had scheduled the fund-raisers well before Hahn released details of his airport plan July 9, and they maintained that they support the mayor for reelection because of his broader vision for improving Los Angeles.

Many contractors see the airport overhaul as a significant part of that vision, however.

In an invitation to Monday's reception at its One Bunker Hill headquarters, the engineering firm HNTB said Hahn's reelection is important "so the city can continue developing its focus upon" issues that include "modernization, safety and security enhancements for LAX."

HNTB already has contracts worth \$8.1 million with the city airport department, known as Los Angeles World Airports, including one to help expand Ontario International Airport and another to improve airfields that would be affected by the LAX modernization plan.

The company also was a subcontractor to Bechtel-JGM for a security study on the LAX perimeter and was a subcontractor on a study of passenger ground- transportation service.

HNTB officials did not return calls for comment.

On Tuesday, public relations firm Fleishman-Hillard will host a luncheon for Hahn at the exclusive City Club in downtown Los Angeles.

The firm has an \$800,000 contract with the city airport agency to help with marketing Ontario International Airport.

"I can tell you unequivocally, my raising money for the mayor has absolutely nothing to do with Fleishman-Hillard's relationship" with the airport agency, said Doug Dowie, the firm's general manager. He said the company had no plans to bid for additional airport work created by the modernization plan.

3. Comments and Responses

Hahn's Wednesday fund-raiser is a reception at Union Station hosted by the heads of airport contracting firms, including Psomas and Associates, Daniel Mann Johnson and Mendenhall and G & C Equipment Corp.

One of the hosts, Tim Psomas, is chairman of the board of an engineering firm that has received work worth more than \$2 million through January 2004 as a subcontractor on the LAX master plan.

Another co-host of the event is Gerald Seelman, a corporate vice president with Daniel Mann Johnson and Mendenhall, an engineering company that has a \$5.2- million city contract to design the new Flyaway Bus Terminal at Van Nuys Airport, where passengers will board buses for LAX.

Another co-host for Wednesday's reception is Gene Hale, the president of G & C Equipment Corp., which provides rental equipment to the city airport agency.

Hale said he supports Hahn for many reasons, and he also hopes to get a piece of the LAX work.

"I will submit my bid just like everybody else to the prime contractors," he said.

Hale also is chairman of the Greater Los Angeles African American Chamber of Commerce, which two weeks ago became one of the first business groups to endorse Hahn's modernization plan.

"We think the revised plan would be economically viable for the city and will create a lot of jobs," Hale said.

Supporters who have been asked by Hahn's campaign to help raise money say they have been told by mayoral advisors that the goal is to raise enough money to dissuade potential challengers to the incumbent.

"Clearly we want to send a message to anyone thinking of running that the reelect Jim Hahn campaign will be well-funded," Carrick said.

"That's how you keep people out. You scare them with money," added political consultant Joe Cerrell, who has submitted a bid for an LAX community relations contract and said he would raise money for Hahn "if asked."

Hahn recently reported that he had reached the \$200,000 threshold in fund- raising, even though no one has filed papers to challenge him yet and the election will not be until March 2005.

"He is going to be fully prepared to run a vigorous and competitive campaign," Carrick said

Response:

Comment noted.

SPC00041

None Provided

Mar Vista Group

8/7/2003

SPC00041-1

Comment:

ELIMINATE JETS
POLLUTION
NOISE
HEAVY AIRCRAFT

Response:

Comment noted. The Draft EIS/EIR and Supplement to the Draft EIS/EIR addressed air quality in Section 4.6, Air Quality, and noise impacts in Section 4.1, Noise, and Section 4.2, Land Use. Supporting technical data and analyses are provided in Appendix D, Appendix G, and Technical Reports 1 and 4 of the Draft EIS/EIR and Appendix S-C, Appendix S-E, and Technical Reports S-1 and S-4 of the Supplement to the Draft EIS/EIR. In addition, please see Topical Response TR-N-4 regarding

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noise mitigation and Topical Response TR-N-6 regarding the fact that the amount of noise generated by an aircraft is not always directly related to the size.

In addition, it should be noted that neither FAA or LAWA have the authority to ban the use of heavy aircraft (over 300,000 pounds) or the use of turbojet aircraft at LAX.

SPC00041-2

The remainder of this comment letter is identical to form letter SPFA; please refer to the response to form letter SPFA.

SPC00042 Tomeo, Betty None Provided 8/12/2003

SPC00042-1

Comment:

Mayor Hahn's recent proposed LAX Master Plan Alternative is supposed to address "Safety and Security" issues, however I am extremely concerned about the exception of general aviation airport users who would continue to be allowed unscreened access to the runway from the Imperial Highway entrance.

