

Attachment 5

**Responses to Comments from Dennis J. Schneider,
Alliance for Regional Solution to Airport Congestion
on the
LAX Draft Master Plan Addendum**

INTRODUCTION

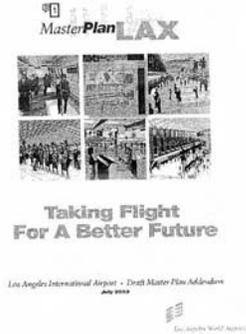
At a public hearing held on October 25, 2003 on the Supplement to the Draft EIS/EIR, Mr. Dennis J. Schneider, Alliance for Regional Solution to Airport Congestion, submitted comments on the Draft LAX Master Plan Addendum. As these comments do not pertain to the Draft EIS/EIR or the Supplement to the Draft EIS/EIR, written responses are not required to be provided pursuant to the State CEQA Guidelines (14 CCR §15132). Nevertheless, written responses to these comments have been prepared and are provided herein.

The comments provided by Mr. Schneider on the Draft LAX Master Plan Addendum were provided as notes entered directly into an electronic copy of the subject document. A copy of the comments in their entirety is provided in this attachment. Responses to the comments are provided separately. In providing a written response to each of the comments on the Draft LAX Master Plan Addendum, the page and sequence number of each comment is provided, followed by the text of the comment, and the response to that comment. The page and sequence number are taken directly from the original comments. In some cases, the original comments contain sequence numbers for which no comment was provided. In these cases, the sequence number is not included in the responses.

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Comments

ANNOTATED COMMENTS FOR VARIOUS PAGES REFERENCED



Summary of Comments on Addendum-Master Plan Alt D- commented.pdf

Page: 1

Sequence number: 1
Author: Denny Schneider
Subject: Note
Date: 7/23/2003 9:01:38 PM
Security from connecting passengers needs addressing.
Sequiveds could back up long distances as it become a drop off for "walk in" passengers.

Preface

The goal of the Master Plan process is to produce a plan for modernizing Los Angeles International Airport (LAX) that is appropriate for the City of Los Angeles and for the five-county region. In 2001, the **Draft LAX Master Plan** and the **Draft Environmental Impact Statement/Environmental Impact Report (Draft EIS/EIR)** were published by Los Angeles World Airports (LAWA), the operator of LAX, to seek input from the public and to start the agency review and comment process. These documents were produced to describe and analyze four alternatives: the No Action/No Project Alternative, Alternative A, Alternative B, and Alternative C.

Alternative D, the fifth Master Plan alternative, was developed after the **Draft LAX Master Plan** and **Draft EIS/EIR** documents were published. 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.

There are three reports to document and describe Alternative D and each is intended for a specific audience and purpose. The **Draft LAX Master Plan Addendum**, the **Supplement to the Draft Environmental Impact Statement and Environmental Impact Report (Supplement to the Draft EIS/EIR)**, and the **Airport Layout Plans (ALP) Package**.

Draft LAX Master Plan Addendum: This document is an addendum to the **Draft LAX Master Plan** and has been prepared to add Alternative D to the four Master Plan alternatives currently being evaluated as part of the LAX Master Plan process. The **Draft LAX Master Plan Addendum** describes and evaluates Alternative D in the same manner the previous alternatives were described, with content and format based on the constrained alternatives analysis contained in Volume 4, Chapter V, Section 3.3 of the **Draft LAX Master Plan**.

Supplement to the Draft EIS/EIR: This document has been prepared to analyze the potential environmental impacts of Alternative D, using the same methodology by which the previous alternatives were analyzed in the **Draft EIS/EIR**, and to compare Alternative D to these alternatives. The environmental impacts of Alternative D have been analyzed in accordance with the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). An EIS is produced in accord with NEPA and an EIR produced in accord with CEQA.

Airport Layout Plans (ALP) Package: The Airport Layout Plans Package consists of a series of drawings that illustrate the layout of existing and proposed facilities at the airport. This Federal Aviation

Page: 3

Sequence number: 1
Author: Denny Schneider
Subject: Note
Date: 7/12/2003 4:41:05 PM
Read Vol 4 chap V sect 3.3

Sequence number: 2
Author: Denny Schneider
Subject: Highlight
Date: 7/12/2003 4:54:15 PM
T

Administration (FAA) required plans set is intended to serve as a record drawing for the airport as well as a guide for the airport's future development. The ALP Package also includes a narrative description of the drawings. The objective of the narrative report is to explain the reasoning behind, and the key features of, the plan and to provide the FAA with information needed to approve the drawings.

The public will have the opportunity to formally review and comment on the Draft LAX Master Plan Addendum and the Supplement to the Draft EIS/EIR. Government entities and the public will have a chance to review and provide comments through oral testimony, written comments, and public hearings. The City of Los Angeles and the FAA will decide which of the Master Plan alternatives best meets the needs of Los Angeles and the Los Angeles region after input from the public and governmental entities has been received and considered.

No action will be taken on the proposed LAX Master Plan until the Mayor of Los Angeles and the Los Angeles City Council approve it.

Page: 4

Sequence number: 1
Author: Denny Schneider
Subject: Highlight
Date: 7/12/2003 4:47:06 PM

Sequence number: 2
Author: Denny Schneider
Subject: Highlight
Date: 7/12/2003 4:55:14 PM

Sequence number: 3
Author: Denny Schneider
Subject: Note
Date: 7/12/2003 4:57:36 PM
When will the FAA have a say? Is the FAA veto only? In the event of a conflict between FAA and LAWA who is the referee to determine a final resolution?

Executive Summary

The Los Angeles International Airport (LAX) Master Plan is a modernization plan that accounts for the growth of the airport since 1984. In 2001, the Draft LAX Master Plan and Draft Environmental Impact Statement and Environmental Impact Report (Draft EIS/EIR) were published and included three project alternatives (A, B, and C), plus a No Action/No Project Alternative. Los Angeles World Airports (LAWA) received a large number of comments on the plans described in these documents and subsequently offered a new alternative for consideration. The new alternative, Alternative D, was developed to offer a regional approach alternative for the LAX Master Plan to ensure representation of the communities' full range of priorities as well as to increase the safety and security of the airport. Figure ES-1 provides an illustration of the plan.

Alternative D would be designed to serve approximately 78 million annual passengers (MAP), 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. In the short-term LAX would continue to serve as the region's predominant international airport for passenger and cargo operations due to the specialized facilities developed over time to serve these functions.

Alternative D represents a new design approach to securing airports for the future. This would be achieved in part by removing private and commercial vehicles from the existing Central Terminal Area (CTA). This approach reduces the risk to airport users while also protecting the airport infrastructure and its link to the economy. The alternative would incorporate, to the greatest extent possible, Transportation Security Administration (TSA) recommendations as they are developed as well as the latest passenger and baggage security screening technologies. Alternative D would also enhance the on-airport presence of law enforcement, surveillance security, and emergency response teams. The Alternative D airfield modifications would include new taxiways on the north and south airfields and additional runway length on the north airfield to improve aircraft movement, thereby reducing the potential for runway incursions and reducing delays. The airfield reconfigurations would improve the efficiency of the airport by reducing large aircraft movement restrictions and physically accommodating the New Large Aircraft (NLA) and the next generation of quieter jets.

- Sequence number: 1
Author: Denny Schneider
Subject: Highlight
Date: 7/12/2003 5:04:45 PM
T
- Sequence number: 2
Author: Denny Schneider
Subject: Note
Date: 7/12/2003 5:05:33 PM
☐ LAX to remain predominant international airport?
- Sequence number: 3
Author: Denny Schneider
Subject: Highlight
Date: 7/12/2003 5:06:31 PM
T
- Sequence number: 4
Author: Denny Schneider
Subject: Note
Date: 7/12/2003 5:07:39 PM
☐ Didn't TSA say they prefer one complete baggage check as early as possible?
- Sequence number: 5
Author: Denny Schneider
Subject: Highlight
Date: 7/12/2003 5:07:39 PM
T
- Sequence number: 6
Author: Denny Schneider
Subject: Note
Date: 7/12/2003 5:08:45 PM
☐ How will emergency response get from the LAX body to the outlying GTC across open public areas? How will evacuation be accomplished?
- Sequence number: 7
Author: Denny Schneider
Subject: Highlight
Date: 7/12/2003 5:09:45 PM
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- Sequence number: 8
Author: Denny Schneider
Subject: Note
Date: 7/12/2003 5:10:33 PM
☐ This increases potential through put for more flights per gate.

Alternative D would improve the level of passenger service throughout the CTA by including new passenger and baggage processing facilities where the public parking garages are located today. In addition, Alternative D would provide for construction of new aircraft parking gates as well as demolition of some existing gates. As a result, Alternative D would have fewer total gate positions than the existing conditions or the No Action/No Project Alternative. As a result, all aircraft parking would be adjacent to a terminal or concourse, eliminating the current need to bus passengers to remote aircraft parking positions.

Deterrence and prevention of terrorist attacks are essential considerations of the Alternative D plan. Its elements include (1) avoiding concentration of people in the public areas, to the greatest extent possible, so as to reduce the likelihood and potential lethality of terrorist attacks with bombs or firearms; (2) moving passengers and their baggage through check-in and security screening and into the secure areas as quickly as possible, and (3) permitting only known, screened, and controlled vehicles into the Central Terminal Area (CTA), and avoiding concentration of unscreened vehicles and people at the curbs of the proposed Ground Transportation Center (GTC), Intermodal Transportation Center (ITC), and the Consolidated Rental Car (RAC) facility. 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 CTA. Refer to Appendix I for a detailed assessment of security and safety features of Alternative D.

Alternative D would consolidate parking and curbside areas at a new GTC. This facility would become the primary point of pick-up and drop-off for passengers utilizing LAX. 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.

A new ITC would provide a more efficient connection currently exists between the existing MTA Green Line station and the CTA. The airport's rental car facilities would be in one location, referred to as the RAC, to simplify passenger access to these services. A new Automated People Mover (APM) system would connect the GTC, ITC, and RAC to the redeveloped CTA. The end goal of this design concept is to achieve a new balance between the needs of both passenger security and passenger convenience.

- Sequence number: 1
Author: Denny Schneider
Subject: Highlight
Date: 7/12/2003 5:11:25 PM
T
- Sequence number: 2
Author: Denny Schneider
Subject: Note
Date: 7/12/2003 5:12:44 PM
☐ How will baggage be delivered from the GTC? Will people have to carry it? Is this defined or slated for future development determination?
- Sequence number: 3
Author: Denny Schneider
Subject: Highlight
Date: 7/12/2003 5:14:02 PM
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- Sequence number: 4
Author: Denny Schneider
Subject: Note
Date: 7/12/2003 5:17:24 PM
☐ Will the remaining gates be more fully utilized than the ones replaced? Are they to be modernized to handle larger aircraft more frequently? Will all gates be "modernized" or only some of them? How will this be controlled for limiting future growth?
- Sequence number: 5
Author: Denny Schneider
Subject: Highlight
Date: 7/12/2003 5:17:24 PM
T
- Sequence number: 6
Author: Denny Schneider
Subject: Note
Date: 7/12/2003 5:20:57 PM
☐ What controls on cargo access will preclude access to the planes since 50% of the cargo is in the belly of the passenger aircraft? How will cars at the GTC and RAC be screened? If no parking at outside in these is enacted, how will the cars parked in the adjacent parking structures be screened?
- Sequence number: 7
Author: Denny Schneider
Subject: Highlight
Date: 7/12/2003 5:21:43 PM
T
- Sequence number: 8
Author: Denny Schneider
Subject: Note
Date: 7/12/2003 5:22:44 PM
☐ Detailed review of Appendix I for security and safety features is required.
- Sequence number: 9
Author: Denny Schneider
Subject: Highlight
Date: 7/12/2003 5:22:44 PM
T
- Sequence number: 10
Author: Denny Schneider
Subject: Note
Date: 7/12/2003 5:27:15 PM
☐ If the GTC is the "PRIMARY POINT OF PICKUP AND DROP OFF" were the press conference comments that people in the RAC and ITC Green Line transfer areas would go directly to the GTC mean that security needs to be able to easily get to all three off-airport sites? What proportions will be initially checked at each site?
- Sequence number: 11
Author: Denny Schneider
Subject: Highlight
Date: 7/12/2003 5:27:15 PM
T
- Sequence number: 12
Author: Denny Schneider
Subject: Note
Date: 7/12/2003 5:28:19 PM
☐ Will the new ITC become a broad access to other mass transit such as buses and rapid transit?
- Sequence number: 13
Author: Denny Schneider
Subject: Highlight

Alternative D would improve the level of passenger service throughout the CTA by including new passenger and baggage processing facilities where the public parking garages are located today. In addition, Alternative D would provide for construction of new aircraft parking gates as well as demolition of some existing gates. As a result, Alternative D would have fewer total gate positions than the existing conditions or the No Action/No Project Alternative. As a result, all aircraft parking would be adjacent to a terminal or concourse, eliminating the current need to bus passengers to remote aircraft parking positions.

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Sequence number: 14
Author: Denny Schneider
Subject: Note
Date: 7/12/2003 5:30:34 PM
For those rental car agencies not included in the 10 consolidated will they be bused to the RAC for processing or will people go to the OTC and be transferred to the outlying car agencies from there?

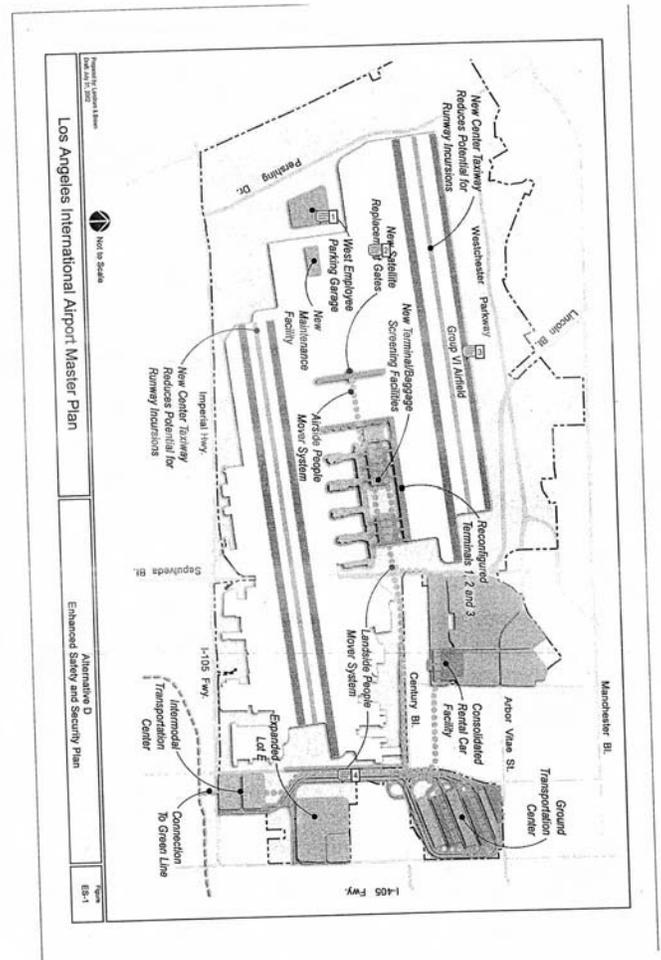
Sequence number: 15
Author: Denny Schneider
Subject: Highlight
Date: 7/12/2003 5:30:34 PM

Sequence number: 16
Author: Denny Schneider
Subject: Note
Date: 7/12/2003 5:31:58 PM
Will there be separate lines to each facility or will they all be in series? Will hotel and other stops also be included in the same line? How will security be enacted if people can get on and off at the various stops?

In accordance with governmental regulations, Alternative D is currently undergoing an environmental evaluation, the findings of which will be published in 2003. As part of the evaluation, this Draft LAX Master Plan Addendum was developed to describe Alternative D in a manner similar to the alternatives discussed in the Draft LAX Master Plan (January 2001). Additional background information and analyses used to design Alternative D are available in the earlier document.

Sequence number: 1
Author: Denny Schneider
Subject: Highlight
Date: 7/12/2003 5:32:44 PM

Sequence number: 2
Author: Denny Schneider
Subject: Note
Date: 7/12/2003 5:34:09 PM
Since the Jan 2001 document never specified Alt D will this document refer to that documentation in table format so that it is consolidated for Alt D review? Where is such a table?



- Sequence number: 1
Author: Denny Schneider
Subject: Note
Date: 7/12/2003 5:44:13 PM
What accommodations for the additional traffic to the West Employee Parking Garage? What security controls will be in place? This structure would be a great launching site for attacking aircraft.
- Sequence number: 2
Author: Denny Schneider
Subject: Note
Date: 7/12/2003 5:39:40 PM
The fuel farm is not shown as moving in other detailed drawings. Will it be too close to the new runways?
- Sequence number: 3
Author: Denny Schneider
Subject: Note
Date: 7/12/2003 5:41:59 PM
The addition of Group VI airfield is not firm. When the separation distances are found to be inadequate in two years will the plan be modified to accommodate the new numbers? If it is so critical to the north side, why is it not done on the south side where the majority of cargo facilities are situated?
- Sequence number: 4
Author: Denny Schneider
Subject: Note
Date: 7/12/2003 5:38:48 PM
Does the People Mover system preclude any other use of the MTA right of way along Aviation Blvd? This will be critical for future development of a mass transit system to support LA because this right of way goes from the South Bay at the way to Downtown LA.

1 Planning Objectives

The Los Angeles International Airport (LAX) Master Plan is a modernization plan that accounts for the growth of the airport since 1984. In 2001, the Draft LAX Master Plan and Draft Environmental Impact Statement and Environmental Impact Report (Draft EIS/EIR) were published and included three project Alternatives (A, B, and C), plus a No Action/No Project Alternative. Los Angeles World Airports (LAWA) received a large number of comments on the alternatives described in these documents and subsequently offered a new alternative for consideration. The new alternative, Alternative D, was developed to offer a regional airport alternative for the LAX Master Plan to ensure representation of the communities' full range of priorities. LAWA simultaneously began master planning effort at Ontario International Airport (ONT) and Palmdale Regional Airport (PMD). The fifth Master Plan alternative, Alternative D: The Enhanced Safety and Security Plan, is the focus of this report. Figure ES-1 provides an illustration of the proposed plan.

1.1 POLICY AND PLANNING OBJECTIVES

The planning objectives for the Draft LAX Master Plan have evolved throughout the development of the study. They reflect the future needs of the airport users and community and environmental oversight agency input. At the beginning of the Master Plan process in 1995, seven goals were established to guide the planning effort:

- ♦ **Goal 1:** Continue to satisfy regional demands for global air transport of passengers and cargo by adding new and optimizing existing facilities at LAX, along with distributing commercial service not essential to the LAX international gateway role to other airports in the region.
- ♦ **Goal 2:** Ensure the safety of all airports.
- ♦ **Goal 3:** Continue to operate efficiently and continue to provide major direct and indirect economic benefits to local, regional and state environments.
- ♦ **Goal 4:** Operate LAX in an environmentally sensitive and responsible manner.
- ♦ **Goal 5:** Through enhanced urban design, maximize compatibility between LAX and the demand for housing, employment, service, and protect surrounding neighborhoods.
- ♦ **Goal 6:** Improve ground access to and around LAX by maximizing the use of regional highway and transit networks and mitigate neighborhood traffic impacts.

- Sequence number: 1
Author: Denny Schneider
Subject: Note
Date: 7/12/2003 5:48:25 PM
Growth Master Plans for these two airports were previously written when the South Side Development plan was done in the late 80s/early 90s. Why are these not being implemented instead of reworking those plans? If the Alternative D is a result of comments to A, B, & C why are these not deleted from the alternatives?
- Sequence number: 2
Author: Denny Schneider
Subject: Highlight
Date: 7/12/2003 5:49:22 PM
- Sequence number: 3
Author: Denny Schneider
Subject: Note
Date: 7/12/2003 5:52:18 PM
If the community needs have been taken into consideration, why has the Manchester Square area been designated for airport use when it is currently residential and in Mar 2001 the LA City Council determined that it should be put in the Westchester/Playa del Rey Community Plan Update as a park because of the paucity of recreational open space in the area?
- Sequence number: 4
Author: Denny Schneider
Subject: Highlight
Date: 7/12/2003 5:52:18 PM
- Sequence number: 5
Author: Denny Schneider
Subject: Note
Date: 7/12/2003 5:53:57 PM
The Mayor signed a no expansion pledge and this document expresses the intent to resist present capacity. Why is it then saying that it plans to add new facilities as a number one priority?
- Sequence number: 6
Author: Denny Schneider
Subject: Highlight
Date: 7/12/2003 5:54:15 PM
- Sequence number: 7
Author: Denny Schneider
Subject: Note
Date: 7/12/2003 5:56:40 PM
Shouldn't safety of residential areas be at the same level as airport users?
- Sequence number: 8
Author: Denny Schneider
Subject: Highlight
Date: 7/12/2003 5:56:40 PM
- Sequence number: 9
Author: Denny Schneider
Subject: Note
Date: 7/12/2003 6:03:40 PM
Efficient operation? How will baggage movements be accomplished? This critical action is not firmed up at all. Studies are being released to state that the economic benefits are NEUTRAL for Alternative D. Studies to determine regional economic benefits should be done to determine if equivalent expansion/development at local other than LAX is more rewarding. This study should include secondary impacts such as lost efficiencies due to exacerbating LAX area congestion and increased pollution resulting in health and social welfare impacts.
- Sequence number: 10
Author: Denny Schneider
Subject: Highlight
Date: 7/13/2003 7:47:31 AM
- Sequence number: 11
Author: Denny Schneider
Subject: Note
Date: 7/13/2003 7:53:37 AM
Use of regional highways is another euphemism for all of the major streets through the communities around LAX. In Westchester-Playa del Rey there is no more room to expand these streets without removing homes or moving them far too close to homes. Additional manipulation of signals to foster flow is also limited as the egress from the residential areas has already limited the number of autos able to leave and pedestrians to safety cross streets.

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- ♦ **Goal 7:** Achieve a balance between increased LAX operations and environmental, social, land use, ground access, economic and air commerce impacts.

In the early stages of the Master Plan, a number of alternatives were developed that reflected these goals. Chapter V, Section 2 of the Draft LAX Master Plan (January 2001) contains a discussion of these alternatives.

As the Master Plan progressed through public review, the original goals remained, however, the weight and emphasis given to each goal has varied over time. In particular, as feedback on the initial alternatives was obtained from the community and oversight agencies, a higher priority was placed on environmental and community objectives than on economic and air service objectives. As a result, the four shortlisted alternatives in the Draft LAX Master Plan contained airside facility limitation that would require air service adjustments to meet the 2015 unconstrained passenger and cargo forecasts. Chapter V, Section 3 of the Draft LAX Master Plan contains the descriptions and evaluations of the shortlisted alternatives. Chapter III of the Draft LAX Master Plan contains the forecast of aviation activity.

The environmental impacts of the four Master Plan alternatives were evaluated in the Draft LAX Master Plan and the Draft EIS/EIR. Following the publication of the Draft LAX Master Plan and the Draft EIS/EIR in January 2001, public comment received during the review period called for a regional approach alternative, whereby growth at LAX would be planned so as to encourage other airports to accommodate future air travel demand. The terrorist attacks that occurred on September 11, 2001 greatly elevated the issue of airport security. In response to these events the newly elected Mayor of Los Angeles directed the Los Angeles Board of Airport Commissioners to develop a new LAX Master Plan alternative that, consistent with public comment calling for a regional approach alternative, would be 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 tragic events of September 11, 2001, would be designed to enhance airport safety and security.

Responding to the Mayor's direction, the new alternative is designed to:

1. Enhance safety and security at LAX for users and to protect the airport infrastructure;
2. Encourage the development and use of regional to serve local demand by constraining the facility capacity at LAX to approximately

Sequence number: 1
 Author: Denny Schneider
 Subject: Highlight
 Date: 7/13/2003 7:54:07 AM

Sequence number: 2
 Author: Denny Schneider
 Subject: Note
 Date: 7/13/2003 7:54:50 AM
 Must read Chap V, Sec 2 of the Draft Plan to see why these alternatives have not survived

Sequence number: 3
 Author: Denny Schneider
 Subject: Highlight
 Date: 7/13/2003 8:01:28 AM

Sequence number: 4
 Author: Denny Schneider
 Subject: Note
 Date: 7/13/2003 7:58:58 AM
 Review of this addendum requires a copy of the original draft due to constant referral to various sections in the old: Chap V, Sec 3 lists alternatives; Chap III contains aviation demand forecast.

Sequence number: 1
 Author: Denny Schneider
 Subject: Highlight
 Date: 7/13/2003 8:02:53 AM

Sequence number: 2
 Author: Denny Schneider
 Subject: Note
 Date: 7/13/2003 8:09:15 AM
 Master Plans already exist for Ontario and Palmdale. Why were these never implemented? Why, for instance, is a top post still existing to recruit business for LAX instead of placing even greater emphasis on other regional airports?

the same aviation activity levels identified in the No Action/No Project Alternative;

3. Maintain LAX as the international gateway to Southern California; and

4. Mitigate the impacts of LAX's continued operation.

Based on this direction, QAWA began master planning efforts of Ontario International Airport and Palmdale Regional Airport and simultaneously developed a fifth alternative for the LAX Master Plan, Alternative D: The Enhanced Safety and Security Plan. The latter effort is the focus of this report.