I am always worried about the private planes that fly over my house - that neither the plane, the pilot nor the passengers have been screened for anything by anyone.

The Los Angeles World Airports is urged to consider the risks of this proposal and address the lack of security at the general aviation passenger access at the Imperial entrance.

In addition, encourage the FAA to increase security standards nationwide not only for access to all general aviation areas but also for screening of the pilot, plane and passengers for security purposes at all airports, like ours, with general aviation traffic.

Response:

Please see Response to Comment SPC00039-1 regarding security concern involving general aviation.

SPC00043 Alimaneshianu, Irina None Provided 8/7/2003

SPC00043-1

Comment:

Living under a flight path in these times of uncertainty is unsettling. We do not want increased traffic at the Santa Monica Airport, especially if the security is not heightened at these smaller airports.

Response:

This is not a comment on the contents of the Draft EIS/EIR or Supplement to the Draft EIS/EIR.

SPC00043-2

The remainder of this comment letter is identical to form letter SPFA; please refer to the response to form letter SPFA.

SPC00044 Ruiz, John TWU Local 564 8/20/2003

SPC00044-1

Comment:

IN THE CURRENT LAX MASTER PLAN, I NOTICED THERE ARE PLANS TO ADD TO THE CURRENT INTERNATIONAL TERMINAL BY CREATING AN ADDITIONAL AREA WEST OF THE TOM BRADLEY TERMINAL. THERE ARE THREE SEPARATE AMERICAN AIRLINES AIRCRAFT MAINTENANCE FACILITY HANGARS GEOGRAPHICALLY POSITIONED NEAR THIS PROPOSED LOCATION. THIS LOCATION CURRENTLY EMPLOYS 600 PERSONNEL. WHAT IS GOING TO HAPPEN TO THIS FACILITY? IN THE EVENT THE HANGARS ARE DEMOLISHED, WHERE WILL A NEW FACILITY BE ERECTED TO ACCOMODATE AND ENSURE SAFE MAINTENANCE CAN BE PERFORMED ON OVERNIGHT AIRCRAFT? FINALLY, WHO WILL FOOT THE BILL, IN THE EVENT NEW HANGARS ARE REQUIRED TO BE ERECTED?

Response:

As described in Chapter 2.6.1 of the Draft Master Plan Addendum, Airline Maintenance Ancillary Facilities, the existing American Airlines Maintenance complex would be removed.

Two new facilities totaling approximately 300,000 square feet would be located on the west side of the airport, south of World Way West.

A portion of the cost of removing existing maintenance facilities and constructing new maintenance facilities would be included in the overall cost for implementation of the Master Plan.

SPC00045 Koch, Andreas None Provided 8/20/2003

SPC00045-1

Comment:

Support a public transportation system that allows the metro Green line to connect to a transporter (people mover) directly to the terminals.

I.E. similar to Atlanta, etc.

Response:

Alternative D includes a direct walkway from the people mover terminus at the ITC to the Green Line Aviation Station. Some airports have light rail lines that directly access terminal buildings, such as in St. Louis, although most require some sort of intermediate link, such as at Chicago O'Hare which requires a lengthy moving walkway trip to get to the terminals. The system proposed for Alternative D is similar to most U.S. airports that provide light rail access. This was discussed in more detail in the Supplement to the Draft EIS/EIR, Section 4.3.2, and in Technical Report S-2c.

SPC00045-2

Comment:

Also suggest no further Air traffic growth due to environmental & living quality standards for neighboring city residents that will be negatively affected.

Response:

Comment noted. Please see Topical Responses TR-GEN-3 regarding past and present activity levels at LAX, and TR-LU-1 regarding quality of life.

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SPC00046 Castle, Gregory None Provided 8/20/2003

SPC00046-1

Comment:

- SUPPORT THE RECOMMENDED MODIFICATIONS IN THE CTA AS DESCRIBED IN FIGURES H-22 AND H-23.

- SUPPORT ALTERNATIVE D7B AS DESCRIBED IN FIGURE H-32.

Response:

Comment noted.

SPC00047 Johnson, R None Provided 8/20/2003

SPC00047-1

Comment:

This comment is limited to a sincere thanks to the staff attending today's public meeting in Manhattan Beach. Not only are staff members comprehensively knowledgeable concerning the diverse aspects and impacts of the proposed plans, but they are courteous to and solicitous of lay community members. A fine staff!

Response:

Comment noted.

SPC00048 Shaddock, Andrew None Provided 8/20/2003

SPC00048-1

Comment:

I LIKE THE PLAN VERY MUCH. RE: GROUND TRANSPORTATION IT IS IMPORTANT TO ME THAT THE PLAN DOES NOT PRECLUDE A RAIL CONNECTION (GREEN LINE OR OTHER) FROM THE ITC NORTH UP THE EXISTING RAIL RIGHT-OF-WAY.

A DIRECT CONNECTION UP THE MTA HARBOR SUBDIVISION FROM THE ITC TO UNION STATION WOULD SIGNIFICANTLY MITIGATE THE IMPACT OF LAX BOUND OR ORIGINATING TRAFFIC ON LOCAL STREETS AND FREEWAYS.

TRANSPORTATION OPTIONS TO/FROM LAX ARE VERY IMPORTANT.

Response:

Comment noted. The plan would not preclude a future connection using the existing rail right-of-way.

SPC00049 Remetch, Al None Provided 8/21/2003

SPC00049-1

Comment:

Trying to institute an airport in Palmdale right now is like putting the cart in front of the horse. Palmdale should build a great community like Valencia and the airport would become a necessity.

Please consider the homeowners in creating schedules, access to the airport, and other construction.

3. Comments and Responses

Every community that has an airport hates it. Palmdale should take a cue from this and preserve the tranquility of our valley

Response:

Comment noted. Please see Topical Response TR-RC-5 regarding LAWA's efforts to encourage operations at Palmdale, planned improvements at the airport and nearby by LAWA and Caltrans, and the master plan update that is currently underway.

SPC00050 Estrada, Mario None Provided 8/21/2003

SPC00050-1

Comment:

AS A 14 YEAR RESIDENT OF PALMDALE, I SUPPORT THE REGIONAL AIRPORT. IT WILL GENERATE JOBS FOR THE AREA ON TOP OF RELIEVING THE FLOW OF HEAVY TRAFFIC FROM THE ANTELOPE VALLEY TO L.A.X.

IF YOU ONLY KNEW THE NIGHTMARE OF DRIVING THE 14 FWY TO THE 405 INTO L.A.X.

YOU WOULD FULLY SUPPORT SUCH REGIONAL AIRPORT.

DURING THE 94 NORTHRIDGE EARTHQUAKE THE WHOLE ANTELOPE VALLEY WAS ISOLATED WITHOUT THE 14 FWY. WOULD OF BEEN NICE TO HAVE A GOOD ECONOMY AT A LOCAL LEVEL.

Response:

Comment noted. Please see Topical Response TR-RC-5 regarding transferring LAX operations to Palmdale.

SPC00051 Zepada, Jose None Provided 8/7/2003

SPC00051-1

Comment:

Security is a major issue for us. Pls support us in the safety of us & our children living in this area when implementing future polocies.

Response:

This comment does not raise or pertain to any environmental issues that are subject to NEPA or CEQA review requirements. Notwithstanding, please see Topical Response TR-SEC-1, which addresses the most frequently raised security-related issues pertaining to the design and ability of Alternative D to enhance existing safety and security at LAX.

SPC00051-2

The remainder of this comment letter is identical to form letter SPFA; please refer to the response to form letter SPFA.

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SPC00052 Jacobson, Norman Lance Camper Manufacturing Corporation 8/19/2003

SPC00052-1

Comment:

I am writing you in reference to the Regional Airport in Palmdale. The communities of the high desert now have over a quarter of a million inhabitants. The city of Santa Clarita has even more. Both areas are growing at an astonishing rate. In the future it is where all northern Los Angeles growth will come.

For residents of either community to get to LAX over the constant congestion is almost unbearable. In fact, it is easier to get to either Long Beach or Ontario from Palmdale than to go to LAX for a morning flight. Of course there is Burbank if you are flying the west coast corridor. Those flights however are often full with no plans for expansion there.

With the City of Los Angeles wanting to expand and upgrade LAX, they should consider or be mandated to sell the Palmdale property to a consortium of interested communities so we can develop our own airport.

Palmdale and Lancaster are at an extreme disadvantage to be able to entice white-collar businesses to our area without local air service. New air service need not connect through LAX. Flights going east could connect in Las Vegas or Phoenix.

Our company, Lance Camper Mfg., goes through the time-wasting experience of having to bring people up to our factory through LAX for business meeting and training. Between the up and back trips we waste almost a day and add to the congestion. We are planning our regular dealer meeting with 230 people. It would be best of we had it locally with a visitation to our factory. That is hardly an option because of the lengthy drive.