1.2 FACILITY CONSTRAINTS

The most constraining component of an airport defines the practical capacity of the entire airport. The airport is a complex system made up of components through which passengers and aircraft flow in a sequential order. Aircraft arriving at the airport pass through the airspace, land on the runways, travel on the taxiways and proceed to the terminal gates to unload and reload passengers. Once loaded and ready for departure, the aircraft will pass through these same components in reverse order. Passengers move through the system in a similar set of sequential steps. Departing passengers travel on local roads and on-airport roads, arrive at the terminal from the curbside, parking, or other shuttle facility, are processed in the terminal and proceed to the designated aircraft gate for boarding. Arriving passengers generally proceed through these steps in reverse order upon arrival at an airport. Exceptions for arriving passengers include domestic connecting passengers who board other flights, international arrivals who move through Federal Inspection Services (FIS) facilities, and baggage claim before they connect to other flights or use ground transportation facilities.

Each component of the airport system has a throughput capacity level, which is typically a function of the physical characteristics of the component. For example, the number of runways, the size of the terminal buildings, number of gates, and the airport's operating

¹ & Practical Capacity is a term used here to refer to the number of operations (take-offs and landings) that can be accommodated with no more than a given amount of delay, usually expressed in terms of maximum acceptable average delay. Practical annual capacity (PACAP) is the level of operations that results in a reasonable average delay per aircraft in the normal peak two-hour operating period. Another term used is throughput capacity, which is the rate at which aircraft can be brought into or out of the airfield without regard to any delay they might experience. This definition assumes that aircraft will always be present waiting to take off or land and capacity is measured in terms of the number of such operations that can be accomplished in a given period of time.

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procedures determine the throughput or processing rate of the airport. The capacity of the overall airport system equals the capacity of its weakest component. On the airside, where capacity is measured in terms of aircraft operations, the airport's capacity is driven by the most constraining of its major components: airspace, runway acceptance rate, taxiway accessibility, or available and accessible aircraft parking gates.

Each of the Master Plan alternatives has facility constraints that would limit its ability to accommodate the forecast of unconstrained passenger and cargo demand to varying degrees. Alternatives A and B, which accommodate the forecast for both passengers and cargo, nonetheless require adjustments in airline schedules to do so because of airfield limitations. When an airport system component is operating at capacity, meaning that it is processing a maximum level of hourly operations given its characteristics and procedures, increasing the capacity of other components does not increase the capacity of the system. For example, if a runway is operating at its throughput operational capacity and, by definition, accepting the maximum number of hourly arriving and/or departing flights without regard for delay, increasing the number of gates will not improve the airport's ability to accept more arriving flights. The runway system would have to be expanded to increase the throughput operational rate.

Each Master Plan alternative has an activity level that is determined by the ability of facilities in that alternative to serve the unconstrained passenger and cargo market demand. Figure 1.2-1 summarizes the Master Plan alternatives and their corresponding activity levels.

The No Action/No Project Alternative is limited by the capacity of the curbside in the Central Terminal Area (CTA) 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. Alternatives A and B include a fifth runway and were designed to serve the 2015 passenger demand forecast. Alternative A and B would accommodate approximately 97.9 million annual passengers (MAP).² 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. The constrained activity profiles for Master Plan Alternatives A, B, and C are discussed in Chapter V of the Draft LAX Master Plan in Section

² & In order to accommodate the 2015 unconstrained passenger forecast of approximately 98 MAP, it would be necessary for the airlines to make air service adjustments, such as reducing the number of daily flights to a destination, limiting the number of non-stop destinations served or adjusting the flights' departure or arrival time, to off-peak hours.

- Sequence number: 1
Author: Denny Schneider
Subject: Highlight
Date: 7/13/2003 8:09:15 AM

- Sequence number: 2
Author: Denny Schneider
Subject: Note
Date: 7/13/2003 8:10:18 AM
The no action alternative limitation is noted to be curbside capacity, not gates or runways!

- Sequence number: 3
Author: Denny Schneider
Subject: Highlight
Date: 7/13/2003 8:17:10 AM

- Sequence number: 4
Author: Denny Schneider
Subject: Note
Date: 7/13/2003 8:18:12 AM
Page 1-4 has an incomplete sentence indicating the constrained activity profiles are somewhere in Chapter V of the LAX Master Plan Draft.

- Sequence number: 5
Author: Denny Schneider
Subject: Highlight
Date: 7/13/2003 8:14:19 AM

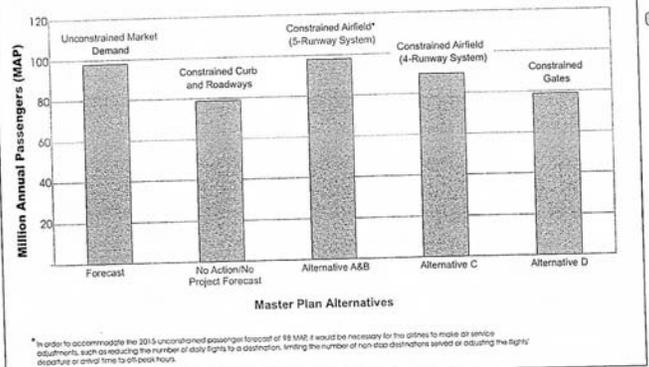
- Sequence number: 6
Author: Denny Schneider
Subject: Note
Date: 7/13/2003 8:10:45 AM
The footnote stating a 98 MAP* estimate for Alt A or B states that it assumes voluntary air service adjustments such as reducing the number of flights to LAX!

3.3.2. Extensive analysis is included in that document, establishing the levels of passengers that each alternative is designed to accommodate. Alternative D was designed to accommodate approximately the same level of passenger activity and design day aircraft operations as 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. 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. The design of Alternative D would encourage airlines to choose the most efficient use of the gate facilities at LAX and supplement high-frequency domestic service at other airports in the region.

- Sequence number: 1
Author: Denny Schneider
Subject: Highlight
Date: 7/13/2003 8:19:30 AM

- Sequence number: 2
Author: Denny Schneider
Subject: Note
Date: 7/13/2003 8:24:32 AM
This basic premise of limiting Alt D via gates indicates an assumption of specific numbers and types of gates. This addendum does not have this detail and in LAX Working Group meetings LAXA officials were unable to define how gates were to be modified.



Sequence number: 1
 Author: Denny Schneider
 Subject: Note
 Date: 7/13/2003 8:29:39 AM
 Figure 1.2-1 graphs Alternative Capacity Constraints. Where is the back-up materials listing the assumptions?

The Alternative D cargo activity is determined by the amount of cargo space available to process cargo tonnage. This sort space would be measured in square feet of cargo building space. The Alternative D cargo facilities would be sized to accommodate the total cargo volume forecast in the constrained No Action/No Project Alternative.

The effective constraint on cargo activity in Alternative D would be the lack of sufficient cargo building space to process the unconstrained cargo activity forecast. The most effective representation of this constraint is illustrated by the utilization rates, or tons per square foot, for the available warehouse space. A common benchmark in the industry is to process approximately 0.9 to 1.0 annual ton of cargo for each square foot of cargo warehouse space available. Higher space utilization rates, ranging from 1.1 to 1.42 annual tons per square foot, are expected for domestic and express cargo, with lower space utilization rates, ranging from 0.5 to 0.6 annual tons per square foot, expected for international freight due to the added time associated with customs clearing and fewer available flights.

The space utilization rate (excluding air mail) calculated for Alternative D is 1.22 tons per square foot. This rate is based on approximately 2.3 million square feet of cargo building space and approximately 2.85 million annual tons (MAT) of cargo (excluding air mail). It is the weighted average of the domestic and express cargo (approximately 2.09 tons per square foot) and international cargo (approximately 0.8 ton per square foot). Based on current cargo activity, the split is 55 percent domestic and 45 percent international; however, cargo space split is 32 percent domestic and 68 percent international. Air mail is projected to be 272,000 tons, resulting in approximately 3.1 MAT of cargo activity.

The utilization rates for Alternative D exceed both the industry standard rates and the high utilization rates already experienced at LAX. Improvements in cargo technologies and efficiencies that may not be realized within the planning horizon would be required to realize the Alternative D utilization rates.

Sequence number: 1
 Author: Denny Schneider
 Subject: Highlight
 Date: 7/13/2003 8:29:39 AM

Sequence number: 2
 Author: Denny Schneider
 Subject: Note
 Date: 7/13/2003 8:37:57 AM

It is commendable that the space utilization rate takes improved modernization into consideration. Has the ground trucking limitation also been considered? What is that limitation?

Table 1.3-2
 LOS ANGELES REGION AIRPORT SYSTEM SCENARIOS
 2015 PASSENGER ACTIVITY FORECASTS

Airport	LAX Master Plan Forecast	Additional LAX Master Plan Scenarios		
		Scenario 1	Scenario 2	Scenario 3
Los Angeles	97,960,000	97,500,000	105,700,000	96,500,000
Ontario		13,862,500	20,750,000	13,875,000
John Wayne		N/A	11,625,000	7,862,500
Marine Corps Air Station (MCAS) El Toro		28,750,000	N/A	21,625,000
Burbank	48,510,000	6,777,778	6,333,333	7,666,667
Long Beach		1,800,000	1,300,000	860,000
Palm Springs		1,080,000	900,000	1,100,000
CandlePoint Marga		344,000	355,000	300,000
Pasimdale		305,000	700,000	230,000
Regional Total	148,470,000	149,619,278	147,663,333	150,019,167

London & Brown, 2000

In each of the three scenarios, LAX was projected to serve passenger levels higher than those associated with the No Action/No Project Alternative and Alternative D. These alternatives would accommodate approximately 78 MAP producing a potential demand of approximately 13 to 20 MAP that cannot be accommodated by the region's airports.

1.3.2 PROJECTED REGIONAL CAPACITY ESTIMATES

As of 2001, the Southern California Association of Governments (SCAG) estimated the existing airport capacity in the region at approximately 120 MAP.² As discussed in the previous section, the 2015 regional demand is expected to total approximately 146.5 MAP. Approximately 73 percent, or 107 MAP, will be origin and destination (O&D) demand by 2015. Table 1.3-3 summarizes the estimated 2025 capacity and/or passenger forecast of the region's airports.

² SCAG 2001 Regional Aviation Plan for the 2001 Regional Transportation Plan (RTP).

Sequence number: 1
 Author: Denny Schneider
 Subject: Note
 Date: 7/13/2003 8:39:25 AM
 Note: Important assumption that 73% of 146.5 MAP demand in 2025 will be O & D.

Sequence number: 2
 Author: Denny Schneider
 Subject: Highlight
 Date: 7/13/2003 8:37:57 AM

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Table 1.3-3
 LOS ANGELES REGION AIRPORTS ESTIMATED 2015
 PASSENGERS

	MAP
Primary	
Los Angeles Int'l.	78
Secondary	
Ontario	30
John Wayne	8
Burbank	9
Long Beach	3
Palm Springs	3
Commuter	
Fairdale	2
Other	4
Total Region	137
Potential Unmet Demand	30
Total Passenger Activity	167

Source: SCAG 2001 Regional Transportation Plan, excluding Marine Corps Air Station El Toro

As illustrated in Table 1.3-3, the region's airports would have a projected shortfall of approximately 30 MAP. Although SCAG's forecast horizon is 10 years beyond the planning horizon of the Master Plan, there is inadequate existing airport capacity in the region to serve long-term passenger demand.

Lack of capacity in the regional airport system would lead to a loss of connecting passenger demand to airports outside the region. The airlines would encourage connecting passengers to use other hub airports to reach their destination by offering more flight options, more convenient schedules, and lower prices. Serving local passenger demand, both domestic and international, is the airlines' highest priority. However, connecting passengers allow the airlines to offer more frequent service to many destinations by filling more seats on each flight. If connecting passengers are routed over other hubs, the airlines would likely reduce the number of flights offered, resulting in reduced customer service.

This pattern would be most evident—and the economic impact most strongly felt—in international service. Other regions in the western part of the U.S. compete with Los Angeles for the economic benefits of international air service and have been building the specialized airport facilities required to serve as international gateway airports. A more complete discussion of the status of competing U.S. gateway airports is found in Section 1.3.5 of this document.

Sequence number: 1
 Author: Denny Schneider
 Subject: Note
 Date: 7/13/2003 8:43:03 AM
 Note: The previous section 1.3.2 states the 2015 regional demand as 146.5 while Table 1.3-3 shows the 2015 demand as 167 with 30 MAP as potential unmet.

Sequence number: 2
 Author: Denny Schneider
 Subject: Highlight
 Date: 7/13/2003 8:43:48 AM

Sequence number: 3
 Author: Denny Schneider
 Subject: Note
 Date: 7/13/2003 8:47:07 AM
 Note: SCAG forecast of 2015 is 10 years beyond the planning horizon of the LAX Master Plan? It will take almost that long to finish this LAX project. Doesn't this plan look that far into the future?

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 airports outside the region such as San Francisco, Denver, and Dallas rather than to secondary regional airports within the region. This loss of traffic would take place largely because the Los Angeles region's secondary airports are not in a strong enough position, nor do they have the infrastructure necessary to provide competitive international gateway service by 2015. In the near future, it is unlikely that they will develop the volume of connecting flights, specialized import-export facilities, and other facilities associated with an international gateway. Accordingly, failure to provide facilities to accommodate regional demand would mean increasing levels of congestion and delay, which would result in passenger air service going to other regions.

1.3.3 SECONDARY REGIONAL AIRPORTS

Examining passenger activity and scheduled passenger departures reveals a close match between each of the regional airports' share of total regional aviation service and passengers for the year 2000 (see Table 1.3-4). This correlation demonstrates that the air transportation marketplace tends to reach a balance between supply and demand. As long as there are adequate airport facilities, the level of service will rise or fall with local demand and airport activity. The existing conditions and published plans for each of the secondary airports in the Los Angeles region are provided in Appendix C.

Table 1.3-4
COMPARISON OF AIR SERVICE AND PASSENGER MARKET SHARE

Airport	2000		Percent (%) Share	
	Passengers ¹	Departures ²	Passengers ¹	Departures ²
Los Angeles Int'l.	67,303,000	372,525	76.0%	72.2%
John Wayne	7,773,000	48,779	8.8%	9.6%
Ontario	6,756,000	40,347	7.6%	7.8%
Burbank	4,749,000	27,745	5.4%	5.4%
Long Beach	638,000	4,213	0.7%	0.8%
Palm Springs	1,281,000	17,189	1.4%	3.3%
Commuter Airports	111,000	4,061	0.1%	0.8%
Total	88,611,000	520,000	100.0%	100.0%

Sources:
¹ SCAG compilation records.
² Official Airline Guides, Scheduled Passenger Aircraft Departures in 2000.
 Note: Commuter Airports include Imperial County Airport and Oxnard Airport.

Prepared by Landrum & Brown

Sequence number: 1
 Author: Denny Schneider
 Subject: Highlight
 Date: 7/13/2003 8:50:22 AM

Sequence number: 2
 Author: Denny Schneider
 Subject: Note
 Date: 7/13/2003 8:52:04 AM
 With 12 years in the future why can't emphasis to create this infrastructure be done?

Sequence number: 3
 Author: Denny Schneider
 Subject: Highlight
 Date: 7/13/2003 8:52:22 AM

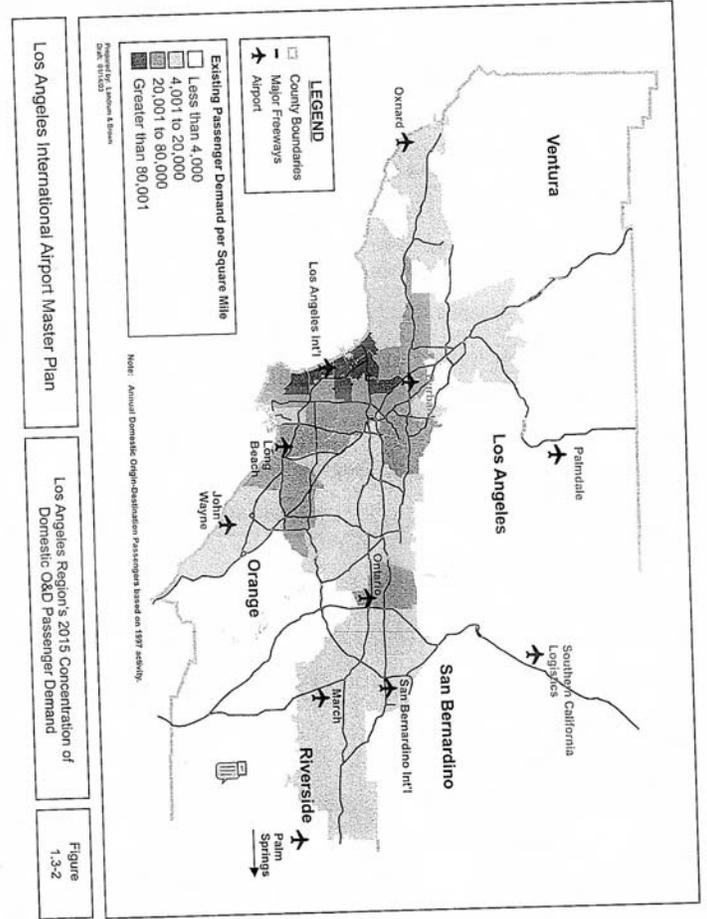
Sequence number: 4
 Author: Denny Schneider
 Subject: Note
 Date: 7/13/2003 8:54:59 AM
 Stating that regional airport share matches use demonstrates market balance does not take into consideration disparity in ticket pricing and flight availability. With incentive pricing equal to LAX, ticket costs many people living in the other areas of the LA region would use their local airports.

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Airlines make decisions on which airport to serve based on several factors, including the population within a reasonable travel distance and the cost to introduce service at a new airport. Figure 1.3-2 shows the population concentration of travel demand, where people are living and working, as it varies throughout the region. Figure 1.3-3 shows the region's airports and the areas around each airport considered to be within a reasonable travel distance, or a 60-minute travel time. When combined, these figures provide information on the location of the travel demand, and how much time would be necessary to access the airports. This is the type of data the airlines use when selecting which airports to serve. In the case of the Los Angeles region, travel time tends to be a better predictor than travel distance due to congested local traffic conditions.

Table 1.3-5 presents the top 25 domestic O&D markets for the Los Angeles region in 2000 and the market share of scheduled departures from LAX and each of the close-in secondary airports. The cities representing the domestic market in highest demand, and the relative share of scheduled service for the year 2000, changed very little from the top markets in 1995. Domestic markets are relatively stable and, without outside influence, the airport and destination pairs are unlikely to change dramatically (see Section 1.3.2). Tables that present the O&D demand to the top domestic markets and the scheduled service from each of the regional airports are included in Appendix C.

Sequence number: 1
Author: Deany Schneider
Subject: None
Date: 7/13/2009 8:59:15 AM
See Appendix C for tables of O & D service demand.



Sequence number: 1
Author: Deany Schneider
Subject: None
Date: 7/13/2009 9:02:00 AM
Figure 1.3-2 Forecasts demand based on 1997 information. The 2000 Census showed marked changes and high growth in outlying areas. If this is to be an accurate representation it should use more current information than that of almost 6 years ago.

Sequence number: 1
Author: Denny Schneider
Subject: Note
Date: 7/13/2003 3:16:31 PM
Data Source and dates covered?
The chart says it was prepared in 2002, but what year data is this?
From LAXA.org 10 yr summary
2000-02 272K 1997-02 143K
2001-01 626K 1998-07 375K
2000-02 203K 1995-03 300K
1999-04 280K
1998-01 216K

1.3.4 AIRLINE DEREGULATION AND COMPETITION

Since passage of the Federal Airline Deregulation Act of 1978, airlines must decide which airports they will serve and how much they will charge for this service. As a general rule, airlines will choose airports near the highest concentrations of conveniently located customers. In this deregulated environment, the key to airline success has been to provide a better product than the competition. Convenience, price and frequent flier incentives have been the tools used most frequently in this competition. In air travel, convenience involves two key factors:

- Airport Accessibility - Airport locations and ground transportation options that make an airline's services convenient to the most potential passengers.
Service Frequency - Flight schedules that most closely match airline service to potential passenger need.

Within this general framework, airlines must make strategic decisions about air service to maximize their investments and gain competitive advantages. Airlines will only provide air service where demand exists. For instance, in regions with multiple airports, airlines tend to concentrate their air service at a single well-located primary airport for economic efficiency. Concentrating service at a dominant airport also facilitates connecting service, which can significantly increase an airline's market share and allow even greater frequencies to more destinations. In particular, international service relies on the availability of domestic connecting flights to a wide range of destinations.

- Local Passenger Market Potential - The potential market is based on the airport's location and its accessibility or convenience to passengers.
Network Synergy - A particular airport may play an important role in a particular airline's air service network, offering opportunities for connecting passenger flows (domestic or international), or encourage competition with other airlines.
Airport Facilities - A particular airport's ability to accommodate existing and projected demand may be constrained by one or more of the following:
- Airport Infrastructure - The size, configuration, and condition of the airfield, aircraft parking gates, terminal

Sequence number: 1
Author: Denny Schneider
Subject: Highlight
Date: 7/13/2003 3:16:31 PM
Sequence number: 2
Author: Denny Schneider
Subject: Note
Date: 7/13/2003 3:18:26 PM
Concentration of air service at a primary airport may be true in medium sized markets, but other major cities such as NY, Chicago, or Washington DC have multiple airports served.
Sequence number: 3
Author: Denny Schneider
Subject: Note
Date: 7/13/2003 3:33:00 PM
Domestic vs Int'l with LAX having a high OSD rate may not bear the assumptions out.
Rates of Passenger Traffic at LAX
or domestic Int'l
1999 48,465 15,815 25%
2000 49,987 17,416 29%
2001 45,659 15,940 26%
2002 41,379 14,845 26%
source LAXA.org LAX Statistics

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facilities, security screening facilities, ground access facilities, cargo facilities, FIS facilities, freight forwarding facilities, fueling systems and other physical infrastructure elements.

- Policy - The airport owner's policies regarding future airport development and the utilization of existing facilities.
Environmental - Significant environmental considerations that may limit airport activity or future development.
Airspace - Airspace limitations due to terrain or interactions with other airports.

In a multi-airport system, where passengers, cargo operators and airlines have alternatives, these factors may cause certain airports the inability to capture their potential market share.

Airlines will establish additional service at secondary regional airports only if the local market generates sufficient demand and adequate facilities exist. In some cases, secondary airports can offer a competitive advantage over a primary airport by reducing airline costs, or by providing more convenient access to and from a Central Business District (CBD) or tourist destination. However, airlines are generally reluctant to serve secondary airports, even under these circumstances, if doing so would dilute their market share or significantly increase operating costs. An airline that attempts to shift service from one airport to another may instead end up losing that share of the market to a competitor.

Passenger demand cannot simply be moved to another airport. In fact, under federal law, it is very difficult for local, regional or federal officials to force airlines to serve one airport over the other. LAXA has tried subsidies to encourage airlines to serve outlying airports, with only limited temporary success. The airlines provide service at the airports where demand exists. Without demand from the traveling public, airlines deploy their assets to serve the greatest number of passengers and earn the best return on their investment.

1.3.5 INTERNATIONAL DEMAND

Historically, U.S. international air traffic has been concentrated at three entry points, or gateways. John F. Kennedy International Airport in New York City has dominated the Atlantic air routes; Miami International Airport is the main connecting point for Latin American traffic; and LAX has been the primary gateway to the Asia-Pacific region. As a result of this historic position, the regions around each of the three primary gateway airports have developed

Sequence number: 1
 Author: Denny Schneider
 Subject: Highlight
 Date: 7/13/2003 3:35:14 PM

Sequence number: 2
 Author: Denny Schneider
 Subject: Note
 Date: 7/13/2003 3:36:13 PM
 Recent LA County studies show that Palmdale has a sizeable market that warrants air service.

Table 1.3-7

INTERNATIONAL GATEWAY COMPARISON
 U.S. AIRPORTS WITH GREATER THAN 1 MILLION INTERNATIONAL ENPLANEMENTS
 CALENDAR YEAR 2000, 1995, and 1990

International Enplanements								
Rank	Airport	Code	2000	Percent (%) Share	1995	Percent (%) Share	1990	Percent (%) Share
1	New York Kennedy	JFK	8,661,911	7.1%	8,152,973	8.1%	3,251,141	7.8%
2	Los Angeles International	LAX	8,193,271	6.7%	6,088,828	6.1%	4,959,221	6.1%
3	Miami International	MIA	7,840,323	6.4%	7,264,534	7.2%	3,162,919	3.7%
4	Chicago O'Hare	MDW	5,116,227	4.2%	3,953,441	3.9%	2,526,107	2.9%
5	Newark International	EWR	4,326,549	3.5%	3,727,811	3.7%	1,959,687	2.3%
6	San Francisco International	SFO	3,723,807	3.0%	2,766,213	2.7%	1,808,922	2.1%
7	Atlanta Hartsfield	ATL	3,613,329	2.9%	2,398,487	2.4%	874,443	1.0%
8	Houston Intercontinental	IAH	2,797,890	2.2%	2,098,233	2.0%	2,842,281	3.4%
9	Phoenix Sky Harbor	PHX	2,643,879	2.1%	1,986,487	1.9%	1,241,025	1.5%
10	Denver International	DEN	2,184,844	1.8%	1,637,413	1.6%	617,299	0.7%
11	Dallas/Fort Worth International	DFW	1,705,119	1.4%	1,340,271	1.3%	1,000,000	1.2%
12	Washington Dulles	DCA	1,651,714	1.3%	1,231,119	1.2%	1,383,124	1.6%
13	Boston Logan	BOS	1,441,206	1.1%	1,100,334	1.1%	769,227	0.9%
14	Quantico International	QUA	1,379,650	1.1%	1,037,421	1.0%	705,262	0.8%
15	San Juan Luis Muñoz	SIJ	1,027,433	0.8%	927,451	0.9%	1,029,423	1.2%
	Total		121,714,487	43.3%	106,629,884	43.3%	32,293,542	33.1%
	Total US Int'l Exp		121,862,600				88,942,892	

International Enplanements Excluding Canada								
Rank	Airport	Code	2000	Percent (%) Share	1995	Percent (%) Share	1990	Percent (%) Share
1	New York Kennedy	JFK	8,177,283	7.3%	7,711,702	8.0%	3,744,303	8.5%
2	Los Angeles International	LAX	7,546,293	6.6%	5,122,574	7.7%	4,959,221	6.1%
3	Miami International	MIA	7,237,217	6.4%	6,620,819	6.1%	3,879,929	6.7%
4	Chicago O'Hare	MDW	3,920,479	3.4%	2,918,132	2.4%	1,540,879	1.9%
5	Newark International	EWR	3,668,656	3.2%	3,426,672	3.5%	2,274,775	2.8%
6	San Francisco International	SFO	3,568,684	3.1%	2,441,194	2.6%	1,373,427	1.8%
7	Atlanta Hartsfield	ATL	2,933,577	2.5%	1,821,229	1.9%	624,465	0.8%
8	Houston Intercontinental	IAH	2,429,645	2.1%	1,883,639	2.1%	2,718,315	3.2%
9	Phoenix Sky Harbor	PHX	2,407,234	2.1%	1,727,229	1.9%	879,294	1.0%
10	Denver International	DEN	2,029,645	1.8%	1,505,737	1.6%	609,268	0.7%
11	Dallas/Fort Worth International	DFW	1,871,218	1.6%	1,521,088	1.6%	1,000,000	1.2%
12	Washington Dulles	DCA	1,791,482	1.5%	1,320,569	1.4%	1,383,124	1.6%
13	Boston Logan	BOS	1,441,206	1.2%	1,100,334	1.2%	769,227	0.9%
14	Quantico International	QUA	1,385,011	1.2%	1,017,746	1.0%	864,124	1.0%
15	San Juan Luis Muñoz	SIJ	1,027,433	0.9%	927,451	0.9%	1,029,423	1.2%
	Total		111,993,258	45.1%	93,888,808	41.3%	32,161,659	30.7%
	Total US Int'l Exp excluding Canada		111,993,258					

Transborder (Canada Only) Enplanements								
Rank	Airport	Code	2000	Percent (%) Share	1995	Percent (%) Share	1990	Percent (%) Share
1	Chicago O'Hare	MDW	1,287,548	11.3%	974,028	12.6%	691,497	15.4%
2	Los Angeles International	LAX	654,555	5.8%	493,945	5.9%	291,922	6.9%
3	Boston Logan	BOS	543,293	4.8%	518,477	6.2%	517,017	7.7%
4	Newark International	EWR	486,773	4.3%	292,009	3.6%	288,268	6.9%
5	San Francisco International	SFO	402,346	3.6%	225,474	2.7%	276,425	6.1%
6	Dallas/Fort Worth International	DFW	345,882	3.1%	231,878	2.8%	142,209	3.2%
7	Denver International	DEN	324,433	2.9%	241,603	2.9%	208,614	4.6%
8	Miami International	MIA	294,048	2.6%	126,211	1.5%	224,204	5.0%
9	New York Kennedy	JFK	281,249	2.5%	186,950	2.2%	0	0.0%
10	Atlanta Hartsfield	ATL	267,441	2.4%	86,709	1.0%	0	0.0%
11	Houston Intercontinental	IAH	186,238	1.7%	124,603	1.5%	144,666	3.2%
12	Phoenix Sky Harbor	PHX	123,140	1.1%	50,823	0.6%	0	0.0%
13	Washington Dulles	DCA	0	0.0%	0	0.0%	0	0.0%
14	Quantico International	QUA	0	0.0%	0	0.0%	0	0.0%
15	San Juan Luis Muñoz	SIJ	0	0.0%	0	0.0%	0	0.0%
	Total		5,693,397	52.7%	4,212,189	54.5%	3,181,892	73.3%
	Total Transborder Exp		10,786,742		7,231,944		6,984,992	

Source: Department of Transportation (DOT), T1-F100 Quarterly/1000 Rows 1-10 Data for Foreign Carrier Enplanements and US Carrier International Enplanements

Sequence number: 1
 Author: Denny Schneider
 Subject: Note
 Date: 7/13/2003 9:12:48 AM

The argument that Gateways are becoming more important because their % of passengers is increasing is spurious. Explain why this same data can not also be explained by the deregulation efforts to concentrate air traffic into specific hubs.

The Immigration and Naturalization Service (INS) records show that New York is the dominant gateway for travel from the U.S. to the Atlantic Region (Europe, Middle East, and Africa). Miami is the dominant gateway to Latin America (Central and South America and the Caribbean), although Los Angeles is the primary gateway to Central America. Los Angeles is the primary gateway to the Asia-Pacific Region, followed closely by Honolulu. Due to the expansion of international air service at mid-continent airports, New York and Miami lost market share between 1995 and 2000 to their respective world regions. In contrast, Los Angeles' market share of the Asia-Pacific Region increased between 1995 and 2000. Detailed tables of INS international passenger data for 1995 and 2000 are presented in Appendix C.

1.3.6 REGIONAL ECONOMIC CONTRIBUTION

An important function of a gateway airport is to serve both local O&D passengers and connecting passengers with quality air service. The value to the region is better international air service than could be justified based on O&D passengers alone. With 50 percent connecting passengers, an airline can operate twice as many flights as the local market alone could support.

The value of a single international flight can be several times greater than the average domestic flight. LAX Master Plan Alternative D would result in employment gains by 2005 that equal those projected for the other LAX Master Plan alternatives. However, by 2015, Alternative D would yield slightly lower economic contributions due to productivity gains made during the time period. There is a direct correlation between the number of passengers served and the character of the passengers (domestic vs. international) at LAX and the airport's contribution to the local and regional economy.

LAX's international gateway role is crucial to the economies of Los Angeles and Southern California. The international gateway role is threatened in the future by limited facilities at LAX and the other regional airports. Except for Ontario, the other airports in Southern California would have limited market strength and facilities to supplement LAX's role. Other competing U.S. cities and regions stand to benefit from this limitation because of their growing market base and their available or planned infrastructure.

2 Alternative D Development and Refinement

Alternative D was developed as a new alternative in response to public comment on Master Plan Alternatives A, B, C, and the No Action/No Project Alternative. Figure 2.0-1 presents the relationship between Alternative D and the Master Plan alternatives described in the 2001 documents.

To ensure that the communities' full range of priorities were represented, Alternative D would be developed to offer a regional airport development alternative for LAX. Alternative D would be designed to serve approximately 78 MAP, which is similar to the activity level identified in the scenario adopted by SCAG for LAX. The Alternative D design would encourage other airports in the region to develop facilities to accommodate regional demand beyond the level served at LAX. In the short term, LAX would continue to serve as the region's predominant airport for international passenger and cargo operations due to the specialized facilities developed over time to serve the international demand.

In response to increased security threats, Alternative D would protect all airport users and critical airport infrastructure from security threats, incorporate Transportation Security Administration (TSA) recommendations, avoid concentrations of people in public areas, enhance on-airport law enforcement presence and surveillance capabilities, and enhance emergency response. Protection of people is paramount in all areas of the airport. The facilities in the CTA and the surrounding ground access network have been identified as infrastructure components critical to airport operations. 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. The facilities in the CTA and the surrounding ground access network have been identified as infrastructure components critical to airport operations. Refer to Appendix I for a detailed assessment of the security and safety features of Alternative D.

As a result, the ground access network would be redeveloped to limit vehicle access to the CTA and to remove vehicle parking from this area. All facilities would be designed to minimize vulnerability of people to security threats. Passengers and employees would access the CTA via the Landside Automated People Mover (APM) system that would be developed as part of Alternative D.

Sequence number: 1
Author: Denny Schneider
Subject: Highlights
Date: 7/13/2003 7:28:20 PM
T

Sequence number: 2
Author: Denny Schneider
Subject: Note
Date: 7/13/2003 7:30:24 PM
What documentation exists to demonstrate this strong statement?

Sequence number: 1
Author: Denny Schneider
Subject: Highlights
Date: 7/13/2003 7:30:24 PM
T

Sequence number: 2
Author: Denny Schneider
Subject: Note
Date: 7/13/2003 7:31:58 PM
The limitation of growth at LAX is an impetus to growth in other regional airports ONLY outside of those owned/operated by LAX.

Sequence number: 1
 Author: Denny Schneider
 Subject: Note
 Date: 7/13/2003 8:00:11 PM
 All D calls for high density mixed use called for west of Sepulveda between La Tijera and Westchester Parkway adjacent to residential areas

2.1 AIRSIDE FACILITIES - ALTERNATIVE D

The airfield modifications for Alternative D would improve the level of service, reduce delays, reduce the potential for runway incursions and consequently enhance the safety and security of passengers and aircraft at LAX. Alternative D in 2015, as shown in Figure 2.0-3, would maintain the existing four-runway system with modifications to the north and south airfield runways. Center taxiways would be constructed between the runways on the north and south airfield to reduce the potential for runway incursions.

The Boeing 747-400 was used as the design aircraft (Group VI), with operational and modified Group VI solutions for the anticipated operation of limited numbers of the NLA. **Figure 2.1-1** highlights each of the Alternative D airside improvements that are described in the following sections. Refer to Chapter III, Section 3.2.6 of the LAX Draft Master Plan (January 2001), for a complete description of the modified Group VI aircraft design standards.

2.1.1 NORTH AIRFIELD FACILITIES

- Extend Runway 6L/24R:** Runway 6L/24R would maintain its current location; however, it would be extended approximately 1,495 feet to the west for a total length of approximately 10,420 feet. This would be used primarily as an arrival runway in both east and west flow, with occasional departures. This is similar to the way Runway 6L/24R is used today. This runway is shown to remain at 150 feet wide through the 2015 horizon of the Master Plan because it is not envisioned to be fully reconstructed in that time. However, a benefit-cost analysis may later determine that this runway should be widened to 200 feet during its life-cycle reconstruction. The basis of this widening would be assessed in relation to the number of Group VI operations taking place at LAX in the future. Discussions with Airbus representatives indicate that a 150-foot wide runway with 50-foot wide paved shoulders for jet blast protection is adequate for the operation of the planned Airbus A380 (a design Group VI representative aircraft also referred to herein as a NLA).
- Relocate, Extend and Widen Runway 6R/24L:** Runway 6R/24L would be reconstructed approximately 340 feet south of the existing runway centerline to allow for the construction of a new parallel taxiway between the runways. Runway 6R/24L would be extended approximately 135 feet west and approximately 1,280 feet to the east. The total runway length would be approximately 11,700 feet long and 200 feet wide. Runway 6R/24L would be used primarily as a departure runway.

Sequence number: 1
 Author: Denny Schneider
 Subject: Note
 Date: 7/13/2003 8:03:24 PM
 Group VI runway spacing criteria have not been finalized by the FAA. Will the criteria call for a change in these runways in another 5 years?

Sequence number: 2
 Author: Denny Schneider
 Subject: Highlight
 Date: 7/13/2003 8:00:11 PM

Sequence number: 3
 Author: Denny Schneider
 Subject: Note
 Date: 7/13/2003 10:33:23 PM
 How another runway change potentially does NOT fit in the present budget estimate? Will it be 50' north or south?

- New Parallel Center Taxiway:** A new taxiway would be constructed between Runways 6L/24R and 6R/24L to reduce the potential for runway incursions and enhance the safety of operations at LAX; currently, there is 700 feet between runways. The new taxiway would be used to access both Runways 6L/24R and 6R/24L. The new taxiway would be a 10,420- by 100-foot full-length, modified Group VI parallel taxiway located 520 feet north of relocated Runway 6R/24L and 520 feet south of Runway 6L/24R. The new taxiway would be used to access both Runways 6L/24R and 6R/24L including two high-speed exit taxiways in west flow, and two high-speed exit taxiways in east flow, spaced to minimize the runway occupancy time reduce airfield and airspace delays for passengers at LAX. Constructing the taxiway would require the demolition of Terminals 1, 2, 3 and the north concourse of the Tom Bradley International Terminal (TBIT). A linear concourse would west of TBIT be constructed to replace some of the lost gates. Section 2.2 contains a complete description of terminal changes.
- Relocate and Widen Taxiway E:** Taxiway E would be relocated 340 feet south of its current location and would be located 400 feet south of the realigned Runway 6R/24L. Taxiway E would be widened to 100 feet.
- Extend, Widen and Realign Taxiway E17:** Taxiway E17 would be realigned and extended north approximately 1,085 perpendicular to the centerline extended off Runways 6L/24R and 6R/24L.
- Relocate, Extend and Widen Taxiway D:** Taxiway D would be relocated approximately 370 feet south (at the intersection with Taxiway Y), and would be approximately 770 feet south of realigned Runway 6R/24L. The taxiway would be extended approximately 7,105 feet from the intersection of Taxiway S west to Taxiway E17, and would be 100 feet wide. The proposed new separations and pavement width would meet full Group V taxiway standards and would also provide modified Group VI separation for taxiing aircraft approaching the departure ends of Runway 6R/24L.
- Service Roads:** Portions of the service road network at the west end of the north airfield would be removed to allow for the westward extension of Runways 6R/24L and 6L/24R.

2.1.2 SOUTH AIRFIELD FACILITIES

- Existing Runway 7L/25R:** This runway would not be modified for Master Plan Alternative D.
- Relocate and Widen Runway 7R/25L:** Runway 7R/25L would be moved approximately 50 feet south of the existing Runway 7R/25L centerline to allow for the construction of a new parallel taxiway between the south airfield runways. The runway would be 11,096

- Sequence number: 1**
 Author: Denny Schneider
 Subject: Note
 Date: 7/14/2003 1:19:53 PM
 [] The graphic doesn't show taxiway E17. Where is this?
- Sequence number: 2**
 Author: Denny Schneider
 Subject: Note
 Date: 7/14/2003 1:22:24 PM
 [] Where is taxiway D? Only 100' Group V? Why not make it Group VI modified at least so it doesn't have to be done twice?
- Sequence number: 3**
 Author: Denny Schneider
 Subject: Note
 Date: 7/14/2003 1:23:29 PM
 [] Would removal of this service road complex make parking VIP aircraft on the north impractical?

ALTERNATIVE D DEVELOPMENT AND REFINEMENT

feet long and 200 feet wide. Runway 7R/25L would be used primarily as an arrival runway. Because this project is considered early in the Master Plan development sequence, an operational plan for Group VI aircraft would be developed in conjunction with the Federal Aviation Administration (FAA) Air Traffic Controllers, pilots and airline representatives to ensure safe and efficient movement of these airplanes on the ground. The goal would be to minimize airfield disruption while providing safe taxiway paths for NLA.

- New Parallel Center Taxiway:** A new 11,096-foot long by 100-foot wide full-length Group V parallel taxiway would be constructed between Runways 7L/25R and 7R/25L to reduce the potential for runway incursions and enhance the safety of operations at LAX. The taxiway would be located 400 feet north of Runway 7R/25L and 400 feet south of Runway 7L/25R. The new taxiway would have four high-speed exit taxiways in west flow and two high-speed exit taxiways in east flow. This taxiway is proposed to be constructed 100 feet wide to provide operational areas for Group VI aircraft prior to the completion of the north airfield development. One proposed approach for Group VI movement on the redesigned south airfield would be to use this taxiway for arriving aircraft to taxi into position for crossing the inbound runway. To allow continued runway operations during a taxiway crossing, a taxiway bypass west of 7L/25R and 7R/25L outside of the Runway Safety Area (RSA) from Taxiway A to Taxiway B may be required.

Runway Safety Area (RSA) - A defined surface surrounding the runway prepared or suitable for reducing the risk of damage to airplanes in the event of an undershoot, or excursion from the runway.

- Sequence number: 1**
 Author: Denny Schneider
 Subject: Highlight
 Date: 7/14/2003 1:25:16 PM
 []
- Sequence number: 2**
 Author: Denny Schneider
 Subject: Note
 Date: 7/14/2003 1:57:34 PM
 [] This statement differs from verbal briefings in that we were told all NLA operations are on the north side.
- Sequence number: 3**
 Author: Denny Schneider
 Subject: Highlight
 Date: 7/14/2003 1:58:46 PM
 []
- Sequence number: 4**
 Author: Denny Schneider
 Subject: Note
 Date: 7/14/2003 1:59:21 PM
 [] They may be taxiing an end around taxiway on the south complex!

2.1.3 APPROACH MINIMUMS

Table 2.1-1 outlines the minimum weather conditions for operations to each runway.

Table 2.1-1
ALTERNATIVE D - LOWEST APPROACH MINIMUMS

Runway	West Arrivals		East Arrivals	
	Decision Height	Visibility (SM)	Decision Height	Visibility (SM)
6L/24R	CAT IIIB	RVR 06	200 feet	1/2 mile
6R/24L	200 feet	1/2 mile	200 feet	RVR 18
7L/25R	200 feet	1/2 mile	200 feet	RVR 18
7R/25L	CAT IIIB	RVR 06	200 feet	1/2 mile

2.1.4 FAA RUNWAY DESIGN AND LAYOUT RECOMMENDATIONS

Improvements to the south airfield runway and taxiway layout were designed using current FAA guidelines and recommendations for airfield safety areas and zones. The proposed Runway Protection Zones (RPZ)¹ and RSA meet the FAA's current recommended dimensions. In addition to expanding the airports safety areas and zones, Declared Distances would be implemented to make the best use of the airport's constrained site.

FAA's established mechanism for allowing existing constrained airports to continue operating unimpeded is through the declaration of safe aircraft operating parameters known as Declared Distances. Declared Distances would be particularly beneficial for LAX Master Plan Alternative D because the airport would satisfy FAA design standards, control project costs, and minimize the physical impacts of airport reconstruction on its neighbors. Guidance on the application of this methodology is contained in FAA Advisory Circular (AC) 150/5300-13 - Airport Design. Appendix 14 of this AC states:

"The use of Declared Distances for airport design shall be limited to cases of existing constrained airports where it is impracticable to provide the RSA, the Runway Object Free

¹ RPZ - Runway Protection Zone - An Area off the runway end to enhance the protection of people and property on the ground.

Sequence number: 1
Author: Denny Schneider
Subject: None
Date: 7/14/2003 2:02:17 PM
What is RVR 06 and RVR 18 visibility?

Sequence number: 2
Author: Denny Schneider
Subject: None
Date: 7/14/2003 2:09:30 PM
What are the "declared distances" to be used to make use of the constrained site? Highlighted below are the four values. Is this used to define how near buildings may be placed? If so, what are the values?

Sequence number: 3
Author: Denny Schneider
Subject: Highlight
Date: 7/14/2003 2:03:10 PM

Area (ROFA), and the RPZ in accordance with the design standards in Chapters 2 and 3 (of AC 150/5300-13)."

The general principal in the application of Declared Distances is the independent treatment of each of the four aircraft runway performance distances:

- ◆ Take-Off Run – The distance to accelerate from brake release to lift-off, plus safety factors.
- ◆ Take-Off Distance – The distance to accelerate from brake release past lift-off to start of takeoff climb, plus safety factors.
- ◆ Accelerate Stop Distance – The distance to accelerate from brake release to V₁ and then decelerate to a stop, plus safety factors.
- ◆ Landing Distance – The distance from the threshold to complete the approach, touchdown, and decelerate to a stop, plus safety factors.

The Airport Layout Plan (ALP) is used to specify the available runway length for each runway in each direction of use. FAA reviews and approves the ALP and publishes Declared Distances in its Facility Directory for use by pilots and airline dispatchers. The following are the four types of Declared Distances:

- ◆ Take-Off Run Available (TORA) – The length of runway declared available and suitable for satisfying takeoff run requirements.
- ◆ Take-Off Distance Available (TODA) – The TORA plus the length of any remaining runway or clearway beyond the far end of the TORA available for satisfying takeoff distance requirements.
- ◆ Accelerate Stop Distance Available (ASDA) – The length of runway plus stopway declared available and suitable for satisfying accelerate-stop distance requirements.
- ◆ Landing Distance Available (LDA) – The length of runway declared available and suitable for satisfying landing distance requirements.

Under LAX Master Plan Alternative D, clearways² would be identified off of five of the eight runway ends. The identification of clearways

² Runway Object Free Area (ROFA) – An area on the ground centered on a runway centerline provided to enhance the safety of aircraft operations by having the area free of objects, except for objects that need to be located in the OFA for air navigation or aircraft ground maneuvering purposes.

⁴ For turbojet aircraft, "V₁" is the maximum speed during takeoff that the pilot may abort the takeoff and stop the airplane within the accelerate-stop distance.

⁵ A "clearway" is a clearly defined area connected to and extending beyond the runway end available for completion of the takeoff operation of turbojet-engine aircraft. The clearway is a plane, extending out and up from the runway end with a slope of no greater than 1.25%. The clearway plane is required to be 500 feet wide and has a practical length of no greater than 1,000 feet. No object or terrain may penetrate the clearway plane.

Sequence number: 1
Author: Denny Schneider
Subject: Highlight
Date: 7/14/2003 2:06:45 PM

Sequence number: 2
Author: Denny Schneider
Subject: Highlight
Date: 7/14/2003 2:09:30 PM

Sequence number: 3
Author: Denny Schneider
Subject: Note
Date: 7/14/2003 2:10:51 PM
Does this "clearway" define the area for 25L where the cargo buildings are along Aviation and Century? What values are acceptable?

ALTERNATIVE D DEVELOPMENT AND REFINEMENT

allows for the increase of an aircraft's gross takeoff weight without extending the physical runway pavement. This would result in airport cost savings through the reduction of airport reconstruction impacts while allowing aircraft operators to maximize their aircraft utilization.

On the North Airfield, Runway 6L/24R would have a physical pavement length of 10,420 feet. The west end of the runway would have a 1,000 foot displaced threshold in order to provide the recommended 1,000 foot Runway Safety Area. A 500-foot clearway would extend off of the west end of the runway increasing Runway 24R TODA while a 1,000-foot clearway would extend from the east end increasing TODA for aircraft departing Runway 6L.

Also on the North Airfield Runway 6R/24L would have a physical pavement length of 11,700 feet. Both runway ends would have displaced thresholds of 1,000 feet to accommodate the recommended 1,000-foot RSA. A 300 foot clearway would extend from the west end of the runway increasing TODA for Runway 24L to 12,000 feet.

On the South Airfield, Runway 7L/25R would have a physical pavement length of 12,091 feet. Runway 7L/25R is the only runway at LAX that would not be modified under Master Plan Alternative D. The east end of the runway would have a displaced threshold of 957 feet. The 25R arrival threshold displacement allows the runway's approach path to clear Air Freight Building #3 (Building 415 on the Sheet 3 of the ALP Package). A 1,000-foot clearway would be extended from the west end of the runway allowing for increased TODA for westbound departures from the runway.

Also in the South Airfield, Runway 7R/25L would have a physical pavement length of 11,096 feet. Runway 7R/25L does not have displaced thresholds at either end. A 1,000-foot clearway would be identified at the west end of the runway allowing increased TODA for westbound departures from the runway.

Sequence number: 1
Author: Denny Schneider
Subject: Note
Date: 7/14/2003 2:14:43 PM

Does the TODA of 500' on west and 1000' on east make 24L adequate for ALA? The "apparent" runway would be equivalent to 12,000'

Sequence number: 2
Author: Denny Schneider
Subject: Note
Date: 7/14/2003 2:16:30 PM

The statement is that there is a 1000' clearway on the west end for 25L, but isn't that blocked by the new employee parking structure?

2.2 TERMINAL/PASSENGER PROCESSING FACILITIES - ALTERNATIVE D

The passenger processing facilities for Alternative D consists of four major distinct types of facilities each serving its own varying purpose. Those facilities include the redeveloped CTA, the GTC, the ITC, and a RAC. The redeveloped CTA would be the primary passenger check-in and processing center and serve as the transition point to and from the new landside facilities.

The GTC, ITC, and RAC facilities are designed to accommodate a specific type of activity, and to distribute the landside demand over a wider geographic area. A more detailed description of each facility is included below.

Consistent with Alternatives A, B, and C the LAWA FlyAway program would be expanded under Alternative D.