Those council members who are opposed to either opening up Palmdale Regional Airport or selling it need to make the trip from Palmdale to LAX to catch an 8:00 am flight. You need to leave at 4:30 am and hope there are no accidents along the way. It is easier to leave in the evening and overnight at an airport hotel.

It's hard to understand why any authority would want to make LAX more congested than it already is. If the Palmdale Regional Air Park could provide air service for the high desert and the Santa Clarita area it would be another step toward getting a high-speed train and a stop in Palmdale. Even now, rail service to Palmdale is excellent. From the Palmdale stop to the airport is a three-minute cab ride.

Let's override the political issue and start considering the people who are affected by not having our own air service.

Thank you for considering our message.

Response:

Comment noted. Please see Topical Response TR-RC-5 regarding transferring LAX operations to Palmdale.

SPC00053 Dupont, Willy-Pierre Airbus 8/11/2003

SPC00053-1

Comment:

Release of LAX Master Plan on the 9th of July 03

- The LAX master plan has been officially released on the 9th of July by LA Mayor Hahn:
- Address passenger security and airport safety.
- Keep LAX as major international gateway.
- Limited growth assumed (78 million versus 56 today) with alternative D.
- Traffic growth at other local airports questionable (ONT, BUR and LGB capability to get 20 million additional pax).
- International traffic to more than double.
- Minimize environmental impact.
- \$9.6 billion to be spent from 2004 to 2015.
- Would create 49000 construction jobs
- Carriers will pay a significant part of the bill.
- Airside and terminals will be heavily modified.
- New satellite to be built.
- Most of CTA will be transformed with no vehicle access and with a secured train system.
- Construction timescale and priorities to be clarified.
- Star alliance approves the plan. ATA and domestic carriers are against.
- Public comments within 45 days (3rd week of August).

Response:

The content of this comment is a summary of several Alternative D points. It should be noted that the comment period was extended to November 7, 2003, for a total of 120 days.

SPC00053-2

Comment:

Airbus proposal for LAX plan

- This proposal is based on Airbus knowledge of the LAX situation and of the A380 performance.
- Proposal aim to improve airside safety (runway incursions) while providing A380 capability (international traffic growth without movement and noise increase) and to minimize costs.
- Proposal aim to link short/medium plan with long term master plan
- Proposal to be agreed/validated by the carriers.
- Joint agreed proposal to be discussed with LAWA and possibly presented to the LAWA board of commissioners, the carriers and to the LA council

Response:

Comment noted.

SPC00053-3

Comment:

Proposal for LAX runways

- Assume primary departure runways for group VI aircraft operations: 6R/24L (150x10285ft) and 7L/25R (150ftx12090ft).
- Assume primary arrival runways for group VI aircraft operations: 6L/24R (150x8925ft) and 8R/25L runways (200x11095ft).
- Rem: A380 can takeoff at MTOW (QFA) on 10000ft and on 9000ft for other carriers. Landings ranging from 7000 to 8000ft.
- Adapt shoulders/lights where needed.
- Rem 25L as primary group VI departure until taxiway C is upgraded for group VI aircraft operations.
- Do not move any runway to the South.
- Shift runways 24R (1500ft) and 25L (3000ft) to the West. It would reduce noise exposure, improve the runway incursion issue and allow an increase of the South cargo area (with runway 25L limited to 10000ft).
- Ban general aviation and helicopters traffic (types primary involved in fatal accidents).
- Limit commuter traffic to 19 seaters and above.

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Response:

The assumption that Runway 6R/24L and Runway 7L/25R are used as the primary departure runways is consistent with the way the LAX airfield currently operates.

The assumption that Runway 6L/24R is used as a primary arrival runway is consistent with the way the LAX airfield currently operates. The other primary arrival runway is 7R/25L, which is 150 feet wide and 11,095 feet long. Airbus remarks that the A380 will have sufficient arrival and departure runway length available with the existing LAX runways.

Three of LAX's four runways are 150 feet wide. Runway 7R/25L (the southernmost runway) is 200 feet wide.

FAA Advisory Circular 150/5300-13 recommends that Group V runways have 35 foot paved shoulders adjacent to the runway surface. For Group VI, 40 feet is recommended.

A 150 foot wide runway with 35 foot shoulder on each side would provide sufficient paved surface to protect the area directly beneath the outboard engine nacelle of the A380 thus preventing erosion from jet blast.

The bottom of the A380 outboard engine nacelles is greater than six feet above the ground negating the need to modify the height of the existing runway and taxiway lights at LAX, which are typically less than 18 inches tall.

The use of Runway 25L as the primary departure runway for A380 operations may be feasible for a limited period of time prior to airfield improvements related to LAX Master Plan - Alternative D.