RECONFIGURED CENTRAL TERMINAL AREA

The existing CTA would be reconfigured for Alternative D. The new terminal buildings and modifications to existing terminal buildings would be developed to meet all TSA recommendations and directives and provide the highest level of passenger safety and convenience. The CTA reconfiguration would prohibit private and commercial vehicle access to the area, eliminating the threat of vehicular blast at the curbfront, which exists today in the CTA. All public parking facilities in the CTA would be relocated, further eliminating the current threat of blast from parked or moving vehicles adjacent to the terminal facilities.

2.2.1 NEW TERMINALS 1 THROUGH 4

Four new terminals (Terminals 1 through 4) would be provided within the CTA as indicated in Figure 2.2-1. The new terminals, designated Terminals 1, 2, 3, and 4, would provide the highest level of passenger security and convenience available. These facilities would incorporate TSA directives to the greatest extent possible, including 100 percent EDS screening of all checked bags. The EDS system would be fully automated, utilizing the most current EDS equipment. The system would separate bags that fail the initial screening process to an isolated blast proof room for further investigation before integration with any outbound baggage matrix.

The existing parking garages currently occupy the CTA land envelope identified for the new passenger and baggage processing facilities (terminals). The new terminals would be multi-level

Sequence number: 1
 Author: Denny Schneider
 Subject: Note
 Date: 7/14/2003 2:22:03 PM
 Passenger convenience seems to be enabling the passenger to exercise by toting all luggage from the GTC to the CTA.

Sequence number: 2
 Author: Denny Schneider
 Subject: Highlight
 Date: 7/14/2003 2:20:31 PM

passenger processing facilities replacing all ticketing, baggage claim, FTS facilities, inbound/outbound baggage sortation, screening and distribution systems. The new terminals would also contain the APM system (discussed further in Section 2.4), platforms and new secondary passenger security screening areas. The new terminals would be designed to meet current dimensional criteria for large international terminals. Current CTA deficiencies such as inadequate ticket lobby depths, baggage claim circulation, undersized security screening areas, and insufficient passenger queue space would be eliminated.

The existing initial sorting and outbound/inbound baggage systems at Terminals 4 through 7 and Concourse 8 would be reconfigured to support delivery of bags to and from apron areas. New baggage functions would be provided in the new terminal facilities and in the landside facilities. Figures 2.2-2 and 2.2-3 depict a conceptual illustration of the new CTA facility.

The new terminals and reconfigured CTA would be connected to the GTC, ITC, and RAC via the APM. The landside components of Alternative D are described in Sections 2.3 and 2.4.

A baggage tunnel running below the existing Lot C area and located below the public right-of-way east of Airport Boulevard would connect the new terminals to the GTC. This tunnel would allow passengers to check baggage at the GTC. Passengers arriving at LAX could use the system to re-check their baggage back to the GTC.

The new terminals would be equipped with video surveillance systems monitoring all activity, particularly at secondary passenger screening areas. Any security breach would immediately be compartmentalized, allowing only a portion of a facility to be evacuated and searched so passengers can be re-screened. The entire new terminal area can be evacuated to the exterior without any disruption to any airport operation.

Sequence number: 1
 Author: Denny Schneider
 Subject: Note
 Date: 7/16/2003 9:13:28 AM
 What's an FTS facility?

Sequence number: 2
 Author: Denny Schneider
 Subject: Highlight
 Date: 7/16/2003 9:11:36 AM

Sequence number: 3
 Author: Denny Schneider
 Subject: Highlight
 Date: 7/16/2003 9:13:28 AM

Sequence number: 4
 Author: Denny Schneider
 Subject: Note
 Date: 7/16/2003 9:14:03 AM
 What are the new baggage functions in the new terminal facilities?

Sequence number: 5
 Author: Denny Schneider
 Subject: Highlight
 Date: 7/16/2003 9:15:20 AM

Sequence number: 6
 Author: Denny Schneider
 Subject: Note
 Date: 7/16/2003 9:25:21 AM
 A baggage tunnel is to be built despite recent statements to the contrary! Will luggage check in be at GTC or not?

Sequence number: 7
 Author: Denny Schneider
 Subject: Highlight
 Date: 7/16/2003 9:26:58 AM

Sequence number: 8
 Author: Denny Schneider
 Subject: Note
 Date: 7/17/2003 10:36:10 PM
 How is compartmentalization accomplished? The illustrations show open areas. Where is the evacuation plan showing where passengers will be evacuated to the central area? Will they be disbursed onto the airside?

Table 2.2-1
ALTERNATIVE D - COMPARISON OF EXISTING AND PROPOSED TERMINAL FACILITIES

	Existing (1996)		2015	
	Nominal	NREG ¹	Nominal	NREG ²
TOTAL NOMINAL GATES (DOMESTIC AND INTERNATIONAL)				
Commuter (Group I)	45	18.0	12	17.0
Narrowbody (Group II)	0	34.0	22	12.1
Narrowbody (Group III)	10	11.0	40	40.0
Boeing 757 (Group IIIa)	38	57.0	23	25.3
Widebody (Group IV)	38	64.6	30	42.0
Boeing 747/Airbus A340 (Group V)	0	0	22	13.2
New Large Aircraft (Group VI)	165	184.6	153	178.9
TOTAL INTERNATIONAL GATES				
Boeing 757 (Group III)	7	7.0	17	17.0
Boeing 757 (Group IIIa)	1	1.1	11	12.1
Widebody (Group IV)	8	12.0	22	30.8
Boeing 747/Airbus A340 (Group V)	41	69.7	22	39.6
New Large Aircraft (Group VI)	0	0.0	6	15.2
Total International Gate	57	89.8	78	112.7
TERMINAL FUNCTION AREAS				
Departure Lounge	390,000 sf.		416,000 sf.	
Concession	203,000 sf.		575,000 sf.	
Public Space	932,000 sf.		1,706,000 sf.	
Federal Inspection Service	389,000 sf.		636,000 sf.	
Airline	1,503,000 sf.		2,135,000 sf.	
Non-Public	258,000 sf.		407,000 sf.	
Mechanical	388,000 sf.		676,000 sf.	
Total Terminal - Gross Area	3,897,000		6,550,000	

¹ To standardize the definition of "gate" used to provide a consistent means for evaluating capacity utilization, the Narrow Body Equivalent Gate (NREG) value was used to determine the gate requirements of diverse aircraft - from small commuters to new large aircraft - based on the maximum wingspan of a typical narrow body aircraft gate. The amount of space each aircraft requires is based on maximum wingspan; the aircraft is classified according to FAA, Terminal Design Group.

² Source: Hertz and Associates, 2002.

Sequence number: 1
 Author: Denny Schneider
 Subject: Note
 Date: 7/2/2003 9:16:19 AM
 Explain why the number of gate types handling larger aircraft does not increase capacity to handle passengers and cargo. Since airline space is being increased about 60% explain how it will fit to existing capacity. What are the present gate configurations? This is based on 1996 data. What about all of the upgrades implemented since?

ALTERNATIVE D DEVELOPMENT AND REFINEMENT

2.2.7 AIRCRAFT GATES

A comparison of the existing number of gates to those proposed in Alternative D is contained in Table 2.2-2. Alternative D would provide a total of 153 contact and commuter gates in 2015. The 2015 gate facilities are shown on Figure 2.2-4. There are more gates available in 2005 (163) but these include the remote jet and commuter gates, which offer a lower level of service than the contact gates. The remote commuter gates are located in two locations, the United maintenance ramp and to the east of the American Airlines low bay hangar. These facilities are accessed via shuttle buses from Terminal 7 and 4 respectively. The facilities have limited amenities in terms of holdrooms, concessions, and airline club lounges.

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 and 10 positions without. These facilities are used primarily for international flights and are scheduled for use on a regular basis. Passengers and their carry on baggage are transported to and from the aircraft via a LAWA operated shuttle bus. The remote boarding facilities do not contain any concessions, holdrooms or restroom facilities.

Alternative D would require the use of fewer gates to achieve the same level due to the higher utilization rates of contact gates at a level of service that exceeds 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.

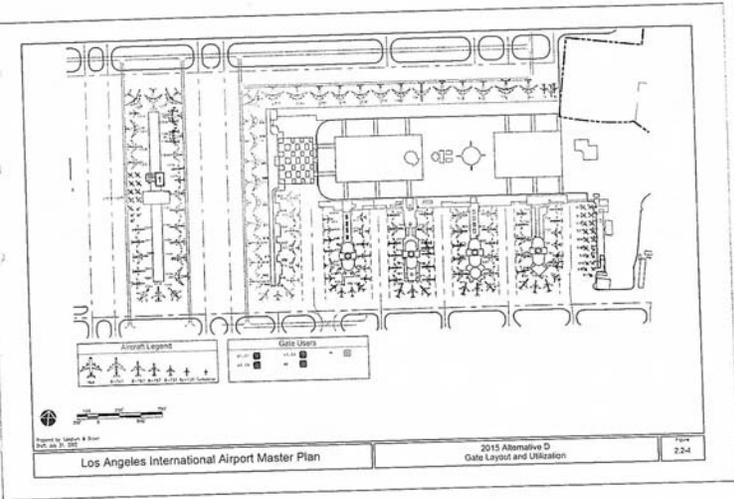
Table 2.2-2
ALTERNATIVE D
EXISTING VS. PROPOSED AIRCRAFT GATES

Gates	Gate Positions	
	Existing (2002)	2015
Commuter	32	40
Narrowbody (Group III)	51	33
Boeing 757 (Group IIIa)	12	23
Widebody (Group IV)	43	22
Boeing 747/Airbus 340 (Group V)	25	6
New Large Aircraft (Group VI)	0	153
Total Nominal Gates	163	153

Sequence number: 1
 Author: Denny Schneider
 Subject: Note
 Date: 7/2/2003 9:21:45 AM
 Despite the call for removal of the west pad gates, please explain why these gates can not be reestablished. If these west pad gates are used to segregate VIP aircraft where will these aircraft be parked in the new alignment?

Sequence number: 2
 Author: Denny Schneider
 Subject: Note
 Date: 7/2/2003 9:31:32 AM
 Why did the gate position mix change between 1996 and 2002 to reduce the group V size and increase the Group III narrow body aircraft gates if the industry is going toward larger aircraft? What area of the airport was downgraded?

Sequence number: 1
Author: Denny Schneider
Subject: Note
Date: 7/21/2003 9:36:22 AM
This statement is made that the western terminals will Southwest be moved there? If commuter flights are more frequent, won't moving these gates to the far end of the runways make them less accessible?



ALTERNATIVE D DEVELOPMENT AND REFINEMENT

ON-AIRPORT GROUND TRANSPORTATION FACILITIES

The on-airport landside system would be composed of three primary facilities: the GTC, ITC, and RAC facilities.

2.2.8 GROUND TRANSPORTATION CENTER (GTC)

The new GTC would be created north of Century Boulevard and south of Arbor Vitae Street, between Aviation and La Cienega Boulevards. This facility, in conjunction with the ITC, would serve all commercial and private vehicular traffic for departing and arriving passengers at LAX.

The GTC is designed to provide a conventional airport landside environment for air passengers at a separate location from the CTA. The layout is also designed to address a variety of safety and security issues as well as improve the landside system that currently exists 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. As the primary pick-up and drop-off point for the airport, all vehicles approaching the GTC would be closely monitored by video surveillance. The access roadway is designed to provide a single access point to the GTC. While the threat of a vehicular blast can never be fully eliminated, limiting large congregations of passengers by moving ticketing, security screening, and baggage claim to the CTA would improve passenger safety and security.

Passengers would be subjected to a first level security screening process at the GTC. 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 passenger security screening would occur at the CTA; however, the GTC would be designed to accommodate second level security screening at any time.

The following major functions are anticipated to be included the GTC:

- ◆ Short-term and long-term parking
- ◆ E-kiosk check-in
- ◆ Curbside interface for buses, private autos, taxis, limos, etc.
- ◆ Skycap baggage check-in
- ◆ First level passenger security screening
- ◆ APM interface
- ◆ Baggage re-claim (optional for re-checked bags)
- ◆ Compressed Natural Gas (CNG) fueling station

Sequence number: 1
Author: Denny Schneider
Subject: Highlight
Date: 7/21/2003 9:39:53 AM

Sequence number: 2
Author: Denny Schneider
Subject: Note
Date: 7/21/2003 9:41:25 AM
This statement is made that the GTC will be designed for "second level" screening. How will this be accomplished since there is presently no way to ensure fully controlled delivery of either passengers OR baggage from the GTC to the CTA. Similarly, explain how the ITC will be modified to provide this same level of screening. If this capability is "designed in," why isn't it utilized?

Sequence number: 3
Author: Denny Schneider
Subject: Note
Date: 7/21/2003 9:45:58 AM
If re-checked bags are made available at the GTC how will they be controlled? How will they be transported in a fully controlled manner along non-contiguous airport site?

Sequence number: 4
Author: Denny Schneider
Subject: Note
Date: 7/21/2003 9:42:09 AM
Why is the CNG station being placed in an area near all of the passengers?

While the CTA is anticipated to be redeveloped as a complex split by the APM into four terminal facilities, and as the identity for the Gateway to Los Angeles, the GTC would be a facility that primarily serves O&D passengers. The GTC would be divided into two parallel passenger-processing facilities, called "piers", with adjacent parking facilities and a commercial vehicle holding area. These pier structures would provide an orientation point for passengers to access the APM, which is connected to the CTA. The architectural design intent for the GTC is to create partially climate controlled open-air structures to help diffuse potential blast impacts at the curbfront by eliminating glass curtain walls.

Passengers would enter or exit vehicles with their baggage at a multi-lane GTC curbfront in front of each pier. Two piers flanked by multi-level parking structures would be provided. Due to space limitations and the demand for curbfront interface, these facilities are anticipated to be developed as multi-level structures with enplaning/departures functions on the upper level and deplaning/arrivals functions on the lower level. The APM would be located at an interstitial level between the departures and arrivals level. Parking structures serving each curbfront would be directly adjacent and clearly visible, with convenient parking entrances for vehicles directly from the curb lanes. Access to both parking and the APM would be provided via interstitial bridges and ramps, which would facilitate passenger movement with a minimum of level changes, and roadway crossings. Both the north and the south piers would have two, bi-level curb frontages, one on each side of the pier building. Therefore, each pier building face would have an upper level curb for departures and a lower level curb for arrivals.

Both departing (Skycap checked) and arriving (re-checked from the CTA) baggage would move between the GTC and the CTA via secured baggage tunnels, which may contain high-speed baggage systems (such as bulk Destination Coded Vehicles (DCVs)). A common-use outbound baggage sort system is anticipated to be located on the lower level of the new CTA terminals to provide for 100 percent EDS baggage screening.

2.2.8.1 DEPARTURE LEVELS (GTC)

Passengers may arrive via one of several modes: Private auto, bus, taxi, limousine, etc., and enter the GTC from either the parking structures or the upper level curbfront. They then move into the upper level of the GTC where e-ticketing/check-in and Skycap check-in facilities would be available. Passengers that do not use Skycap baggage check-in may carry baggage on the APM to the CTA. Bags carried by passengers on the APM would need to be checked by the appropriate airline in the CTA. No airline agents are initially anticipated to be located at the GTC. Since most passenger

ALTERNATIVE D DEVELOPMENT AND REFINEMENT

processing and congregating would occur in the CTA and not the GTC, it is anticipated that passenger assembly would be limited to the APM platform.

Each pier would be signed by carrier on the upper level curbfront similar to traditional terminal facilities; however, any curbfront would be able to accommodate departing passengers since all passengers would be destined to the APM station for access to the new terminal facilities in the CTA. The departure level of each ground transportation pier would provide flight information, e-ticketing kiosks, public restroom facilities and limited concession space. Before boarding the APM, departing passengers would access the APM station through multiple high capacity vertical circulation cores and a ramp system capable of accommodating all departing passengers, their carry-on baggage as well as baggage to be checked. It is also assumed that luggage carts would be allowed on the APM and highly utilized in the transfer of people and baggage. One conceptual illustration of the GTC departure level is depicted in Figure 2.2-5.

2.2.8.2 ARRIVALS LEVEL (GTC)

Arriving passengers would board the APM from their carrier's assigned station at the CTA and transported to a specific pier within the GTC. Each airline would be assigned to a specific pier/arrivals curbfront. Trains leaving the CTA would stop at two stations within the GTC; one station within each pier.

Passengers arriving at the GTC from the CTA via the APM leave the APM at the interstitial level station where they may access parking and curbfront (including private auto pick-up, buses, limos, taxis, etc.) and potential baggage reclaim facilities. Arriving passengers wishing to access parking would move from the APM station to the parking structures via interstitial level bridges which would be located between the upper and lower levels of the roadways at the GTC. This arrangement would eliminate the need for passengers to cross active roadways. Arriving passengers needing to claim re-checked baggage move one level down from the APM station using a high capacity vertical circulation core and ramp system to baggage reclaim areas where re-checked baggage may be retrieved. Passengers would then access either the parking structures via the interstitial bridges, or proceed directly out to the arrivals (deplaning) curb where buses, taxis, limos, and private auto access would be available.

Meeters and greeters would be either encouraged or directed to short-term parking facilities designed to allow passengers to conveniently find their parties. Meeters and greeters would be allowed to use the APM to meet their parties at the main terminal in

Sequence number: 1
Author: Denny Schneider
Subject: Note
Date: 7/2/0003 9:49:24 AM
How can we move the potential for a car bomb impacting check in gates, how will a similar multi-level structure at Manchester Square protect all of the people who are checking in?

Sequence number: 2
Author: Denny Schneider
Subject: Highlight
Date: 7/2/0003 9:46:26 AM
How will this transport be done without baggage tunnels that are very questionable in cost and safety?

Sequence number: 3
Author: Denny Schneider
Subject: Note
Date: 7/2/0003 9:47:17 AM
How will this transport be done without baggage tunnels that are very questionable in cost and safety?

Sequence number: 4
Author: Denny Schneider
Subject: Note
Date: 7/2/0003 9:51:40 AM
If baggage is being checked for explosives in the CTA but is being checked by Skycaps in the GTC, how will bag matching be accomplished? Why do two checks of baggage instead of one?

Sequence number: 1
Author: Denny Schneider
Subject: Highlight
Date: 7/2/0003 9:53:23 AM
How can we move the potential for a car bomb impacting check in gates, how will a similar multi-level structure at Manchester Square protect all of the people who are checking in?

Sequence number: 2
Author: Denny Schneider
Subject: Note
Date: 7/2/0003 9:56:27 AM
Will a tunnel be used or will all passengers be given carts to carry their luggage on the automated people mover? How much help would be available to people with their luggage? What about people with children, elderly, or disabled?

Sequence number: 3
Author: Denny Schneider
Subject: Note
Date: 7/2/0003 9:57:54 AM
Does this mean that people will retrieve their luggage on arrival in the CTA and then recheck their bags to the GTC? How will this massive exercise be accomplished?

the reconfigured CTA or would also be allowed to meet their parties within the arrivals level lobby of the individual piers. Passenger conveniences such as restrooms and public seating areas would be provided to allow people to wait for their parties' arrival via the APM.

2.2.8.3 APM LEVEL (GTC)

Each pair of piers as shown in Figure 2.2-6 would share an APM station located at a level between the departure and arrival levels. Further refinement and development would determine the exact location of the APM. The APM platform would be designed in a manner which helps diffuse potential blast impacts at the curbside and protect passengers.

The GTC complex would have a pedestrian concourse that would provide passage between all curbside piers, APM stations, parking structures and the commercial vehicle holding area. The pedestrian concourse/transfer level would be equipped with proper signage, information, and passenger conveniences such as power walks and restrooms. In addition, a limited number of concessions may also be provided at this level.

One additional feature of the GTC would be the placement of the commercial vehicle holding/staging area at the far northern end of the site along Arbor Vitae Street. Commercial vehicles would use the arrivals and departures curbside on each pier's north side. Both private and commercial vehicles would use the two curbs on the north side of each pier, whereas only private vehicles would use the curbs on the two piers' south sides. Signage within the CTA and onboard the APM trains would direct the commercial vehicle patrons to the correct station stop at each pier. One conceptual illustration of the GTC interior views is depicted in Figure 2.2-7.

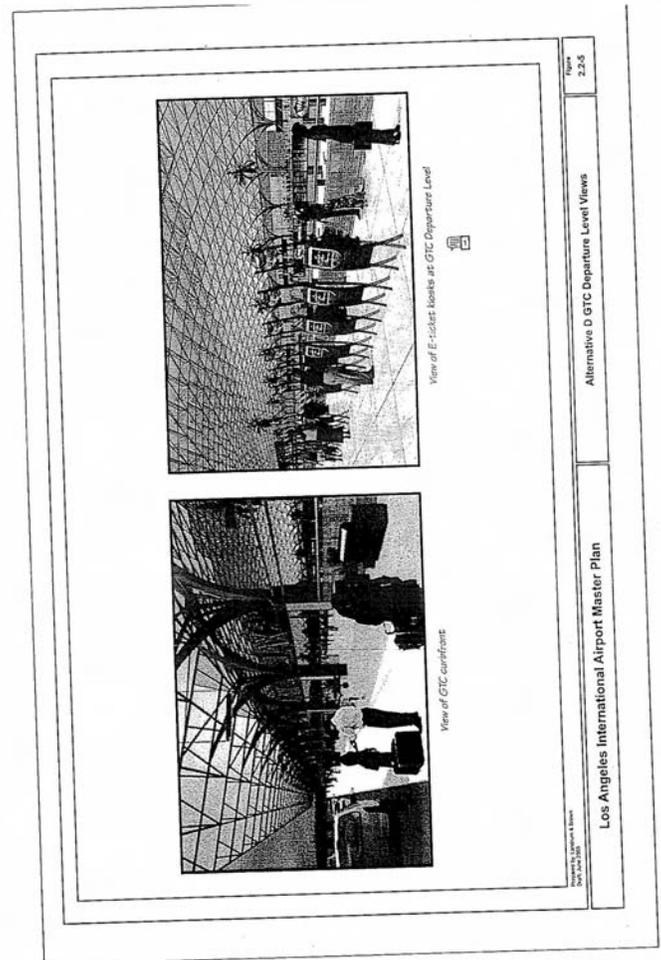
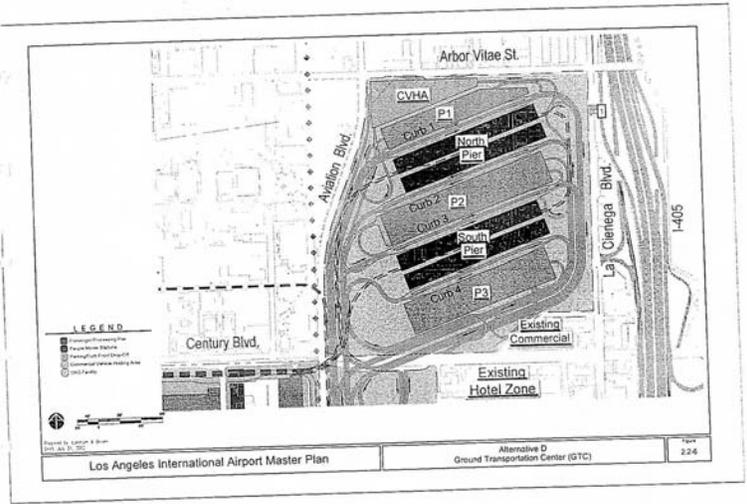


Figure 2.2-5

Alternative D GTC Departure Level Views

Los Angeles International Airport Master Plan

Prepared by: [unreadable]
Date: [unreadable]



ALTERNATIVE D DEVELOPMENT AND REFINEMENT

2.2.9 INTERMODAL TRANSPORTATION CENTER (ITC)

An ITC would be located at the northeast corner of Imperial Highway and Aviation Boulevard, and would provide airport access for Green Line and chartered bus passengers. The ITC, like the GTC would be a partially controlled open-air structure to help diffuse blast impacts from the adjacent parking structure. All vehicles approaching the ITC and entering the parking structure would be monitored using video surveillance systems. The primary ITC elements would be:

- ◆ APM and MTA Green Line access
- ◆ Short-term parking
- ◆ Chartered bus access

The ITC would serve the premium short-term parking needs of the airport. Internal to the facility would be a curbside for pick-up/drop-off of passengers prior to parking their vehicles. The first level of the ITC would provide flight information, e-ticketing kiosks, public restroom facilities, and concession space. It is anticipated that passenger processing at the ITC would include a random checking of baggage and passengers using sniffing dogs, video surveillance systems, and other security devices. Second level security screening would occur at the CTA; however, the ITC would be designed to accommodate second level security screening at anytime. The ITC would also provide a curbside that would specifically accommodate large buses, such as charter and tour buses. An enclosed pedestrian connection with power walks would cross over Imperial Highway and under I-105 to connect to the MTA Green Line station at Aviation Boulevard. MTA regional buses would also be accommodated at the Green Line station. An illustration of the ITC interior views is depicted in Figure 2.2-8.

2.2.10 CONSOLIDATED RENTAL CAR FACILITY (RAC)

RAC facilities in Alternative D would be located on a consolidated campus that is bordered by Nielsen Park to the north, Airport Boulevard to the east, 98th Street to the south and Sepulveda Boulevard to the west in existing Lot C. Primary elements of the consolidated RAC would be:

- ◆ APM interface
- ◆ RAC drop-off
- ◆ RAC pick-up
- ◆ Ready/return and Quick Turnaround Area (QTA) facilities
- ◆ RAC storage and maintenance support

Vehicle access would be provided from the north, east and south. The facility would include a direct pedestrian bridge to the APM system. A customer service facility would be provided adjacent to the

Sequence number: 1
 Author: Denny Schneider
 Subject: Note
 Date: 7/21/2003 10:11:32 AM
 ☐ If charter bus access is set up in this facility, will public transportation buses also be in this facility? If they are, what holding facilities will there be to aid travelers? How will baggage be handled? What provisions for people traveling with children, elderly, or disabled?

Sequence number: 2
 Author: Denny Schneider
 Subject: Note
 Date: 7/21/2003 10:14:42 AM
 ☐ What levels of traffic increase are anticipated on Aviation Blvd., the eastern boundary? How will directions to access to this area be facilitated since it is not near the freeway? Will the traffic be increased along La Tijera, how much? or via Manchester Blvd, how much?

APM station and the ready/return garage. The ready/return garage would consist of a four-level facility that would accommodate 9,000 ready/return spaces.

Customers picking up vehicles would walk across the APM platform to the second level of the customer service building, where they would complete their transactions and proceed to the garage for their vehicles. The walking distance from the customer service building would be minimized to each side of the garage. They would then exit out of the west side of the garage onto 96th Street or east out of the garage onto Airport Boulevard southbound. Rental car returns would enter on the east side of the garage off Airport Boulevard into the ready/return garage.

A common-use OTA would be located adjacent to the ready/return garage. Cars would exit down the northeast side of the garage, circulate through the OTA and then queue into the garage on the northwest side of the OTA facility. The OTA facility would include fueling, vacuuming and car wash facilities.

Based on preliminary program requirements as identified in Table 2.2.4. The RAC would provide adequate space to accommodate the rental car operators at LAX. However, these estimates are subject to refinement and would require analysis of each rental car company's operations to determine accurate space and operational requirements. An illustration of the RAC exterior view is depicted in Figure 2.2.9.

Sequence number: 1
 Author: Denny Schneider
 Subject: Note
 Date: 7/21/2003 10:16:00 AM
 ☐ How close to the runway clear zone area will this 4 story rental facility be placed?

Sequence number: 2
 Author: Denny Schneider
 Subject: Highlight
 Date: 7/21/2003 10:16:00 AM

Sequence number: 3
 Author: Denny Schneider
 Subject: Note
 Date: 7/21/2003 10:16:04 AM
 ☐ This facility will be for the "on-site" rental agencies, how will it integrate with the "off-site" ones? What % of agencies will be on vs off site? What % of rental cars will be on vs off site?

ALTERNATIVE D DEVELOPMENT AND REFINEMENT

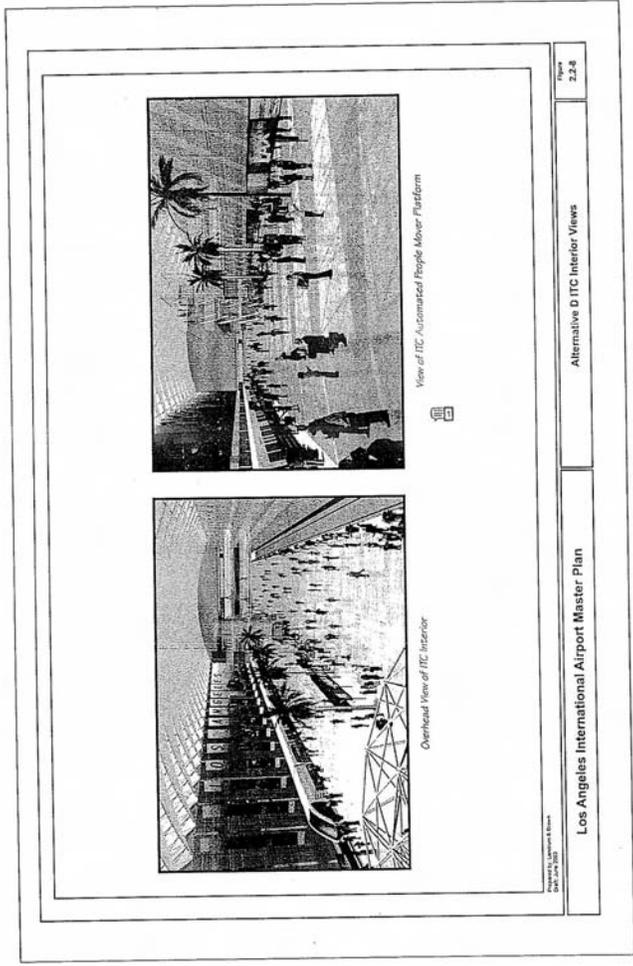
TABLE 2.2.4
 RENTAL CAR FACILITY PLANNING
 PRELIMINARY PROGRAM REQUIREMENTS

	Units	Acres
Ready/Return and Customer Service		
Ready/Return Parking (spaces)	9,000	62.50
Customer Service Building (square feet)	150,000	3.44
Bus Plaza (square feet)	82,300	1.89
Landside APM Station (square feet)	30,000	.69
Exclusive Use Service Centers		
Storage/Overflow Parking (spaces)	17,100	83.36
Car Wash (bays)	20	0.41
Fueling/Vacuum (stations)	80	0.69
Queuing lanes (includes car wash and fuel/vacuum)	20	1.05
Maintenance Buildings (square feet)	120,000	2.75
Open Space (Landscape Requirements)	N/A	23.88
Total Program Requirements	N/A	180.66

- Notes:
- The total number of ready/return spaces was determined based on comparison of the top five airport car rental markets.
 - Acres estimates for ready/return were based on 300-square foot/car for ready spaces and 200-square foot/car for return spaces. Total acreage includes 10 percent for internal circulation.
 - Acres estimates for storage spaces based on 200-square foot/car for storage spaces and include 10 percent for internal circulation.
 - Customer service building includes exclusive and common use space for RAC agencies, lobby/circulation, mechanical/security and unassigned/responson areas.
 - Customer service and maintenance buildings square footage estimate based on comparable markets with a consolidated rental car facility/customer building.
 - The number of storage spaces was determined by multiplying the total number of ready/return spaces by 1.9.
 - Maintenance buildings include all space for service buildings, maintenance bays and employee parking.
 - Landscape estimated to be 15 percent of the total site.
- Source: Landrum & Brown, February 2002

Sequence number: 1
 Author: Denny Schneider
 Subject: Note
 Date: 7/21/2003 10:20:26 AM
 ☐ If the Bus Plaza is being left at Lot C how will bus riders move from the bus to the trains?

Sequence number: 2
 Author: Denny Schneider
 Subject: Note
 Date: 7/21/2003 10:23:43 AM
 ☐ As Lot C is in the Westchester-Playa del Rey Community Plan area, will the 15% landscaping meet it's requirement for this application?
 Will any of the area require rezoning? What are they and how much?



Sequence number: 1
 Author: Denny Schneider
 Subject: Note
 Date: 7/21/2003 10:29:51 AM
 ☐ The views of the ITC show very large open spaces and long, open areas. Will there be any moving sidewalks or other support for people who can't walk long distances? The illustration is populated with a small number of people. What numbers are anticipated to arrive at one time? If, for instance 5 buses and a train arrive at the same time will people be able to drive carts holding luggage? I note that there are no carts for luggage visible. Where and how will they be disbursed and controlled?

ALTERNATIVE D DEVELOPMENT AND REFINEMENT

2.3 GROUND ACCESS AND PARKING – ALTERNATIVE D

2.3.1 OVERALL LANDSIDE APPROACH

Modifications to the landside system in Alternative D would enhance the safety and security of the airport by protecting the airport's critical infrastructure components. Alternative D eliminates the threat of vehicular blast in close proximity to congregations of queuing passengers at functions such as ticketing and bag claim. Alternative D decentralizes ground access and creates four landside access points and a controlled airport road connected directly to the local freeway system to mitigate the existing city/street traffic congestion leading to the single access point on the CTA roadway. Discussed in Section 2.2, the new system would be composed of four primary facilities: the CTA, GTC, ITC, and RAC. These facilities are depicted in Figure 2.3-1.

The landside surface transportation approach and methodology for Alternative D consists of decentralizing the vehicular traffic associated with the airport over a large geographic area. Decentralizing the vehicle traffic creates an improved level of service compared to the existing operation in the CTA. The existing roadway access system is congested. The CTA curbside, Sepulveda tunnel, Sepulveda/I-105 interchange, and Sepulveda/Century Boulevard interchange are existing landside impediments to customer convenience. The Landside APM is a key element linking several facilities to the CTA. In addition, the new access system provides the opportunity to control and monitor all access into the CTA, GTC, ITC, and the RAC.

This section provides a description of the overall landside access and parking system for Alternative D.

2.3.2 ON-AIRPORT ROAD ACCESS

Alternative D meets the overall roadway access demand for the airport by distributing the majority of vehicles serving the airport to the GTC, ITC, and RAC, which are linked to the CTA via the APM. Alternative D allows for direct on-airport access via eastbound Century Boulevard, southbound La Cienega Boulevard, northbound Aviation Boulevard, and Imperial Highway. The existing on-airport roadway access to the CTA would be limited. See Section 2.3.2.4 for a detailed description of the access plan to the CTA. Figure 2.3-2 provides a depiction of the ground access plan to the passenger processing facilities. A description of the access to each facility is provided below.

Page: 94

Sequence number: 1
 Author: Danny Schneider
 Subject: Note
 Date: 7/21/2003 10:46:52 AM
 The example, dedicated road appears to have an access from Century east of Aviation. There are several other yellow streets (assumed to be the existing ones) that do not show any ramping to the dedicated streets. Will these be underpasses? What is done to preclude these streets being used to interrupt the dedicated ones by a truck bomb?

Sequence number: 2
 Author: Danny Schneider
 Subject: Note
 Date: 7/21/2003 10:49:41 AM
 The vertically bisected Lennox Blvd. connections are not shown. Does this mean that they will NOT be used? If they are, how will it be integrated into this. The LaCienega access is shown below what is now Lot D. How will the increased levels of traffic in this area be handled since many people will get off at LAT/era, LaCienega, and Manchester to take advantage of the LaCienega entrance. How will traffic from these arrive?

Page: 95

Sequence number: 1
 Author: Danny Schneider
 Subject: Note
 Date: 7/21/2003 10:51:07 AM
 Employees would be required to leave their building and go a block or two to escort each car? Has this increased loss of work time been accounted for? How much is this anticipated to cost?

Sequence number: 2
 Author: Danny Schneider
 Subject: Note
 Date: 7/21/2003 12:15:59 PM
 What about VIP Limos, etc for entry to the CTA? How will these be accommodated? Will VIPs be required to access via the GTC whereas Flyaway buses will go into the CTA? Will Flyaway buses be diverted to the ITA so that only the emergency and cleared vehicles will enter the CTA roadway system?

LAX Master Plan Addendum

for passenger drop off. Commercial vehicle traffic on the lower level would be restricted to Curbs 1 and 3, which would be designated for passenger pick-up. A direct connection between the holding area and the two commercial curbs would be provided via a separate connector ramp.

A commercial vehicle holding area would be provided adjacent to the GTC for staging of taxis, door-to-door vans, limousines, and other commercial vehicles. Commercial vehicles would access this lot using the main entrance road to the GTC and the entrance located near the intersection of Arbor Vitae Street and Aviation Boulevard. The commercial vehicle holding area would provide a location for parking and queuing of commercial vehicles prior to and after deployment to the GTC curbs. The holding area limits the amount of time that commercial vehicles are driving around on area roadways waiting to pick up passengers. By providing a place for commercial vehicles to stage, it reduces traffic congestion to surrounding communities and roadways.

The single approach multi-lane roadway system allows a greater opportunity to monitor all vehicles, approaching the GTC. An illustration of the approach to the GTC from the primary entrance road is provided in Figure 2.3-3. The use of video surveillance systems to monitor activity and the ability to pre-screen vehicles before they approach the GTC would be an integral part of the security of this facility. The roadway security plan would extend beyond the on-airport roadways to the surrounding regional highway and arterial roadway network. This would provide for additional time and distance to identify and preview potential vehicle hazards. Vehicles that are to be inspected would be directed into a vehicle checkpoint area for inspection. Multiple checkpoint locations would be incorporated into the final ground access plan. For a more detailed description of the GTC functions, refer to Section 2.2.

2.3.2.3 INTERMODAL TRANSPORTATION CENTER (ITC)

Access to the ITC would be provided from the east and west sides of the facility. The ITC would be accessible via 111th Street and Imperial Highway along a proposed at-grade roadway. Traffic signals would be provided at these intersections and at the entrance/exit to the ITC. On the west side of the ITC, cars and buses would be allowed to exit directly onto Aviation Boulevard at-grade with a traffic signal provided at this location.

The ITC would also provide curbside for charter, regional and other bus activity. For a more detailed description of the ITC functions, please refer to Section 2.3 of this document.

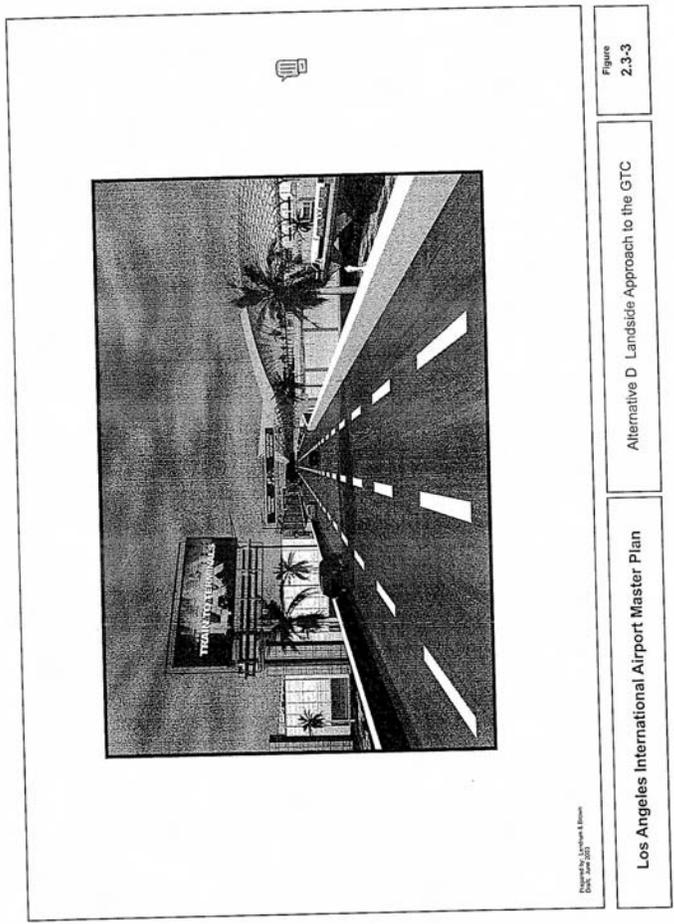
Sequence number: 1
 Author: Denny Schneider
 Subject: Highlight
 Date: 7/21/2003 12:35:24 PM

Sequence number: 2
 Author: Denny Schneider
 Subject: Note
 Date: 7/21/2003 12:35:03 PM
 If commercial vehicles will enter via Arbor Vitae and Aviation how will they get to the GTC? Is there a planned off ramp of the 405 at Arbor Vitae or will traffic get off at La Tijera and Manchester? The present holding area is quite large. What is the comparison of present to planned areas?

Sequence number: 3
 Author: Denny Schneider
 Subject: Highlight
 Date: 7/21/2003 12:37:05 PM

Sequence number: 4
 Author: Denny Schneider
 Subject: Note
 Date: 7/21/2003 12:35:41 PM
 During "rush hours" this is one of few N-S roads. It already backs up significantly. How will all of the larger commercial vehicles be accommodated? Aviation is extensively used by cargo trucks at present. How and where will these trucks (and the many additional ones) be diverted?

Sequence number: 1
 Author: Denny Schneider
 Subject: Note
 Date: 7/21/2003 12:45:51 PM
 What direction is this view? If this is west, then I assume the ITA is on the left and GTC on the right. The distances shown on the illustration is much greater. How will the parking be invoked to allow short travel distances? How will baggage be handled to get from the Green Line to the ITC and then to the APAs?



ALTERNATIVE D DEVELOPMENT AND REFINEMENT
2.3.2.4 CONSOLIDATED RENTAL CAR FACILITY (RAC)

The RAC significantly improves passenger convenience by locating all off-airport rental car facilities into one central location. The consolidated RAC facility would include a direct pedestrian bridge to the APM system. All passengers would access the RAC facility to and from the CTA by using the Landside APM system. This has the distinct advantage of eliminating all rental car busses from the arterial roadway network. Primary vehicle access to the consolidated RAC facilities would be via Airport Boulevard and 98th Street.

Passengers returning their vehicles from the south and the east would access the facility via a left turn from northbound Airport Boulevard to westbound 98th Street. Passengers returning their vehicles from the northwest would access the facility via a right turn from southbound Airport Boulevard near 98th Street via a new dedicated ramp into the facility. There would be two primary exits ramps from the facility. One exit ramp would be onto southbound Aviation Boulevard and the other would be to westbound 98th Street.

2.3.2.5 AIR CARGO ROADWAY

The cargo roadway network would provide direct access for cargo vehicles from the surrounding arterial street network. This would reduce congestion on the arterial roadway network. There are four separate cargo complexes in Alternative D that require direct access off of the arterial roadway network:

- ◆ Century Cargo Complex: Access to the Century Cargo Complex would be accommodated from Century and Aviation Boulevards. In total there are seven access points to the Century Cargo Complex, six from Century Boulevard and one from Aviation Boulevard.
- ◆ Imperial Cargo Complex: Access to the Imperial Cargo Complex would be accommodated from Imperial Highway and Aviation Boulevard.
- ◆ South Cargo Complex East: Access to the South Cargo Complex would be accommodated from Imperial Highway.
- ◆ South Cargo Complex West: Access to the South Cargo Complex West would be accommodated from Imperial Highway and I-105.

2.3.3 OFF-AIRPORT PUBLIC ROAD ACCESS

Alternative D would include a series of improvements to the off-airport transportation network; it would accommodate the shift in traffic patterns associated with the relocation of the primary passenger destination from the CTA to the GTC and the ITC. Various

- Sequence number: 1
Author: Denny Schneider
Subject: Note
Date: 7/21/2003 12:47:05 PM
 ALL rental car companies will be located here? Which will and which will not? What is the percentage of cars NOT covered by this facility?
- Sequence number: 2
Author: Denny Schneider
Subject: Highlight
Date: 7/21/2003 12:45:51 PM
 If the access to this facility is Airport and 98th then is it anticipated that Arbor Vitae will become a main access road? Will most traffic travel from the north along Airport from La Tijera and/or Manchester? Please provide detail flow information.
- Sequence number: 4
Author: Denny Schneider
Subject: Note
Date: 7/21/2003 12:51:09 PM
 Southbound 105 would require an exit on Sepulveda. Is it the plan to divert all rental car traffic via La Tijera and Sepulveda? How much traffic is involved and how will it be accommodated?
- Sequence number: 5
Author: Denny Schneider
Subject: Note
Date: 7/21/2003 12:58:53 PM
 General cargo traffic station: How will this cargo traffic get out of the area? Will it all be directed to the 105 Freeway? What about N-S destinations?

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. Alternative D proposes that one northbound lane would be added on La Cienega Boulevard from 111th Street to Arbor Vitae Street, and one southbound lane would be added from Arbor Vitae Street to 104th Street. The intersection of La Cienega Boulevard and Lennox Boulevard would be designed to restrict traffic from traveling between Lennox Boulevard and the on-airport roadways. These improvements are strategically designed to improve those intersections that would experience the primary increase in traffic as a result of the plan.

2.3.4 TRANSIT

The existing MTA Green Line station is located at the southeast corner of Aviation Boulevard and Imperial Highway. Alternative D would provide an enclosed pedestrian connection with moving walkways between the Green Line station and the ITC. The walkway would cross above Imperial Highway and below I-105 freeway. Transit users would access the CTA from the ITC via the APM system. The MTA Green Line station would also serve as the destination for airport bound passengers that would be using the future rapid b line from downtown Los Angeles.

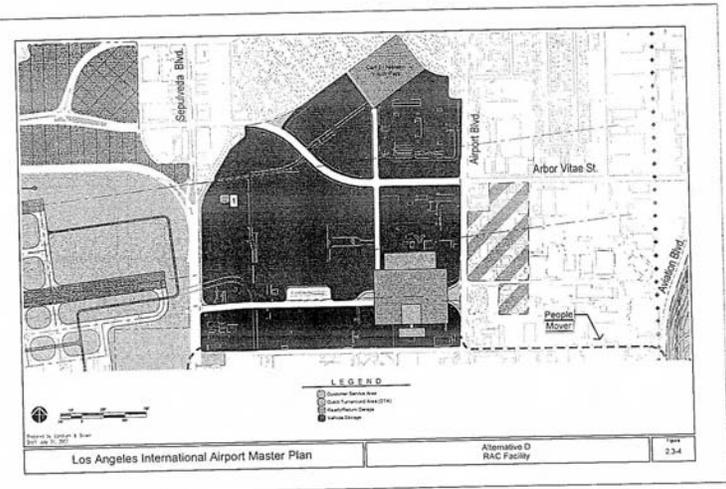
2.3.5 PUBLIC PARKING

Public parking would be provided in three separate locations: GTC, ITC, and in an expanded Lot B. Parking locations and number of stalls is depicted in Figure 2.3-5. In the GTC, three garages would provide approximately 7,515 stalls. Parking Garage 1 (P1) would have five levels. Parking Garages 2 and 3 (P2, P3) would each have three levels. Of the 7,515 GTC stalls provided, 4,253 would be priced for short-term parking, while the remaining 3,262 stalls would be priced for long-term parking. The parking structures in the GTC would be designed to help diffuse blast impacts from surrounding vehicles.

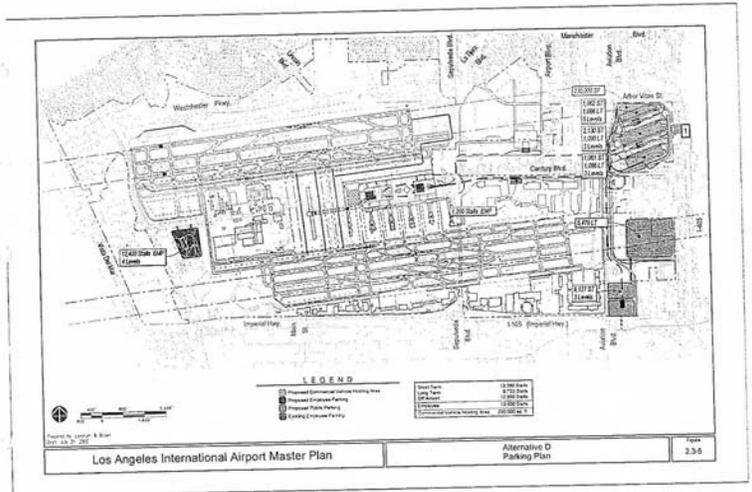
The parking facilities at the ITC would provide approximately 9,127 stalls, with all stalls priced for short-term parking. These stalls would be provided in three separate levels within the ITC.

The surface lot north of 111th Street would be incorporated into Lot B and would provide 5,470 long-term parking stalls. A shuttle bus would transport people between this lot and the ITC for access to the CTA via the APM.

- Sequence number: 1
Author: Denny Schneider
Subject: Highlight
Date: 7/21/2003 12:59:59 PM
 Transit users access the CTA from the ITC via APM. What accommodations for baggage?
- Sequence number: 3
Author: Denny Schneider
Subject: Highlight
Date: 7/21/2003 1:03:04 PM
 If the Green Line is the Rapid Bus from Downtown, why not send it to the Bus Terminals, or better yet, put all of them in one place?



Sequence number: 1
 Author: Denny Schneider
 Subject: Note
 Date: 7/21/2003 1:31:19 PM
 This drawing of the RAC shows the center line of the runways. How far off center must the area be clear since the RAC is to be several stories high?
 Again if 98th St is to be the west bound exit, how will the traffic be accommodated on Sepulveda, La Tijera, and the local streets on the cars' venture back to the freeways.



Sequence number: 1
 Author: Denny Schneider
 Subject: Note
 Date: 7/21/2003 1:35:48 PM
 This map, Figure 2.3-4 shows parking stalls owned by LAWA. What about all of the private, commercial parking? How will it be supported to relocate to the new accesses and how will it be accommodated? How does this compare with existing parking?

ALTERNATIVE D DEVELOPMENT AND REFINEMENT

Table 2.3-1 compares the parking stalls available in Alternative D to the existing conditions.

Table 2.3-1

ALTERNATIVE D - SUMMARY OF PUBLIC PARKING FACILITIES

Lot	Existing Conditions	Alt. D 2015
CTA Toll booth	7,294	NA
CTA Metered	1,147	NA
Lot B	4,838	NA
Lot C	8,147	NA
GTC	NA	7,515
ITC	NA	9,127
East Surface Lot	NA	5,470
Total	21,426	22,112
Off-Airport Stalls	12,500	12,890
TOTAL	33,926	35,002

NA - Not Applicable
 Source: Landrum & Brown, Inc.