LAX Master Plan - Alternative D would relocate existing Runway 7R/25L 55 feet south of its current location and Runway 6R/24L 340 feet south of its current location. The runway relocations will allow the construction of two new parallel taxiways; one between Runways 6R/24L and 6L/24R and the other in the south airfield between Runways 7L/25R and 7R/25L. The construction of center parallel taxiway between the two sets of runways at LAX would improve safety at LAX by limiting the potential for runway incursions through eliminating direct access via taxiways from the existing outboard runways to the inboard runways.

Relocating the Runways 7L/25R and 7R/25L further west is not consistent with the master plan goal of reducing environmental impacts to the greatest extent possible. There are sensitive habitat areas west of the west ends of the two runways that would be impacted by any runway relocation to the west. LAX Master Plan - Alternative D reduces the potential for runway incursions by relocating Runway 7R/25L 55 feet south of its existing location and constructing a new parallel center taxiway between the south runways. The elimination of high-speed taxiways directly linking the outboard and inboard runways at LAX is a key feature in improving airfield safety. Relocating the south airfield runways further west does not address the issue of taxiways directly linking the two runways.

General aviation and helicopter traffic at LAX account for a small percentage of total airport operations. Business and corporate jets and helicopter traffic are important components of LAX. The United States Coast Guard (USCG) is one of several important tenants at LAX with a helicopter base. The USCG flies routine coastal patrols from their base at LAX.

LAX Master Plan - Alternative D provides for the relocation of the USCG facilities within the LAX boundary. Additionally, FAA provides safe and efficient air traffic control of all GA and helicopter operations to and from LAX.

United Express affiliate, SkyWest currently operates the smallest commuter aircraft at LAX, the 30 seat Embraer Brasilia (EMB-120). SkyWest connects several regional communities with LAX and feeds United's LAX hub.

SPC00053-4

Comment:

Proposal for LAX taxiways

- Assume taxiways A, C West and E West as main parallel group VI taxiways. Minimum separations ranging from 450ft (E), 500ft (A) to 648ft (C).
- Create:
 - 2 interim taxiways for aircraft up to group III (separations from 350ft to 372ft), between the two pairs of runways.
 - 1 new taxiway for group IV to VI at 500ft (or more if possible) North of runway 24R.
- Adapt taxiways D/E East area to allow 24L departures or 6L arrivals.
- Restrict taxiway B to group III and relocate Taxiway C East 238ft North of B, for group IV to VI operations, with 146ft clearance to a new Service road adjacent to apron area.
- Assume AA and S as main North/South group VI taxiways.
- Replace taxiway Q by a new taxiway T designed for group VI operations.
- Increase TWY to object (service road) distances on main group VI taxiways to 146ft (or 160ft wherever possible).
- Strengthen existing parts as required (Sepulveda tunnels).

Response:

Taxiway A would likely provide an interim east-west route to and from Runway 7R/25L for A380 aircraft when the aircraft enters commercial service in 2006. Portions of Taxiways E and C may also be used though operations on adjacent taxiways may need to be partially restricted.

LAX Master Plan - Alternative D would include the construction of two new center parallel taxiways. One would be constructed between Runways 6L/24R and 6R/24L while the other would be constructed between Runways 7L/25R and 7R/25L. The proposed taxiways would have modified Group VI separation standards.

The construction of smaller taxiways, or restricted taxiways, is not feasible for two reasons:

First, restricting the center parallel taxiways to Group III aircraft would not Accommodate Boeing 757, 767, 777 and 747 aircraft in addition to Airbus A300, A310, A330 and A340 aircraft. Restricting these aircraft, which are common among the fleet mix at LAX, would require that the existing taxiways directly linking the outboard and inboard runways to be maintained. Failure to reduce the number of taxiways directly linking the outboard and inboard runways wouldn't be consistent with the airport goal of improving airfield safety.

Secondly, separation standards are not unidirectional. Where a parallel taxiway and runway lie, the runway's separations standards will typically trump the taxiways. All four LAX runways accommodate Group V aircraft operations. FAA Advisory Circular 150/5300-13 recommends that Group V runways have a minimum of 400 feet of separation from a parallel taxiway.

LAX Master Plan - Alternative D does not construct any airfield facilities north of existing Runway 6L/24R. This is to minimize airport impact to the Westchester neighborhood, which is directly north of the airport.

It is assumed that Airbus's concept for the runway and taxiway system at LAX is to have wide body aircraft exit the outboard runways away from the airport terminal area, taxi to the west end of the airfield and then cross into the airfield interior. This would result in a shift in the way in which the airfield currently operates. Additional study of operations would be required to check for the potential of increases in taxi time and delay.