2.3.6 EMPLOYEE PARKING

Alternative D employee parking would be provided in two locations: the West Employee Parking Garage and the existing garage on the southeast corner of Avion Drive and Century Boulevard. Both locations are shown in Figure 2.3-5.

A 12,400-stall garage would be constructed on the west side of the airport, south of World Way West. Employees would access this lot via World Way West by way of Pershing Drive. The new employee garage 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. Employees parking in this garage would be shuttled on World Way West or on the Airport Operations Area (AOA) to their places of employment.

The existing garage on the southeast corner of Avion Drive and Century Boulevard would provide approximately 1,200 stalls. Employees would access this parking garage via Century Boulevard. Employees parking in this garage would be shuttled to the RAC Landside APM station for access to the CTA, GTC, or ITC.

2.4 AUTOMATED PEOPLE MOVER - ALTERNATIVE D

Alternative D would include two people mover systems: a Landside APM system and an Airside APM system. The Landside system would become the primary connections between the landside facilities and the terminal facilities at LAX. The Airside system would connect the TBIT and the new West Satellite Concourse. The APM system would be continually monitored by security personnel utilizing video surveillance to identify potential threats. Redundancy would be an integral part of assuring the continued operation of the system in the event of a mechanical failure or threat. The CTA would be able to be accessed by passengers through a busing operation should it be necessary. Figure 2.4-1 depicts the alignment of these systems.

2.4.1 LANDSIDE AUTOMATED PEOPLE MOVER SYSTEM

The Landside APM would be the primary mode of transportation for passengers and employees to access to the CTA. The system would provide service between the CTA and the GTC, ITC, and RAC. The Landside APM would also provide a continuous connection between the MTA Green Line and the CTA.

2.4.1.1 LANDSIDE SYSTEM ROUTES

To balance the passenger loads, two Landside APM routes were designed to operate independently, with one route serving only the CTA and GTC and a second route serving the CTA, RAC, and ITC. Although a direct non-stop route connecting the ITC and CTA is desirable, it would require a fourth pair of guideways, which cannot be accommodated in the CTA.

2.4.1.1.1 CTA-GTC Route

Sliders on CTA-GTC route would include arriving and departing passengers who: (a) are dropped off or picked up by third parties, (b) park in the airport GTC parking garage, (c) use commercial transportation to arrive or depart at the airport, and (d) airport employees. Meeters/greeters and airport visitors would also park at the GTC and ride the Landside APM to and from the CTA.

The CTA-GTC route would connect six stations, the four stations in the CTA and the two in the GTC. Starting in the CTA in Terminal 3, trains would go to the Terminal 4 station, then to the station in the South Pier of the GTC, then to the station at the North Pier and then return to the CTA to stations in Terminal 1 and Terminal 2. The train would return along this route in the opposite direction on the other track. The route is highlighted in Figure 2.4-2. By repeating the route in the opposite direction, the Landside APM system would allow passengers to board the Landside APM at any station and go to any station without concern about being on the correct side.

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Sequence number: 1
Author: Denny Schneider
Subject: Note
Date: 7/2/2003 1:38:29 PM
According to these press numbers the statement that no new parking is being added is FALSE. How do these numbers associate with the map on 2.3-5? Where do all the non-LAX owned parking come into the equation?
Is the mix of long and short term parking about the same or is it being changed? What are the new comparison numbers?

Sequence number: 2
Author: Denny Schneider
Subject: Note
Date: 7/2/2003 3:27:49 PM
The East Surface lot appears to be an expanded Lot B. Where do the extra spots come from? Is this to include the spaces from the present Proud Blvd? Is the Proud Blvd being removed or will it be staying? If so, what parking will be for the Proud Blvd? Is it double used-LAX & Proud Blvd?

Sequence number: 3
Author: Denny Schneider
Subject: Note
Date: 7/2/2003 5:00:40 PM
In addition to the two employee lots isn't there employee parking in the NW corner of Lot C?

Sequence number: 4
Author: Denny Schneider
Subject: Note
Date: 7/2/2003 5:03:55 PM
How will the employee entrance be screened at the CTA? Why would employees be shuttled away from LAX to take a people mover back?

Page: 104

Sequence number: 1
Author: Denny Schneider
Subject: Note
Date: 7/2/2003 5:14:43 PM
On the second, extensive APM route from the ITC & RAC how long will it take? What additional stops are contemplated to accommodate the hotels, businesses, and rental car activities.

Sequence number: 2
Author: Denny Schneider
Subject: Highlights
Date: 7/2/2003 5:14:44 PM

Sequence number: 3
Author: Denny Schneider
Subject: Note
Date: 7/2/2003 5:21:25 PM
Since the train is going on one side of the CTA and then to the GTC and completing the circle, if you got on the "A" train instead of the "B" it could take an enormous time to get to the might take to get to a particular terminal without a major walk. What is to be done to preclude this?

The proposed CTA-GTC route would have two guideways, providing redundancy and allowing for the most direct trip for all passengers. If there is a failure at a station, or at one point along the guideway, failure management switches would permit bypass loops or shuttle routes to be implemented for the system to carry at least half the normal capacity.

Traveling from a west CTA station to the first GTC station would take about 5 minutes. The train length would be varied by operating period to meet the fluctuating passenger loads, so that the operating headway (time between trains) would remain at approximately 2 minutes during all periods, resulting in an average waiting time of 1 minute. Thus the total typical trip between the CTA and GTC would be less than 6 minutes.

2.4.1.1.2 CTA-RAC-ITC Route

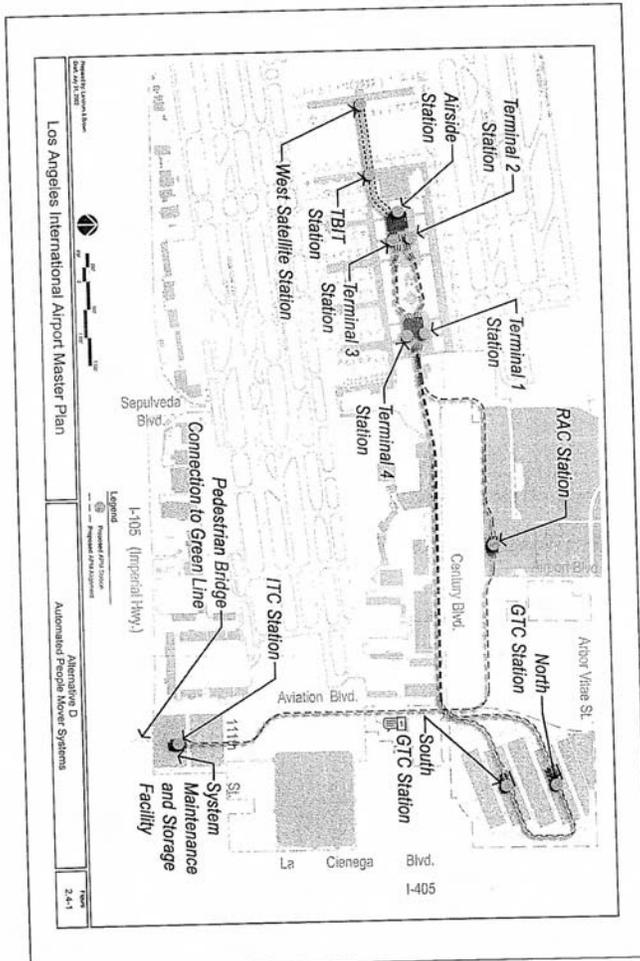
Riders on this route would include arriving and departing air passengers who are: (a) parking at the ITC, (b) using the Green Line light rail transit system or regional buses to the ITC station (c) parked in the long-term surface lot west of La Cienega Boulevard and are shuttled by buses to and from the ITC, (d) charter bus users, and (e) airport employees. Meeters and greeters who park at the ITC or use the Green Line would also ride this route.

Arriving air passengers renting cars would ride the system from the CTA to the RAC, and passengers returning rental cars would ride the system to the CTA to catch a flight. Airport users going to or from the hotels and other businesses along 98th Street could take this route and use connecting shuttle buses at the RAC station. A potential collector APM serving these hotels and the RAC station might be part of the future development in the Century Boulevard corridor.

The CTA-RAC-ITC route would run from a western station between the new landside Terminals 2 and 3 to a second CTA station between Terminals 1 and 4, then on to the RAC and ITC. There, trains would reverse and return to the CTA stations via the RAC. This would give direct service to the RAC users and service to the ITC with one intermediate stop. The route described is highlighted in Figure 2.4-3. In addition, airport and airline employees working in the CTA would take the Landside APM after being shuttled by a bus to the RAC station from the employee parking lot.

The scheduled travel time between the western CTA station and the ITC would be about 7.5 minutes. Again, the train length would varied by operating period and the operating headway would remain about 2 minutes during all periods, resulting in an average wait time of 1 minute. A typical trip time between the ITC and western CTA station, including headway, would be less than 9 minutes.

- Sequence number: 1
Author: Denny Schneider
Subject: Note
Date: 7/21/2003 5:27:50 PM
Taking a bus from the parking to an APM station means that luggage must be dropped by the traveler at each point. What accommodations are established to reduce this burden?
Any "shuttle" mentioned in this plan must not be done as part of this proposal AND IS NOT PART OF THE \$2.6 billion estimate. Is this a way to run a railroad by allowing the inconveniences of having to change conveyances?
- Sequence number: 2
Author: Denny Schneider
Subject: Highlight
Date: 7/21/2003 5:24:42 PM
T
The routes established require purchase of the lands behind all of the hotels. This use is in conflict with the proposed VI/PRI Community Plan which calls for use of this area as a walkable support area for travel related businesses and local retail business.
- Sequence number: 4
Author: Denny Schneider
Subject: Note
Date: 7/21/2003 6:33:27 PM
How many stops between the ITC and CTA? If none, how fast will this have to travel to go the approximately 3+ miles in 7.5 minutes.



- Sequence number: 1
Author: Denny Schneider
Subject: Note
Date: 7/21/2003 7:28:41 PM
There are no stops noted. Verbal statements have been made about stops not yet assigned. What are the stops to be implemented and why? Signage, etc.

2.4.1.2 LANDSIDE SYSTEM CAPACITY

The Landside APM capacity requirements were developed based on the number of passengers that would be riding the system in the peak period. The results of the analysis determined that three pairs of guideways would be required to serve the CTA. Combining the GTC and RAC riders would overload a CTA-RAC-GTC route, and a route serving the CTA-ITC would operate well below capacity.

The CTA-GTC route would be designed to carry up to 13,500 passengers per hour per direction (pphpd) in the peak hour with full baggage loads, and 19,500 pphpd with carry-on baggage in a six-car train. The RAC-CTA link capacity would be about 8,700 pphpd in the peak hour. The RAC-ITC link would carry 9,600 pphpd in the peak hour. Capacities on these two links of this route vary due to different baggage characteristics of the ITC and RAC riders.

2.4.1.3 LANDSIDE SYSTEM STATIONS

Landside APM stations would be designed as flow-through stations to separate passengers entering and exiting the trains. This station layout would minimize cross flow of passengers and congestion at the train doors. It would also shorten the station dwell time and would best accommodate baggage carts as passengers travel between airside and landside facilities. Figure 2.4-4 depicts typical station layout options. The flow-through option at the top of the figure would be the station layout for the landside system.

Station widths would be adequate to accommodate passenger queuing at platform doors and vertical circulation elements. Station lengths would be based on the ultimate train length, which could be up to 300 feet long, plus circulation space. Vertical circulation would be provided to accommodate level changes between the stations and ticketing, baggage claim and curbside. Elevators, escalators, ramps and stairs would be used for vertical circulation.

2.4.1.4 LANDSIDE SYSTEM ALIGNMENT

Both Landside APM routes would be designed to minimize interference with existing facilities, and with existing and planned roadways. The two routes would include three pairs of guideways at-grade in the CTA. As the CTA-GTC guideway transitions out of the CTA, it would be elevated above Sepulveda Boulevard and continue elevated for the remainder of its route. This guideway would run along Century Boulevard to Aviation Boulevard and turn north into the GTC complex. Figure 2.4.5 depicts potential APM views from Century Boulevard.

The CTA-RAC-ITC guideway would run north along Sepulveda Boulevard and then east along 98th Street to the RAC station. From

LAX Master Plan Addendum

Draft June 2003

2-79

Sequence number: 1
 Author: Denny Schneider
 Subject: Note
 Date: 7/23/2003 11:28:51 AM
 What is the peak number of passengers in an hour? How does this relate to 78 MAP? What about if there's 100 MAP?
 78 MAP/365 = 213,700 pps. per day
 with 50% over nominal in an hour it's 11,870 people

LAX Master Plan Addendum

the RAC station, the guideway would continue along 98th Street and turn south along Aviation Boulevard. As the guideway approaches the ITC, it would split into an upper and lower pair of guideways. The upper guideways would serve the ITC station and the pedestrian link to the MTA Green Line. The lower guideway would serve the Landside APM maintenance and storage facility.

Approximately six traction power substations with a footprint area of approximately 50 by 50 feet would be located along the guideway at 5,000-foot intervals.

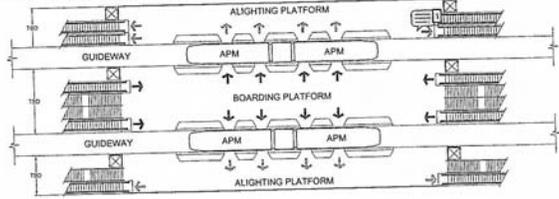
2.4.1.5 FLEET, MAINTENANCE AND STORAGE REQUIREMENTS

Assuming a typical 40-foot rubber-tired Landside APM vehicle, up to 189 cars could be needed to meet the 2015 demand. At the peak hour, approximately 11 trains would be running between the CTA and GTC and 7 trains between the CTA, RAC, and ITC.

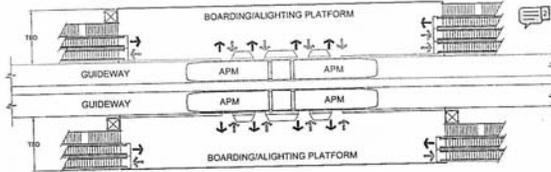
The Landside APM maintenance and storage facility would be in the basement of the ITC. It would contain vehicle maintenance, open shops, spare parts, tool and equipment storage and a cleaning area. Other functions of the facility include central control, offices, a traction power substation, loading dock with a shipping/receiving area and staff facilities.

Sequence number: 1
 Author: Denny Schneider
 Subject: Note
 Date: 7/23/2003 11:58:17 AM
 How many cycles per hour are assumed? How many stations are in the assumption? How many people does a car handle?
 If each 40' car carries about 50 people standing (the illustration has 6-7 shown) filled then one 6 car train is about 300 people. If I assume 11 trains x 2 cycles per hour plus 7 trains x 1.5 cycles per hour the max hourly capacity would be about 99,000 people/11 189 cars x 300 = 56,700 people

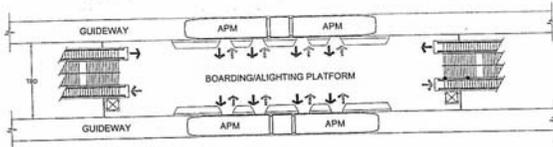
Flow-Through (Center-Side Platform) Configuration - CTA Stations



Side Platform Configuration - GTC Stations



Center Platform Configuration - ITC Stations



Source: LeoA+Eliot - 2000
Prepared by: Landrum & Brown
Draft: December 12, 2002

Los Angeles International
Master Plan

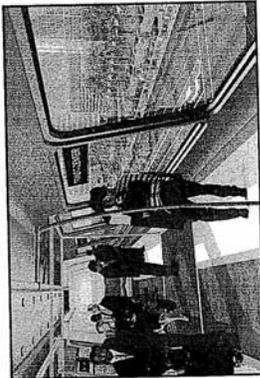
Automated People Mover
Typical Station Design

Figure
2.4-4

Sequence number: 1
Author: Denny Schneider
Subject: Note
Date: 12/23/2003 11:51:30 AM
How high would these APM stations be? Handicap access? Where will the screening be accomplished in this station? How will luggage be handled? How will the carts be accommodated? If an elevator is present, how many people with luggage will it handle for full evacuation? Where will the luggage and people screening be done to detect bombs, etc?

Sequence number: 2
Author: Denny Schneider
Subject: Note
Date: 12/23/2003 11:52:29 AM
Are the platforms may be wider than large buildings? Where will they be placed?

Sequence number: 1
Author: Denny Schneider
Subject: Note
Date: 12/23/2003 12:01:05 PM
Does this picture imply that the APM is moving buildings to accommodate the APM? If so, which ones and how many?



Interior View of Automated People Mover



Overhead View of ITC Automated People Mover along Century Blvd.

Figure
2.4-5

Alternative D Automated People Mover View

Los Angeles International Airport Master Plan

Prepared by: Landrum & Brown
Date: July 2002

2.4.2 AIRSIDE AUTOMATED PEOPLE MOVER SYSTEM

The Airside APM system would be the primary means of access to the West Satellite Concourse. The Airside APM would consist of a dual lane shuttle system, with two trains connecting the CTA with the TBIT and the West Satellite Concourse. This 3-station system would be located in a tunnel, passing under the apron, taxiways and buildings with stations located beneath the facilities being served. This system would be used for access to/from aircraft gates and the CTA. Arriving passengers would use the system to reach baggage claim and public meeter/greeter areas. Depending upon the final configuration and location of FIS facilities, the Airside APM could also transport passengers headed to customs from the West Satellite Concourse to the CTA and TBIT.

2.4.2.1 AIRSIDE SYSTEM ROUTES

The route would be designed as a short distance system with two trains operating in separate guideways to allow for low headways and high capacities. Riders would include ticketed passengers departing to/arriving from gates in the TBIT or the West Satellite Concourse, as well as the employees working in these facilities. This system would be in the "secure" area of these facilities.

2.4.2.2 AIRSIDE SYSTEM CAPACITY

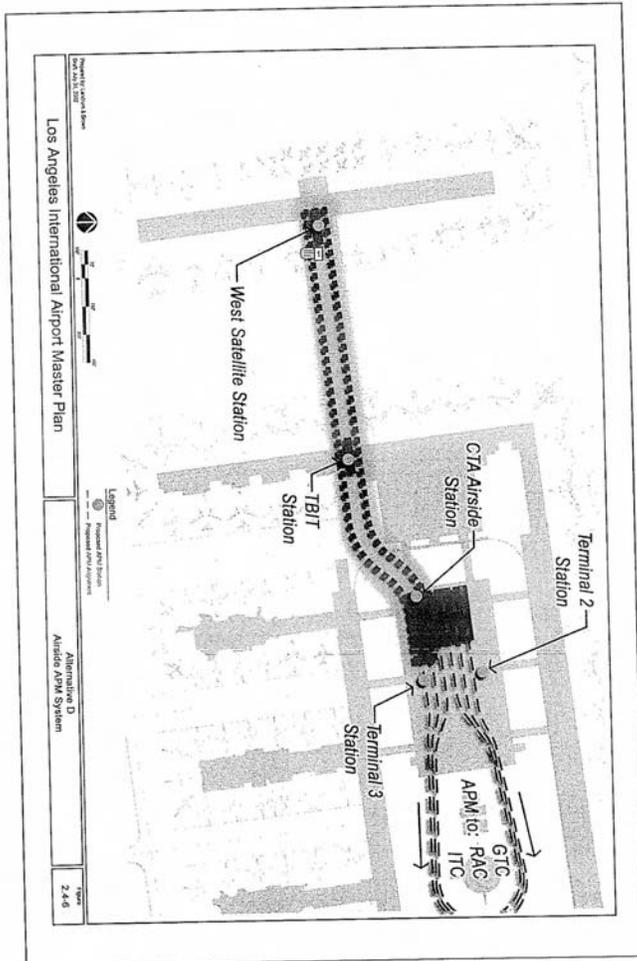
Depending on peak ridership, the trains could be up to six cars long, but would probably not be longer than four cars. Based on travel distance and speed, the trains would operate with headways of approximately 2.7 minutes. This would result in an average wait time of about 1.4 minutes and an average trip time just over 4 minutes. Using maximum length trains, this system could carry up to 9,000 passengers in a peak hour.

In this short distance and dual lane shuttle configuration, cable systems could be a viable alternative to self-propelled vehicles. An operating speed of 25 to 30 miles per hour has been assumed, which is within the range of both cable propelled systems and lower-speed self-propelled systems.

2.4.2.3 AIRSIDE SYSTEM STATIONS

Because this system is located entirely underground, access to and from the stations platforms would require significant vertical circulation elements. Elevators, escalators, ramps and stairs would be provided at every station. Station widths would be adequate to accommodate passenger queuing at platform doors and vertical circulation elements. Station lengths would depend on train length.

Sequence number: 1
 Author: Donny Schneider
 Subject: Note
 Date: 7/23/2003 12:13:06 PM
 If a single set of APM lines are going to the West Satellite Concourse, what kind of internal transportation will facilitate movement from one end of the terminal to the other?
 Since it is to be at a different level, how will people be moved from one level to another? Since people may need carts to carry luggage (not everything is always checked), how will this be done?
 Sequence number: 2
 Author: Donny Schneider
 Subject: Note
 Date: 7/23/2003 12:15:24 PM
 Will these APM cars be the same as the other system? How will they be maintained? If the western end maintenance facility is insufficient how will more cars be brought in?



Sequence number: 1
 Author: Donny Schneider
 Subject: Note
 Date: 7/23/2003 12:17:15 PM
 If most of the connector gates are consolidated all the way in the back, isn't this causing more people to ride this airside APM and making it less convenient?

2.5 CARGO FACILITIES— ALTERNATIVE D

The Alternative D Cargo plan would provide approximately 2,342,000 square feet of cargo building space, which would include mostly existing cargo facilities and some new and reconfigured cargo facilities. The Alternative D cargo facilities would accommodate approximately 3.1 MAT of cargo by 2015. The amount of sort space available for cargo carriers would be fully utilized by the year 2015 and would likely limit processing capability beyond 3.1 MAT.

Alternative D would retain all cargo facilities in the Imperial Cargo Complex and South Cargo Complex East, and remove buildings in the South Cargo Complex West and Century Cargo Complex. The removed buildings would be replaced with newer cargo facilities and would provide a more traditional and efficient ramp area layout at each of the facilities. The four cargo complex areas, and the existing and proposed cargo buildings within those areas, are depicted in Figure 2.5-1 and summarized below. New cargo security requirements are currently being developed by TSA. Further accessibility restrictions would likely be required of the cargo facilities located at airports like LAX. LAWA would incorporate any new TSA requirement into the cargo facilities as those standards are developed. The new standards may or may not require additional building space.

- Century Cargo Complex:** Would consist of nine existing buildings and one new building constructed on the site of a building that would be demolished. The Century Cargo Complex would provide approximately 953,000 square feet of cargo building space and 173,000 square feet of mail sort space on approximately 2,110,000 square feet of real estate. Mail sort facilities are excluded from the cargo space utilization calculations to be consistent with the analysis provided for the other Master Plan alternatives.
- Imperial Cargo Complex:** Would remain in its present condition with eight buildings, totaling approximately 498,000 square feet on 1,649,000 square feet of real estate.
- South Cargo Complex West:** Would consist of four buildings, of which, two are existing and two are new. One of the new buildings would be built on the site of the existing Imperial Terminal while the other would be built on the site of the existing LAWA Police Lost and Found facility. The Imperial Terminal and LAWA Police Lost and Found facility would be demolished. This complex would provide approximately 199,000 square feet in four buildings on approximately 1,189,000 square feet of real estate.

- Sequence number: 1**
 Author: Denny Schneider
 Subject: Highlights
 Date: 7/23/2003 12:18:11 PM
 T
- Sequence number: 2**
 Author: Denny Schneider
 Subject: Note
 Date: 7/23/2003 12:24:06 PM
 This assumes almost a 4% growth per year! How will the facilities be upgraded to accommodate this? Where will these facilities be placed? How will the increased truck traffic be accommodated, and where will it go?
- Sequence number: 3**
 Author: Denny Schneider
 Subject: Highlights
 Date: 7/23/2003 12:24:06 PM
 T
- Sequence number: 4**
 Author: Denny Schneider
 Subject: Note
 Date: 7/23/2003 12:55:42 PM
 If the subject buildings are there by FAA height requirement waiver now, will these new buildings also be waived? What is the basis of the waivers?
 If new TSA/FAA standards are added to require additional building space where does LAWA intend to put them? Will an EIR be done or another incremental improvement be used?
- Sequence number: 5**
 Author: Denny Schneider
 Subject: Highlights
 Date: 7/23/2003 12:53:20 PM
 T

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- South Cargo Complex East:** Seven buildings would be retained totaling approximately 692,000 square feet on 2,874,000 square feet of real estate.

Table 2.5-1 provides a summary of the total cargo space organized by cargo complex. Table 2.5-2 provides a detailed list of new or redeveloped cargo facilities and existing cargo facilities that would remain.