Limited A380 departures from Runway 24L may be accommodated in the interim period. However, operations on adjacent taxiways may need to be restricted during A380 operations.

Master Plan - Alternative D would reconstruct Taxiway E and Taxi lane D with sufficient separation to allow for unrestricted access to Runway 6L/24R by A380 aircraft.

LAX Master Plan - Alternative D would reconfigure Terminals 4, 5, 6, & 7 to accommodate narrow body, domestic flights. Taxiways B and C would remain as is as this portion of the airfield would not likely accommodate Group VI aircraft.

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Taxiway AA may be used to taxi A380 aircraft between the north and south airfields. LAX Master Plan - Alternative D would reconstruct Taxiways Q and S to full Group VI separation standards providing two additional routes available to A380 aircraft taxiing between the north and south airfields.

LAX Master Plan - Alternative D would reconstruct Taxiways Q and S to full Group VI separation standards providing two additional routes available to A380 aircraft taxiing between the north and south airfields.

Planned routes for A380 taxi operations have at least 146 feet of taxiway to object separation. Areas with compromised clearances may be restricted.

Additional engineering studies would evaluate various airfield components to judge capability of accommodating the A380.

SPC00053-5

Comment:

Proposal for apron and terminals (2006/2008)

- Upgrade TBIT and T2 for 2006:
- 3 A380 TBIT stands as baseline (investigate terminal mods and dual pax bridge feasibility. 3rd pax bridge whenever possible.
- 1 stand at T2 as a basis. 2nd stand after another A380 carrier decides to use T2. NWA to be in the loop.
- Loss of gates to be compensated by additional gates at AAL maintenance area (2 A380 or 4 group III aircraft). This area to be the first phase of the new satellite.

- Investigate:
- 1 T4 stand with access from taxiway C and evaluate impact of a Twy C clearance increase to 146ft. DAL in the loop.
- Additional stands at T6/T7 with relocated taxiway C. UAL in the loop.
- Adapt West pad with 3 A380 stands (2 pax bridges). Improve bussing service (7 bus lanes with priority on premium pax) and minimum facilities (toilets. . .)
- Reduce service roads widths to increase either Twy separations or useable apron.

Response:

The Tom Bradley International Terminal (TBIT) would accommodate at least one A380 aircraft at the existing north end of the terminal concourse. The presence of A380 aircraft at TBIT may require access restrictions to adjacent gates. A second gate position at the south end of the terminal concourse at TBIT may be possible and would also require that the adjacent gate to the north be restricted to smaller aircraft such as the Boeing 767.

T2 currently accommodates as many as eight Group V aircraft simultaneously. Sufficient parking depth exists at T2 to position an A380 at any of the eight gates. However, the narrow taxi lanes to the east and west of T2 will limit A380 positions to those accessible from Taxi lane D. Currently, there are four Group V positions accessible from Taxi lane D. Sufficient depth and width may be present to simultaneously park as many as three A380s at T2. A380 operations on Taxi lane D while another A380 is positioned at T2 will require additional studies to ensure sufficient clearance is present.

American Airlines is the current leaseholder for this portion of the airfield. The use of this portion of the airfield for remote A380 parking would require cooperation with American Airlines. Remote aircraft parking positions on the west side of LAX, north of World Way West will be used for A380 aircraft during the interim period.

There is insufficient separation between the Taxiway C centerline and the non-movement areas for Terminals 4, 5, 6 & 7 to accommodate the A380. At the present time, fixed passenger loading bridges and structures are present at T4 that would prevent the terminal concourse from accommodating an A380.

3. Comments and Responses

The remote aircraft parking positions on the west side of LAX may be used to accommodate remote parking of A380 aircraft during an interim period. Bussing service and remote hold room facilities may be evaluated and improved in cooperation with the airlines that lease the facilities.

Service roads are designed to provide sufficient width for the various vehicles that need to access the Air Operations Area (AOA). Typically, each lane is 12 feet wide. Reducing lane width to less than 12 feet may not be sufficient.

SPC00053-6

Comment:

Proposal for LAX apron and terminals (2009+)

- Upgrade TBIT West
- Mix of A380, A346 and 773 new stands (8 to 9). Create West new international satellite with adequate mix of stands (20 to 25).
- Suppress all existing terminal gates at ends (North and South) to create a new buffer zone (push back area) and to restore adequacy of existing terminal facilities (mostly undersized).
- Prepare adequate remote and cargo stands at East and South East areas (increased areas).
- Assume 24 A380 passenger flights a day with 12 contact stands by 2012. Assume mix of 777 and A330/340 for other gates. Total number of International gates to double.