A limited amount of automobile parking would be provided for the cargo complexes to serve customers and staff. A ratio of approximately one stall per 1,000 square feet of building area would be provided on site. Additional parking at the ratio of 0.5 stalls per 1,000 square feet of building would be provided in the airport employee parking areas and accessed via airport shuttles.

The Alternative D cargo facilities would encompass 2,342,000 square feet of building area (excluding mail facilities) and 3,386,000 square feet of apron area on approximately 197 acres of real estate. The new and reconfigured cargo space would account for approximately 6 percent of the total 2,342,000 square feet of cargo building space available at the airport. See Section 3.2.4 for a discussion on cargo space utilization and the cargo processing capabilities at LAX under Alternative D.

Public parking, some employee parking, landscaping, circulation space, and other support for cargo operations would be provided within the site boundaries (depicted with dashed lines on Figure 2.5-1).

- Sequence number: 1**
 Author: Denny Schneider
 Subject: Note
 Date: 7/23/2003 1:08:07 PM
 Table 2.5-1 shows allocation of cargo space. This paragraph in 2.5 says 6% more will be built while the table totals amount to 7% and it is not clear about mail cargo. Why do these figures differ? Which is correct?
- Sequence number: 2**
 Author: Denny Schneider
 Subject: Note
 Date: 7/23/2003 1:05:26 PM
 Earlier in 2.5 the 2.3M sq ft cargo space was used. This says that the mail cargo is not included in this number so the actual number is greater. What is the total cargo space to be created and maintained? 2.5 also speaks of 3.39 M sq ft of apron space. What about access roads and control areas? How will this be integrated into the airport and external roadways? Who will pay for it and how?

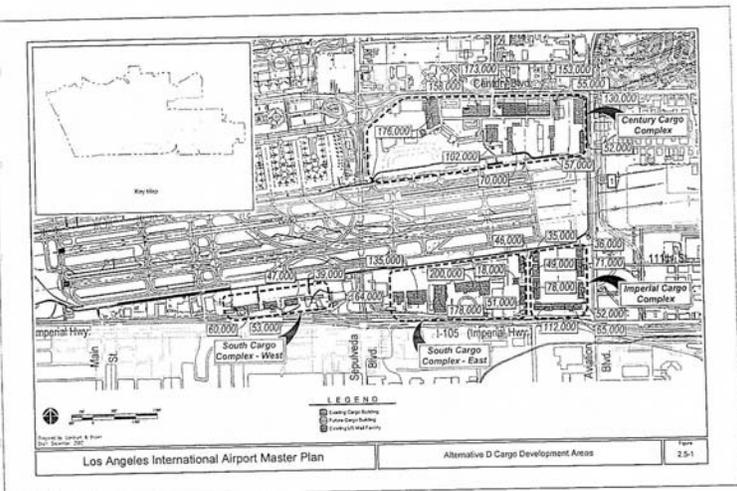
Table 2.5-2

ALTERNATIVE D - NEW/RECONFIGURED AND EXISTING CARGO FACILITIES BY COMPLEX

New Cargo (NC) Facilities		Existing Cargo (EC) Facilities to Remain	
1. Century Cargo Complex Bldgs.			
NC	55,000 sf.	EC	176,000 sf.
NC	sf.	EC	158,000 sf.
NC	sf.	EC	153,000 sf.
NC	sf.	EC	0 sf.
NC	sf.	EC	130,000 sf.
NC	sf.	EC	52,000 sf.
NC	sf.	EC	57,000 sf.
NC	sf.	EC	70,000 sf.
NC	sf.	EC	102,000 sf.
NC	sf.	EC	898,000 sf.
Total	55,000 sf.	Total	898,000 sf.
2. Imperial Cargo Complex Buildings			
NC	sf.	EC	35,000 sf.
NC	sf.	EC	49,000 sf.
NC	sf.	EC	78,000 sf.
NC	sf.	EC	112,000 sf.
NC	sf.	EC	65,000 sf.
NC	sf.	EC	52,000 sf.
NC	sf.	EC	71,000 sf.
NC	sf.	EC	36,000 sf.
Total	sf.	Total	498,000 sf.
3. South Cargo Complex Bldgs.			
NC	39,000 sf.	EC	0 sf.
NC	60,000 sf.	EC	0 sf.
NC	sf.	EC	53,000 sf.
NC	sf.	EC	47,000 sf.
Total	99,000 sf.	Total	100,000 sf.
4. South Cargo Complex East Bldgs.			
NC	sf.	EC	64,000 sf.
NC	sf.	EC	135,000 sf.
NC	sf.	EC	178,000 sf.
NC	sf.	EC	200,000 sf.
NC	sf.	EC	51,000 sf.
NC	sf.	EC	18,000 sf.
NC	sf.	EC	46,000 sf.
Total	sf.	Total	692,000 sf.

Sequence number: 1
 Author: Denny Schneider
 Subject: Note
 Date: 7/23/2003 1:09:33 PM
 Table 2.5-2 lists may items without a sf number. Why? What should be listed?

Sequence number: 1
 Author: Denny Schneider
 Subject: Note
 Date: 7/23/2003 1:13:45 PM
 What proportion of cargo is handled in each complex presently and what is anticipated for Alt.D? Is some more accessible than other? Is there adequate truck access to each area for the anticipated amount of MAT handled? How will the trucks be routed away from LAX, and where are they going?



2.6. ANCILLARY FACILITIES - ALTERNATIVE D

The ancillary facilities in Alternative D are depicted on **Figure 2.6-1** and summarized below. All areas are based on facility footprint measurements.

2.6.1 AIRLINE MAINTENANCE

Alternative D would require the removal of the existing American Airlines, TWA and US Airways maintenance complexes on the west side of the airport (551,000 square feet of building space). Two existing facilities on the west side of the airport and south of World Way West would be retained (612,000 square feet of building space). One existing 164,000-square foot facility would be retained on the west side of the airport, north of World Way West. In addition, two new facilities totaling approximately 300,000 square feet would be located on the west side of the airport, south of World Way West. Five existing maintenance facilities totaling 292,000 square feet located south of Century Boulevard, east of Sepulveda, and west of Airport Boulevard, would be retained. Total airline maintenance facilities would encompass 1,368,000 square feet of building space in Alternative D.

2.6.2 GROUND RUN-UP ENCLOSURE (GRE)

Alternative D would include two new 90,000-square foot Ground Run-up Enclosures (GRE) at the airport. A GRE is a three-sided open-air structure designed to absorb noise associated with aircraft engine tests. A GRE would reduce noise impacts to surrounding communities impacted by aircraft engine tests. A GRE is capable of reducing the standard noise signature by 15 to 18 dBA. Today, all run-ups are conducted on the ramp area near the maintenance facilities. **Figure 2.6-2** depicts a typical GRE. One GRE would be located on the west side of the airport, south of World Way West and east of the airline maintenance complex. An additional GRE would be located on the east side of the airport, south of the existing Delta airlines maintenance facility.

2.6.3 FUEL FARM

The overall fuel farm site footprint would be reduced from 662,000 square feet to 591,000 square feet to accommodate the north airfield modifications for Alternative D, described in Section 2.1. The fuel farm would retain its existing capacity and would remain at its existing location on the west side of the airport, north of World Way West. On-site modifications would be required due to the redevelopment of the north airfield complex.

Sequence number: 1 Author: Denny Schneider Subject: Note Date: 7/23/2003 1:16:12 PM What all of the maintenance area presently utilized? When maintenance space is vacated will it be used for cargo? If so, how will access be coordinated and controlled?
Sequence number: 2 Author: Denny Schneider Subject: Note Date: 7/23/2003 1:21:05 PM How would aircraft be moved to the GRE? Is it convenient to ALL of the maintenance areas? How do the enclosures impact low frequency noise dissemination in addition to standard noise signature? 18 dBA from 90 dBA still leaves a major amount of noise. What are the specific angles and locations of these units. Has a noise projection for single event noise been made? What areas areas are impacted?
Sequence number: 3 Author: Denny Schneider Subject: Highlight Date: 7/23/2003 1:17:25 PM
Sequence number: 4 Author: Denny Schneider Subject: Note Date: 7/23/2003 2:14:18 PM If the fuel farm remains the same capacity, how will it handle the expanded requirements for fuel?

2.6.4 LOS ANGELES WORLD AIRPORTS ADMINISTRATION AND MAINTENANCE

LAWA administrative offices would remain in the existing 42,000-square foot facility at the former airport traffic control tower and the 40,000-square foot facility on the west side of the airport, north of World Way West.

The existing LAWA maintenance yard and storage facilities are comprised of three complexes totaling 135,000 square feet. These facilities would remain in the existing location on the west side of the airport, north of World Way West. These buildings serve maintenance, storage and administrative functions. Consolidation of these facilities and/or reconfiguration may be considered as the existing facilities reach the end of their useful life.

2.6.5 FEDERAL AVIATION ADMINISTRATION (FAA)

The FAA tower facility would not be affected by Alternative D. The existing 13,000-square foot air traffic control tower is located in the CTA. A security-screening checkpoint would be developed on the Park One site, adjacent to Terminal 1, for employees within the CTA. FAA employees may be required to screen through this facility prior to gaining access to the FAA tower.

2.6.6 FLIGHT KITCHENS

The two existing flight kitchens located north of Imperial Highway and east of Main Street would remain, providing a total of 98,000 square feet. Existing airline catering located in airline maintenance facilities would be relocated and incorporated into the new airline maintenance facilities. In addition, there are currently 90,000 square feet of flight kitchens located off-airport which would not be affected by Alternative D.

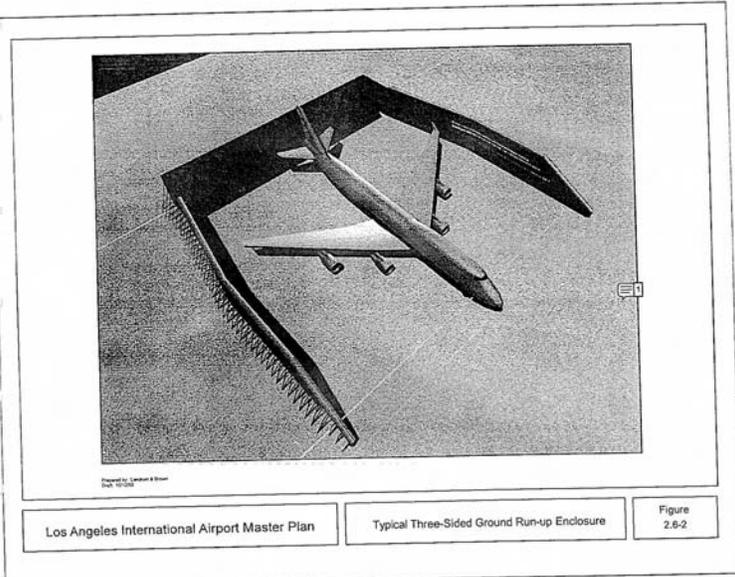
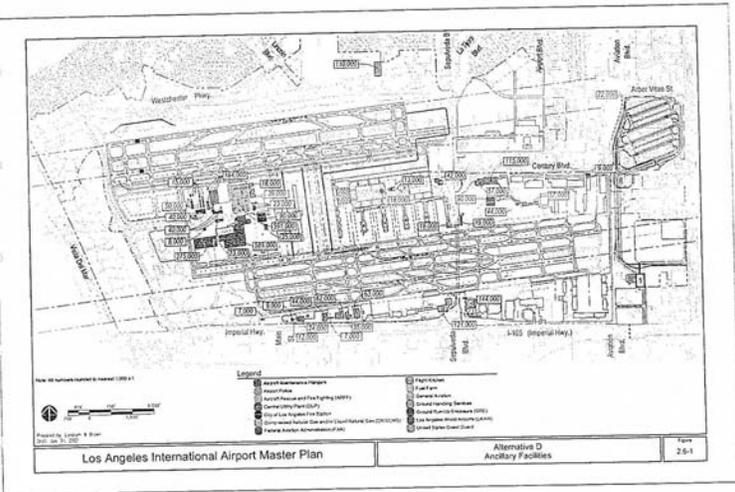
2.6.7 GROUND SERVICE

Six existing ground handling facilities, totaling 158,000 square feet, located north of Imperial Highway and east of Main Street, would be retained. Additional ground handling functions would be located on the apron and in the terminal area.

2.6.8 GENERAL AVIATION

Alternative D would accommodate two general aviation facilities that encompass 265,000 square feet. The existing 144,000-square foot facility north of Imperial Highway and east of Sepulveda Boulevard would remain. A new 121,000-square foot facility would be located north of Imperial Highway and west of Sepulveda Boulevard.

Sequence number: 1 Author: Denny Schneider Subject: Note Date: 7/23/2003 2:24:30 PM Why are the administrative offices remaining in the same? These were supposed to be moved to the Northside Development some time ago? WHEN LAWA moves these facilities what will be put in their place?
Sequence number: 2 Author: Denny Schneider Subject: Note Date: 7/23/2003 2:26:58 PM What about the maintenance facilities east of LAX off LaCienega off Lot B? Are these facilities being replaced or moved? What will be put in place of these buildings?
Sequence number: 3 Author: Denny Schneider Subject: Highlight Date: 7/23/2003 2:28:05 PM
Sequence number: 4 Author: Denny Schneider Subject: Highlight Date: 7/23/2003 2:28:17 PM
Sequence number: 5 Author: Denny Schneider Subject: Note Date: 7/23/2003 2:28:05 PM We've heard verbally that this check facility will also be used for walk in traffic. How will baggage and screening be handled?
Sequence number: 6 Author: Denny Schneider Subject: Note Date: 7/23/2003 2:29:05 PM



2.6.9 AIRCRAFT RESCUE AND FIREFIGHTING (ARFF)

Fire Station 51 and 80 would be expanded to accommodate the future ARFF requirements and increase response capabilities at LAX. Fire Station 51, located west of Sepulveda Boulevard and south of Century Boulevard, would remain at its current location and be expanded from 9,000 square feet to 18,000 square feet. Fire Station 80 would be expanded from 14,000 square feet to 18,000 square feet and relocated due to the construction of the new Taxiways S and Q. This new ARFF facility would be located east of the fuel farm and north of the U.S. Coast Guard facility. The 9,000-square foot Fire Station 95, at the southeast corner of Century Boulevard and International Road between Airport and Aviation Boulevards, would remain the same.

2.6.10 AIRPORT POLICE

The existing LAWA police headquarters, located on West 96th Street and west of Sepulveda Boulevard, would be removed and relocated to accommodate Alternative D.

A new 110,000-square foot airport police headquarters facility would be built at the northwest corner of Westchester Parkway and Emerson Avenue to accommodate the increased staffing levels due to enhanced safety and security requirements. The new facility would provide convenient access to the airport. The new facility would be located across the street from the newly relocated City of Los Angeles Fire Station No. 5 to facilitate easy communication between members of the emergency response team. The Police Lost and Found function would be located in the new LAWA police headquarters facility. Additional police substations would be located in both terminal and landside facilities to further enhance public safety, security, and police responsiveness.

2.6.11 UNITED STATES COAST GUARD

The existing 39,000-square foot U.S. Coast Guard facility, including the apron and helicopter landing area, would remain in its existing location on the west side of the airport, north of World Way West.

2.6.12 CENTRAL UTILITY PLANT

The existing 18,000-square foot central utility plant would remain in its current location within the CTA. A security-screening checkpoint would be developed on the Park One site, adjacent to Terminal 1, for employees within the CTA. Central utility plant employees may be required to screen through this facility prior to gaining access to the plant.

2.6.13 COMPRESSED NATURAL GAS/LIQUID NATURAL GAS FACILITIES

The existing LAWA Liquefied Natural Gas/Compressed Natural Gas (LNG/CNG) facility would remain in its present location. It consists of a core facility of approximately 8,000 square feet located on an approximately 131,000-square foot (3-acre) site at 7350 World Way West. Access to the LNG/CNG facility would be controlled by a security checkpoint along World Way West adjacent to the new employee-parking garage.

The 22,000-square foot off-airport CNG facility, located south of 104th Street and east of Aviation Boulevard, would be removed and space would be provided for a new 22,000-square foot facility at the southeast corner of Arbor Vitae Street and Aviation Boulevard. Access to the new CNG facility would be controlled via the security monitoring systems along the GTC entrance roadway. A remote security gate may be developed on the entrance road to the facility to control access.

2.6.14 TRANSPORTATION SECURITY ADMINISTRATION (TSA)

Alternative D would accommodate and facilitate the needs and directives of the TSA at LAX. At this point, the requirements of the newly formed TSA are continually evolving. LAWA officials are currently working with the TSA to determine and accommodate the needs of the administration. Alternative D was designed to be flexible in accommodating all existing and future federal security requirements.

2.6.15 SUMMARY

A detailed list of all ancillary facilities and associated building area is provided in Table 2.6-1.

2.7 LAND ACQUISITION – ALTERNATIVE D

Major infrastructure projects like the LAX Master Plan often require the purchase of property in order to construct new facilities. Every effort was made during the planning of Alternative D to limit property acquisition to the minimum area required to implement the plan. Alternative D would require a combination of full and partial parcel acquisitions, as well as easements across certain parcels in the project area.

The Master Plan alternatives would require various amounts of property acquisition to provide space for airport facilities and improvements. Various businesses and other properties would need to be acquired under Alternative D. The land acquisition and easement areas are depicted in Figure 2.7-1 and summarized in Table 2.7-1. In addition, Table 2.7-2 provides a more detailed description of each parcel. Figure 2.7-1 contains reference numbers for each parcel that are keyed to the map reference number appearing in the first column of Table 2.7-2.

The timely acquisition of property is a key element to the Master Plan Alternative D phasing schedule. All land acquisition identified within this section would need to be completed in the first five years after the Record of Decision for the EIR/EIS. Section 2.8 and Section 2.10 provide the sequence for acquisition activities to accommodate this schedule.

LAWA is in the process of acquiring the Airport/Belford and Manchester Square areas east of, and adjacent to, the airport under the Aircraft Noise Mitigation Program (ANMP). Some residents in those areas approached the airport staff and requested that their properties be acquired rather than soundproofed. Should the ANMP land acquisition for the Airport/Belford and Manchester Square areas not be completed by the time the Master Plan is approved, the City of Los Angeles would use the most appropriate and practical measures available (e.g., voluntary acquisition, leasing, and/or public condemnation¹), to ensure that the designated areas are vacated to accommodate the Construction Sequencing Plan for the selected Master Plan alternative. Land purchases or LAWA terminated ground leases associated with Master Plan Alternative D are listed below.

- ◆ Approximately 77 acres² of property.

¹ These measures would be available to be used for all build alternatives to pursue any needed acquisition that cannot be obtained through negotiations.

² Excludes LAWA-owned on-airport properties.

Sequence number: 1
 Author: Denny Schneider
 Subject: Highlight
 Date: 7/23/2003 3:02:58 PM

Sequence number: 2
 Author: Denny Schneider
 Subject: Note
 Date: 7/23/2003 3:07:02 PM
 Who will decide what to condemn and when?

LAX Master Plan Addendum

- ◆ Institutional uses on approximately 6 acres including the former Community Aviation College (now Hollywood Cinema Production Resources Training School) and the Westchester Neighborhood School.
 - ◆ Acquired commercial property with approximately 36 businesses including light industrial, office, retail, and one hotel.
 - ◆ Approximately 3,676 remote, off-airport parking spaces.
 - ◆ Approximately 9 acres of rental car space.
 - ◆ Approximately 147,000 square feet of freight/warehousing building space.
- Easements would be required over property owned by the Atchison, Topeka and Santa Fe Railway and four private property owners.

Table 2.7-1

ALTERNATIVE D - SUMMARY STATISTICS OF ACQUISITION AREAS

Area	Total No. of Bus.	Parcel Acreage	Building (sf)				No. of Hotel Rooms	Airport Parking Stalls
			Light Industry	Office	Retail	Residential		
B	19	52.46	0	145,581	16,550	0	0	3,456
C	0	0.60	0	0	0	0	0	0
D	10	6.79	1,722	0	104,888	0	154	0
E	9	16.63	225,298	95,026	0	0	0	220
F	0	0.38	16,748	0	0	0	0	0
Total	38	76.86	243,768	240,607	121,538	0	154	3,676

Note: Equivalent to Tables V-3.15, V-3.23, and V-3.31 in Chapter 5 of the Draft LAX Master Plan and Tables A-3, B-3, and C-3 in Appendix P of the Draft LAX Master Plan.

Sequence number: 1
 Author: Denny Schneider
 Subject: Note
 Date: 7/23/2003 3:12:47 PM

Does this include lands north of Arbor Vitae? Are all of the other 26 businesses within Manchester Square? If 3676 private parking spaces are removed, are they being replaced? The 9 acres of rental car space is also west of Manchester Square. What is its use? Does the easements of the MTA line along Aviation and 4 property owners preclude future extension of the Green Line? If not, why not. How will the future Green Line extension be protected? What is planned for these properties that are not inside Manchester Square?

Sequence number: 2
 Author: Denny Schneider
 Subject: Note
 Date: 7/23/2003 3:20:55 PM
 The table assumes all of residential areas of Manchester Square and Belford Area are already procured. Since they are not included in this table, what is the anticipated cost for procurement of these housing units?

2.8 RELOCATION - ALTERNATIVE D

2.8.1 PRELIMINARY PROPERTY ACQUISITION AND RELOCATION PLAN

This section describes how the LAX Master Plan would relocate residences and business in accordance with applicable statutes designed to minimize community disruption, limit adverse economic impacts and protect human rights. A final relocation plan would be developed during Master Plan implementation. Applicable statutes include the Federal Uniform Relocation Assistance and Real Property Acquisition Act of 1970, as amended in 1987 (hereinafter the Uniform Act), and the regulations implementing the Act (49 Code of Federal Regulation (CFR) Part 24). These regulations require the project sponsor to compensate landowners and tenants fairly for the acquisition and to assist in their relocation. The regulations support relocating businesses to nearby areas to maintain the economic and employment benefits to the economy.

2.8.1.1 RESIDENTIAL USES

At this time it is anticipated that no residential properties would be acquired under Alternative D. However, if necessary, all procedures for residential acquisition and relocation would be identical to those now employed by the LAWA Residential Acquisition Program conducted under the Airport Noise Abatement Plan in accordance with the Uniform Act.

2.8.1.2 BUSINESS USES

Similar to residential owners, business property owners would be compensated for their property and/or provided relocation assistance in accordance with the Uniform Act. This can be a time consuming and complicated process. In addition to the value of the land and buildings, the value of the business itself must be appraised and evaluated. Each business would be evaluated separately and individual negotiations would occur.

2.8.1.3 LAX NORTHSIDE AND MANCHESTER SQUARE

Alternative D of the LAX Master Plan calls for the development of the LAX Northside Plan as currently entitled and modified with reduced traffic activity. All businesses identified for acquisition or relocation in Alternative D can be accommodated either on LAX property, or in the surrounding business community within the City of Los Angeles. At this time, without a final relocation plan, it is impossible to say precisely which businesses would relocate to the LAX Northside and what their space needs would be. However, it is possible to provide a preliminary list of businesses that would be compatible to relocate to

Table 2.8-2
 ALTERNATIVE D - SUMMARY OF AIR FREIGHT USES IN ACQUISITION AREA

Area	Total No. of Bus.	Parcel Acreage	Building (sf.)				No. of Hotel Rooms	Airport Parking Stalls
			Light Ind.	Office	Retail	Residential		
A1*	0	n/a	n/a	n/a	n/a	n/a	n/a	
A2*	0	n/a	n/a	n/a	n/a	n/a	n/a	
B	0	n/a	n/a	n/a	n/a	n/a	n/a	
C	0	n/a	n/a	n/a	n/a	n/a	n/a	
D	0	n/a	n/a	n/a	n/a	n/a	n/a	
E	4	9.88	146,667	n/a	n/a	n/a	n/a	
F	0	n/a	n/a	n/a	n/a	n/a	n/a	
G	0	n/a	n/a	n/a	n/a	n/a	n/a	
I	0	n/a	n/a	n/a	n/a	n/a	n/a	
Total	3	9.88	146,667	0	0	0	0	

*A1 - Commercial
 *A2 - Residential
 Note: Equivalent to Tables A-1, B-1, and C-1 in Appendix P of the Draft LAX Master Plan

2.8.1.6 BUSINESSES REQUIRING RELOCATION ASSISTANCE

All office, hotel, retail, commercial and light industrial uses acquired under this alternative can be relocated to the LAX Northside Development or absorbed in the local community.

To address these specific properties and to facilitate all business relocations to LAX Northside, the Relocation Plan envisions the establishment of a Business Relocation Program under the auspices of the LAWA Business Development Bureau. This program would administer compliance with the provisions of the Uniform Act and other regulations and would provide assistance to individual business owners.

2.8.1.7 SURVEY OF OWNERS, RESIDENTS AND BUSINESS OPERATORS

A face-to-face survey of every affected property owner would be conducted as soon as possible to determine attitudes toward acquisition and special needs.

Such a survey was conducted as the first step in the development of the Relocation Plan for the Airport/Belford and Manchester Square areas. A similar survey of business owners is essential to determine the willingness to relocate to the LAX Northside and the potential costs, time frames and special needs.

2.8.1.8 UTILITY RELOCATIONS

The acquisition areas contain a variety of above- and below-ground utility lines and facilities. Investigation and planning for these relocations would be required to complete the work on time.