Response:

LAX Master Plan - Alternative D would accommodate aircraft consistent with the forecast fleet mix. LAX Master Plan - Alternative D would provide 16 contact gates capable of accommodating an A380. Each of the 16 gates would also accommodate the Airbus A340-600 or the Boeing 777-300.

LAX Master Plan - Alternative D would provide LAX with an efficiently reorganized central terminal area that would better and more safely accommodate both the existing fleet of aircraft that fly to and from LAX in addition to the New Large Aircraft that are scheduled to enter commercial service in 2006.

LAX Master Plan - Alternative D would provide adequate cargo sorting facilities with improved efficiency. Two new cargo-sorting facilities would replace antiquated sorting facilities but would not provide any additional cargo sorting capacity.

LAX Master Plan - Alternative D would begin construction in 2005 with completion scheduled for 2015 if local, state and federal approval is granted. The phasing of construction of various components of the Master Plan that will provide adequate facilities for the A380 would be determined during the advanced planning stage of the Master Plan process.

SPC00054 Hyra, J

None Provided

8/20/2003

SPC00054-1

Comment:

Our family feels the LAX Master Plan is just another way for LAX to expand. The communities around the airport have suffered with noise, pollution, and traffic for years. Now is the time to build regional international airports here in Southern California.

Response:

Comment noted. The Draft EIS/EIR and Supplement to the Draft EIS/EIR addressed noise impacts in Section 4.1, Noise, and Section 4.2, Land Use; air quality in Section 4.6, Air Quality; and traffic impacts in Section 4.3, Surface Transportation. Supporting technical data and analyses are provided in Appendix D, Appendix G, and Technical Reports 1, 2, 3, and 4 of the Draft EIS/EIR and Appendix S-C, Appendix S-E, and Technical Reports S-1, S-2a, S-2b, and S-4 of the Supplement to the Draft EIS/EIR. In addition, please see Topical Response TR-RC-1 regarding the LAX Master Plan role in regional approach to meeting demand and Topical Response TR-GEN-3 regarding actual versus project activity

3. Comments and Responses

levels. The City of Los Angeles and LAWA can only control the development of LAX, Ontario, Palmdale, and Van Nuys Airports. The decision to develop any airport is the responsibility of local government.

Alternative D is designed to serve a future (2015) airport activity level of 78.9 million annual passengers (MAP), which is comparable to the 78.7 MAP projected to occur under the No Action/No Project Alternative. As such, Alternative D is not considered to represent an expansion of LAX. The other build alternatives (Alternatives (A, B, and C) are designed to serve a future activity level substantially more than the No Action/No Project Alternative, and therefore represent an expansion of LAX. Alternative D is consistent with the Mayor's commitment to no expansion of LAX.

SPC00055 Wiggs, Kristopher None Provided 8/18/2003

SPC00055-1

Comment:

Having recently relocated from Northern California, I find it troublesome at best that the Palmdale Region Airport sits without scheduled airline service yet is able to accommodate the heaviest and largest commercial aircraft in the world. Being one of the 300,000+ residents in the Antelope Valley, I am forced to commute to Ontario, Burbank, or LAX to catch a flight, helping to further clog the already overloaded and busy highway 14 freeway.

I would like to encourage the decision makers at large, yourself included, to reinstate airline service to Palmdale and relieve the citizens and environment of unnecessary traffic, hassle, and inconvenience.

Response:

Comment noted. Please see Topical Response TR-RC-5 regarding transferring LAX operations to Palmdale.

SPC00056 Hyra, J None Provided 8/20/2003

The content of this comment letter is identical to comment letter SPC00054; please refer to the response to comment letter SPC00054.

**SPC00057 Shipley-Green,
Jacinda None Provided**

SPC00057-1

Comment:

I am a resident of 5401 w. 93rd Street Apt. #2 Los Angeles, CA. 90045. The building is owned by the Cadman Group. I have notice that several buildings on my block are empty including the building next door which has 60 days to move. I would like to know if the above address will be effected by the LAX expansion, and if so when. I received the enclosed letter in the mail, but I have never received a master Plan (NOA) either have the other tenants.

The reason I am notifying you is because I have been a resident at the above address for 3 years pays \$875 monthly for rent and I just received a notification from the owner 60 days or quit over some hear say and I am not fighting the owner because Consumer Affairs says they are legally right without giving me a written reason on why I have to leave.

3. Comments and Responses

I would like to know if I am entitled to any wages by the LAX due to the fact that I had occupied the residency for 3 years paying full rent. If you believe I am entitled to any relocating wages or if you believe my building is on the market before 10/07/03 please let me know in writing, phone or e-mail I will greatly appreciate it. If I am contacting the wrong department please forward to the correct department or mail me the correct information.

Response:

Comment noted. Business acquisition and relocation impacts are addressed in Section 4.4.2, Relocation of Residences or Businesses, of the Draft EIS/EIR and the Supplement to the Draft EIS/EIR. The properties to be acquired under each of the Master Plan build alternatives are identified in Table A-3, Parcel Detail of Acquisition Areas Alternative A, Table B-3, Summary Statistics of Acquisition Areas Alternative B, and Table C-3, Summary Statistics of Acquisition Areas Alternative C, in Appendix P to Chapter V of the Master Plan, Preliminary Property Acquisition and Relocation Plan, as well as in Table 2.7-2, Alternative D - Parcel Detail of Acquisition Areas, in Chapter 2.7 of the Draft Master Plan Addendum. As indicated therein, the above-referenced property would not be acquired as part of the Master Plan, and relocation assistance would not be required.

SPC00058 Rodine, Robert The Polaris Group 8/19/2003

SPC00058-1

Comment:

I most heartily endorse the adoption of a program to modernize LAX.

LAX Medium Growth demand embodied in the SCAG Regional Transportation Plan, driven by fundamental regional demographics at 2020, is 94.2 Million Annual Passengers ("MAP"), and 4.2 Million Tons of Cargo Annually. This is 59.8 % of the forecasted regional load of 157.4 MAP.

Under Alternative D, emphasized to be part of a Regional Plan, the loads planned for LAX are 78.9 MAP and 3.1 Million Annual Tons of Cargo. This reduction in the LAX portion of the regional volumes is 15.3 MAP and 1.1 Million Annual Tons of Cargo. If this reduction in volume is retained within the region through diversion to other regional airports there would be no net negative impact. If, however, it is not, the negative impact is the loss of approximately \$33 BB of turnover annually and some 222,000 jobs inclusive of the effects of induced economies (exclusive of construction related expenditures.) If we are to avoid the above losses, it seems that specific arrangements for diversion would necessarily be in place before leaping off on a \$9 BB public works project, however, the EIR seems to be mute on this aspect of the plan. What, if any specific arrangements have been formalized to insure that the proposed diversion of traffic doesn't result in any negative economic impact for the region? Absent a prearranged plan with specific agreements to accommodate the displaced LAX passengers within the region, I am abjectly opposed such a plan based on the supposition of such a large phantom backup element.

Response:

The content of this comment is identical to comment SPHA00002-1; please refer to Response to Comment SPHA00002-1.

SPC00058-2

Comment:

I am also vitally concerned about security a LAX for both passengers and employees. Using a very simple blast radius analysis, it is clear that the proposed CTA has a much higher concentration of passengers on an hourly basis than does the current dispersed terminal arrangement. Quantified, the current terminal arrangement results in a blast exposure factor of approximately 1,509 passengers per hour, while the proposed passenger arrival facility will result in and exposure factor of 7, 425 passengers per hour. I think that increase in risk renders the proposed plan unacceptable as defined.

Central Terminal Risk Analysis

3. Comments and Responses

Comparison of Numbers of People Exposed to Blasts of Equal Size
Given New Passenger Arrival Center vs. Old CTA

[See original document.]

Response:

This comment does not raise or pertain to any environmental issues that are subject to NEPA or CEQA review requirements. Notwithstanding, please see Topical Response TR-SEC-1, which addresses the most frequently raised security-related issues pertaining to the design and ability of Alternative D to enhance existing safety and security at LAX.

SPC00059 Lacunza, Nino None Provided

SPC00059-1

Comment:

I recently recieved a postcard in the mail regarding the LAX Master Plan. The post card was short and it read:

" Dear Stakeholder,

Recently you were mailed an LAX Master Plan Notification of Availability (NOA). The address listed in the NOA for the Federal Aviation Administration (FAA) ha changed. Please us the new address listed below...."

I never recieved an LAX Master Plan Notification of Availability (NOA). I would appreciate it if you would please resend me one.

Response:

Comment noted. The same mailing list was used for the Notice of Availability and the postcards. Nevertheless, a second copy of the Notice of Availability was mailed upon receipt of the author's letter.

SPC00060 Wiggs, Kristopher None Provided 8/18/2003

The content of this comment letter is identical to SPC00055; please refer to the response to comment letter SPC00055.