- Sequence number: 1
Author: Denny Schneider
Subject: Note
Date: 7/23/2003 3:48:42 PM
 These are additional businesses along Aviation between 102nd and 104th. Is this land already owned by LAWA? When was it procured? How will these businesses be relocated (or will they)?

- Sequence number: 2
Author: Denny Schneider
Subject: Note
Date: 7/23/2003 3:45:28 PM
 These area II businesses are located adjacent to the cargo area off Aviation. If they are moved to Northside Development how will they interface with their cargo areas? What security be implemented in the Northside Development area?

- Sequence number: 3
Author: Denny Schneider
Subject: Highlight
Date: 7/23/2003 3:48:42 PM

- Sequence number: 4
Author: Denny Schneider
Subject: Note
Date: 7/23/2003 4:03:08 PM
 What are the results of the Relocation Plan survey? In order to state that no residences are to be purchased implies that there is a 100% expected sales.

2.8.1.9 WESTCHESTER SOUTHSIDE DEVELOPMENT

Alternative D of the LAX Master Plan identifies the LAX Northside Development as the baseline for additional development north of the airport.

2.8.1.10 SEQUENCE OF ACQUISITION

Master Plan property acquisition would need to be completed in the first stage of Master Plan implementation. Relocation sites would need to be available before the acquired property can be vacated and redeveloped. The land acquisition process can take many years and it is recommended that certain planning actions, categorically exempt from the California Environmental Quality Act (CEQA) and categorically excluded from National Environmental Policy Act (NEPA), be undertaken at the earliest possible time. Detailed acquisition and phasing plan would be developed in conjunction with the preparation of the Final EIS/EIR.

2.8.1.11 FINAL RELOCATION PLAN

The final Relocation Plan would be developed and approved in concert with the Master Plan and EIS/EIR as they progress through the LAWA and City of Los Angeles' approval process.

2.8.2 RELOCATION ASSISTANCE

The Uniform Act, as amended, governs the relocation of individuals and businesses displaced by projects paid for in whole or part with federal funds. Since Alternative D requires the purchase of property in order to complete construction of the project, the Uniform Act establishes minimum standards for relocation assistance and compensation as follows:

- ◆ Relocation advisory and financial assistance shall be available for individuals and businesses that must relocate as a result of the public acquisition of property; and
- ◆ Basic standards and requirements for appraisals and acquisition shall be followed in acquiring real property.

The provisions of the Uniform Act are set forth in the Code of Federal Regulations, 49 CFR Part 24, for federal and state agencies that are either acquiring the property or providing the financial assistance to do so. In order to comply with Federal, State and City of Los Angeles regulations, LAWA would establish a relocation assistance program with the following components:

- Sequence number: 1
Author: Denny Schneider
Subject: Note
Date: 7/23/2003 4:06:01 PM
 Phase one of the Master Plan implementation as presented at the LAX Working Group was for less than the 5 years indicated to be used for procurements. How is this reconciled?

- Sequence number: 2
Author: Denny Schneider
Subject: Highlight
Date: 7/23/2003 4:06:01 PM

2.9 COLLATERAL DEVELOPMENT-
ALTERNATIVE D

The LAX Northside Development Plan would develop approximately 340 acres of airport-owned land for various uses in Alternative D.

The LAX Northside Development would be compatible with and serve the needs of the Westchester residential community. A Village Area would be developed as a new town center. The Village Area would be pedestrian oriented and heavily landscaped to provide an attractive and prosperous commercial center for the residents and airport visitors. On the east end, the project would include about 1,360,000 square feet of office space, 650,000 square feet of hotel use (1,000 rooms) and 100,000 square feet of retail/restaurant space. This new Village Area would be the proposed new town center to serve the Westchester residential community.

The LAX Northside Development would include a business park with additional office, retail and hotel space, which would be located east of the existing golf course. The business park would house compatible airport facilities and light industrial uses relocated from the acquisition areas. The proposed development would likely include 1,580,000 square feet of office space, 870,000 square feet of hotel use (1,400 rooms) and 130,000 square feet of retail/restaurant uses. The LAX Northside Development would also include 1,170,000 square feet of research and development business park use and 750,000 square feet of airport related uses.

The original LAX Northside Development (see Figure 2.9-1) 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. The reduced trip cap would limit the amount of total daily traffic generated by the LAX Northside Development to a level comparable to that associated with the Westchester Southside Development proposed under Alternatives A, B, and C. 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, resulting in a reduction of 50 percent from the approved LAX Northside trips of 6,340 in the a.m. and a reduction of 57 percent from the approved LAX Northside trips of 7,000 in the p.m. The amount of trips generated by a project shall be based on the trip generation rates used in the June 2003 Supplement to the Draft EIS/EIR transportation analysis and on square footages of the proposed development, under the LAX Northside Development. Estimates of the number of trips generated by specific projects shall be made prior to issuance of building permit and shall be documented so that the total number of trips generated

Sequence number: 1
 Author: Denny Schneider
 Subject: Note
 Date: 7/27/2003 10:41:38 AM
 Why is the 1983 ER and Plan for the Northside development acceptable to use to go forward whereas the Palmdale and Ontario airport plans from the same time frame are being redone before any progress is to be made?
 Explain how the densities of the Northside Plan is compatible with the Westchester-Playa del Rey Community Plan.
 Sequence number: 2
 Author: Denny Schneider
 Subject: Note
 Date: 7/27/2003 10:43:55 AM
 Explain why this large number of trip generations is still acceptable given the numerous added area projects since reviewed in 1983. This plan was predicated on expanding several arteries. How and when will this be accomplished?

LAX Master Plan Addendum

by ongoing development is monitored and reviewed for consistency with the maximum allowable number of a.m. and p.m. peak trips described above for each new on-site development. The precise square footage and allocation of land uses associated with LAX Northside under Alternative D have not been identified, but would include a mix of office park, hotel, retail/restaurant, and research/development (R/D) business park uses, similar to the original LAX Northside Development.

A summary of the LAX Northside Development is identified below in Table 2.9-1.

Table 2.9-1

LAX NORTHSIDE DEVELOPMENT

Office	1,580,000 sq. ft.
Hotel (1,400 rooms)	870,000 sq. ft.
Retail/Restaurant	130,000 sq. ft.
R/D Business Park	1,170,000 sq. ft.
Airport Related	750,000 sq. ft.
Total Development	4,500,000 sq. ft.

Sequence number: 1
 Author: Denny Schneider
 Subject: Note
 Date: 7/27/2003 10:45:38 AM
 Where is the fire station recently approved to be built in this development area? Is it considered part of the 314 million sq feet of airport related? If not, what is to be moved into this area—especially since other areas note that the airport administration is to remain in its present locale.

2.10 CONSTRUCTION SEQUENCING PLAN - ALTERNATIVE D

The following is a general overview of the sequence of activities that would be required to complete the phased development of Alternative D. Construction on a large scale can cause vehicle and pedestrian congestion, increasing security vulnerability. Planning of each construction phase would include actions to alleviate vulnerabilities. This narrative establishes a phasing and sequencing plan broken down into three distinct phases. This sequencing plan was developed independent of financial, operational and existing lease constraints. The chronology for these facilities is depicted in an order that is consistent with the priorities established by the LAWA staff. **Figure 2.10-1** graphically depicts the Phase I projects associated with Alternative D.

Phase I

1. Reconstruct and recrown Runway 7R/ZSL approximately 50 feet to the south, construct new full-length parallel taxiway between Runways 7R/ZSL and 7L/ZSR, and relocate Navais associated with Runway 7R/ZSL.
2. Redevelop the Continental City lot into a new ITC containing 9,127 parking stalls. This facility would provide short-term parking and would contain a physical link to the existing Green Line transit station at the corner of Aviation Boulevard and Imperial Highway. The link would provide power-assisted moving walkways to assist passengers transferring to and from the Landside APM system.
3. Reconfigure the existing long-term parking lot west of and adjacent to La Cienega Boulevard (southeast surface parking). This facility would contain approximately 5,470 parking spaces. Passengers using this lot would be shuttled to the ITC via a busing operation and transferred to the Landside APM for transit to the CTA.
4. Relocate existing off-site utility infrastructure impacted by development program.
5. Construct a baggage tunnel from the site of the future GTC to the existing CTA.
6. Construct a new access roadway system east of Aviation Boulevard including Century Boulevard overpasses. These roads provide access to and from the ITC and GTC.
7. Construct a new RAC facility in the general location of the existing long-term parking lots C and D. A 150,000-square foot

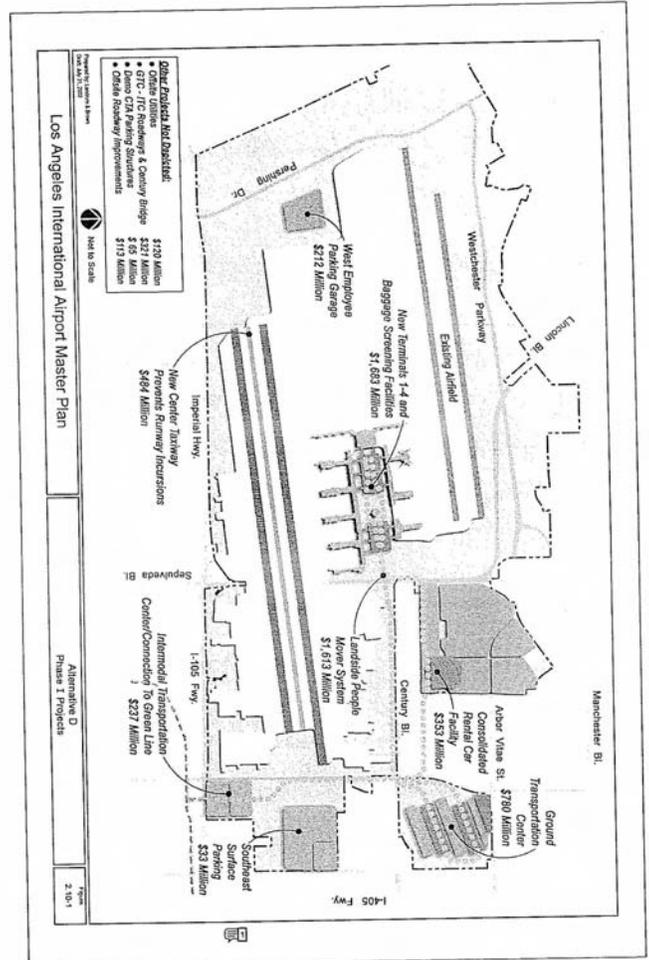
Page: 143

<p>Sequence number: 1 Author: Denny Schneider Subject: Note Date: 7/20/2003 4:07:37 PM <input type="checkbox"/> General question about construction costs: Since many of the stated items for work are still nebulous how has this been priced? What is the range of pricing?</p>
<p>Sequence number: 2 Author: Denny Schneider Subject: Note Date: 7/20/2003 3:49:23 PM <input type="checkbox"/> Based on the number of parking places for short term outside of GTC (9127+5470) vs GTC (7515), explain how the plan is to push for more foreign OSD in preference to commuter will be accommodated.</p>
<p>Sequence number: 3 Author: Denny Schneider Subject: Note Date: 7/20/2003 4:01:24 PM <input type="checkbox"/> If this is not a "concrete" item was it priced into the \$9 billion or is this added on if done? Is the expense of this item justified? How will this be done before land is purchased? <input type="checkbox"/> Are all of the geological studies finished? How long will they take? Safety of this tunnel?</p>
<p>Sequence number: 4 Author: Denny Schneider Subject: Note Date: 7/20/2003 4:03:48 PM <input type="checkbox"/> Similar to other Phase I project items, how will this be done before land is purchased? Is this a joint project with CalTrans and MTA as well as LAWA and DOT? What Project level EIRs will be done? What are and when will the details of this project become available?</p>
<p>Sequence number: 5 Author: Denny Schneider Subject: Note Date: 7/20/2003 4:05:13 PM <input type="checkbox"/> At with the other Phase I, how will the RAC be done before lands are purchased? The RAC facility appears to need some of the area between 98th and 96th streets.</p>

customer service center including a 9,000-stall, four-level ready/return parking garage would be located north of 98th Street. This project would be completed in two phases. Upon the completion and opening of the GTC, the public parking component of Lot C would be transferred to the GTC, and a series of maintenance facilities and vehicle storage lots would be distributed to the north of the service center. In the period between the completion of the RAC service facility and the opening of the GTC, rental car companies would shuttle vehicles from the existing lots to the new customer service/ready return garage.

8. Construct the West Employee Parking Garage containing 12,400 parking stalls. A consolidated employee security screening facility could be developed as part of this project. Shuttle buses would transport employees between this lot and their respective employer locations.
9. Demolish the existing parking structures in the CTA, relocate necessary utilities and complete site preparation for new terminal facilities.
10. Construct off-site roadway improvements required for Alternative D as per the approved Transportation Improvements Phasing Plan for Alternative D of the Master Plan.
11. Construct four new terminals in the area currently occupied by the parking garages in the CTA.
12. Construct a new above ground Landside APM from the CTA to the GTC, ITC, and RAC. An associated Landside APM maintenance facility and test track would be located in the basement of the ITC.
13. Install new baggage security and distribution systems in the CTA and the GTC, including linkage between the two facilities.
14. Construct the GTC north of Century Boulevard and south of Arbor Vitae Street, between Aviation and La Cienega Boulevards. This would also include the construction of three new parking garages containing a total of approximately 7,515 parking spaces. A new commercial vehicle staging area would be developed north of the northern-most parking structure at the GTC.

Sequence number: 1
 Author: Denny Schneider
 Subject: Note
 Date: 7/20/2003 4:09:29 PM
 ☐ During construction how will access to Lot C be maintained? If access will be moved, what evaluations of traffic patterns have been made? What mitigation for these changes has been proposed?
 Sequence number: 2
 Author: Denny Schneider
 Subject: Note
 Date: 7/20/2003 6:25:18 PM
 ☐ How will the APM be fully operational from the GTC before the CTA structure parking is demolished? Aren't drop off points in the CTA needed for APM use? If this is



Sequence number: 1
 Author: Denny Schneider
 Subject: None
 Date: 7/20/2003 8:51:07 PM
 Phase 1 project cost estimated at:
 Term 1-4 & Baggage Stor 1683
 West Employee Parking 212
 South Complex Center Taxiway 484
 Ground Transportation CA 782
 Consolidated Rental Car 303
 Landside People Mover 1613
 International Transit Center 237
 Southeast Surface Parking 33
 Other Utilities 120 GTC-ITC Roadways & Century 321
 Demo CTA Parking Structures 65
 Other Roadway Improvements 113
 Phase 1 total from fig 2.10-1 56014

location of airport facilities to accommodate projected air traffic demand. Thus, airport facility planning is a local government function. Local agencies plan for efficient and compatible airports and surrounding land use in their communities with the least amount of external impacts on people and the environment.

The starting place for the facility design concept for Alternative D was to design basic airport and ground access facilities that enhance airport safety and security while retaining the ability to serve aviation activity equivalent to the projected No Action/No Project level while reducing the impacts associated with the No Action/No Project Alternative. This design approach was an iterative process that reapplied projected market forces to the constrained facilities to forecast the changes that would likely occur at LAX if this policy and the associated facilities were developed. Finally, the airport and ground access facilities were refined, as necessary, to best reflect the forecast for the constrained market changes.

The most constraining component of an airport defines the practical capacity² of the entire airport. An airport is a complex system made up of components through which passengers and aircraft flow in a sequential order. Aircraft arriving at the airport pass through the airspace, land on the runways, travel on the taxiways and proceed to the terminal gates to unload and reload passengers. Once loaded and ready for departure, the aircraft pass through these same components in reverse order.

Passengers move through the system in a similar set of sequential steps. Departing passengers travel on local roadways and on-airport roads, arrive at the terminal from the curbside, parking, or other shuttle facility, are processed in the terminal and proceed to the designated aircraft gate for boarding. Arriving passengers generally proceed through these steps in reverse order upon arrival at an airport. Exceptions for arriving passengers include domestic connecting passengers who board other flights, international arrivals who move through FIS facilities and baggage claim before they connect to other flights or use ground transportation facilities.

Each component of the airport system, the airfield, terminal passenger facilities and the curbside, has an operational or passenger capacity that is a function of the physical characteristics of the component. The annual passenger level served by the overall airport system is related to the hourly capacity of its weakest component. The relationship between hourly aircraft operations,

² The "unconstrained aviation demand forecast profile" refers to both the volume and manner in which airline operations are conducted.

Sequence number: 1
 Author: Denny Schneider
 Subject: None
 Date: 7/20/2003 8:59:43 PM
 This section describes what a constrained is, but not what they are. How were market forces taken into consideration with regard to development of a real regional solution? The assumptions should be enumerated in a concise, direct way. Page 3-4 says that they are in Chapter 3 of the 2001 document. This is another level of action for the document that we are told to self contain.

airport activity profile. It is reasonable to compare historical aviation activity statistics among several airports; however, it is of little value to compare forecast levels of passenger and cargo activity without knowing the above listed market factors for each airport in the comparison. An extensive historical record and forecasting effort to define each of these parameters and their application at LAX was undertaken as a part of the LAX Master Plan (see Chapter 3 of the Draft LAX Master Plan, January 2001). It is from this body of information that detailed design day forecasts have been developed for each of the LAX Master Plan alternatives.

A projected design day and annual performance measure of total passengers and total cargo has been computed for each Master Plan alternative. Alternative D has a passenger and cargo activity level that is determined by the ability of facilities in that alternative to serve the unconstrained market demand. Figure 1.2-1 summarizes the Master Plan alternatives and their corresponding activity levels. The No Action/No Project Alternative is limited by the capacity of the curbside in the CTA 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 78.7 million. Alternatives A and B include a fifth runway and were designed to serve the 2015 passenger demand forecast. Alternative A and B would accommodate approximately 97.9 MAP.³ 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. The constrained activity profiles for Master Plan Alternatives A, B, and C are discussed in Chapter V of the Draft LAX Master Plan in Section 3.3.2. Extensive analysis is included in that document, establishing the levels of passengers that each alternative is designed to accommodate. Alternative D was designed to accommodate approximately the same level of passenger activity as the No Action/No Project Alternative.

3.3 2015 ALTERNATIVE D ACTIVITY

The following sections discuss the activity levels associated with Alternative D in 2015. The plans have been developed to provide gate facilities that would promote a regional solution to air travel for the Los Angeles region.

³ The "unconstrained aviation demand forecast profile" refers to both the volume and manner in which airline operations are conducted.

Sequence number: 1
Author: Denny Schneider
Subject: Highlight
Date: 7/20/2003 9:00:15 PM

Sequence number: 2
Author: Denny Schneider
Subject: Note
Date: 7/20/2003 9:04:10 PM
The constraint value is stated as 78.7 MAP. The reported value in other areas is 78 whereas in others 78.9. Why are these different and what is the significance of how they were determined to justify the values. In the cases of the other alternatives the numbers differ from the widely reported values on the LAWA website.

Sequence number: 3
Author: Denny Schneider
Subject: Highlight
Date: 7/20/2003 9:04:10 PM

Sequence number: 4
Author: Denny Schneider
Subject: Note
Date: 7/20/2003 9:05:41 PM
Not sure if this is a reference to the 2001 document. If it is, this other document has been demonstrated to be questionable in the past.

Sequence number: 5
Author: Denny Schneider
Subject: Note
Date: 7/20/2003 9:08:37 PM
The statement is made that Alt D was designed to accommodate approximately No Action/No Project, but which version of Alt D? There are numerous alternative facts discussed in this plan. Which one is the one that limits to MANP? Is there a common constraint that is the limiting factor? What is it and how is it justified?

Sequence number: 6
Author: Denny Schneider
Subject: Note
Date: 7/20/2003 9:11:18 PM
What does the statement "developed to provide gate facilities that would promote a regional solution to air travel" really mean?

ALTERNATIVE D CONSTRAINED ACTIVITY

3.3.1 AIRCRAFT ACTIVITY

Alternative D peak hour aircraft operations activity was projected based on the capacity of the existing four-runway system at LAX in **usual operating conditions**. Given that the airport was operating with high peak hour delays and a significant number of cancelled flights during poor weather conditions in 1996, peak hour operations in the 2015 activity scenario were projected not to exceed the 1996 levels. However, operations were projected to increase in other hours as warranted by market demand.

The resulting total daily aircraft operations are forecast to be the same as the No Action/No Project Alternative and less than Alternative C. This difference in total operations is due to the fact that Alternative D would not be designed to accommodate the same level of cargo activity as Alternative C (and the other build alternatives). It is also projected that design day cargo aircraft operations levels would be below the unconstrained forecast operations demand.

3.3.2 PASSENGER ACTIVITY

As stated previously, Alternative D would be designed to accommodate the same design day aircraft operations as the No Action/No Project passenger level. 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. The following sections describe the steps taken to develop the Alternative D constrained design day forecast schedule.

A passenger capacity analysis was conducted to allow aircraft size (as measured by enplanements per departure) to increase beyond 1996 and 2000 levels without significantly exceeding the 2015 unconstrained forecast enplanements per departure for each air service region. This enabled the enplanements per departure ratios for the domestic and international fleet to grow to a level between the 2010 and 2015 Master Plan forecast. The average commuter fleet size (again measured by enplanements per departure) was able to grow to the 2015 unconstrained forecast level. On average, the proportion of air carrier and commuter operations results in an enplanements per departure ratio similar to the No Action/No Project Alternative. 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. By comparison, 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. Gate space is provided in Alternative C as necessary to accommodate the projected increase in average fleet size that serves both the

<p>Sequence number: 1 Author: Denny Schneider Subject: Note Date: 7/20/2003 9:15:09 PM [?] If peak activity of runway operations was based on visual operating conditions, how much capacity is added by IFR and/or the new GPS controlled flight path maintenance? What if the technology improves even more? Is capacity that much greater?</p>
<p>Sequence number: 2 Author: Denny Schneider Subject: Highlight Date: 7/20/2003 9:11:49 PM [?] An assumption was made that the airport operated with high peak hour delays and significant number of cancelled flights during poor weather. Why is this appropriate for LAX? What are the peak hours and how many are there? How many hours of peak activity/capacity can be sustained at LAX?</p>
<p>Sequence number: 3 Author: Denny Schneider Subject: Note Date: 7/20/2003 9:19:24 PM [?] Why is the assumption of total daily aircraft operations remaining the same valid? Alt D is presumed to be less cargo than C. Why assume that cargo capacity will increase at all? Any increase in facilities needs to be added to a new plan since it is fixed as in from the 1992 one. What is the basis of the statement that "the design day cargo aircraft operations levels would be below the unconstrained forecast"? Cargo is projected to go from present levels of 2 MAT to 3.5 MAT. This can't happen without increased cargo handling facilities being built.</p>
<p>Sequence number: 4 Author: Denny Schneider Subject: Note Date: 7/20/2003 9:26:11 PM [?] Explain how the aircraft mix combination remains comparable relating to ratios of commuter vs other air operations since the gate mix is being changed significantly toward larger aircraft.</p>

international and domestic markets. As the projections in the following section indicate, the design of Alternative D would encourage airlines to choose the most efficient use of the gate facilities at LAX and supplement high-frequency domestic service at other airports in the region.

3.3.3 AIR SERVICE CHANGES

Alternative D is projected to meet 87 percent of the unconstrained 2015 O&D passenger demand forecast and 82 percent of the 2015 international passenger demand forecast. **Figure 3.3-1**, **Figure 3.3-2**, and **Figure 3.3-3** present a comparison of forecast air service operations between the No Action/No Project, Alternative D, and unconstrained demand at LAX. The forecast of air service changes at LAX, as a reaction to the airport facilities available under Alternative D, is based on the following projections and expectations:

- 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 an 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.
- 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.
- Domestic air carrier connecting passengers would decrease from 2015 forecast levels to reflect the projected loss of connecting passengers from commuter flights.
- 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

<p>Sequence number: 1 Author: Denny Schneider Subject: Note Date: 7/17/2003 10:14:24 PM [?] How is the projected percentage of O&D passengers remaining the same whether capacity is increased by alt C, alt D, or no action since the push by this upgrade plan is to change the mix?</p>
--

and Europe place limitations on the arrival and departure times for flights to these world regions.

- 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.
- 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.
- Cargo operations would be equivalent to those forecast in the 2015 No Action/No Project Alternative.
- Total general aviation activity would remain at 1996 and 2000 levels and operations would move out of peak hours to avoid excessive arrival and departure delays.

Table 3.3-1 contains a comparison of the resulting 2015 Alternative D aviation activity forecast, the actual 1996 and 2000 aviation activity, the unconstrained 2015 forecast and the forecasts for the other Master Plan alternatives. The corresponding aircraft operations and passenger activity profiles are contained in Appendix F.

3.3.4 CARGO ACTIVITY

The Alternative D cargo activity is determined by the amount of cargo sort space available to process cargo tonnage. This sort space would be measured in square feet of cargo building space. 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.

The effective constraint on cargo activity in Alternative D would be the lack of sufficient cargo building space to process the unconstrained cargo activity forecast. The most effective representation of this constraint is illustrated by the utilization rates, or tons per square foot, for the available warehouse space. A common benchmark in the industry is to process approximately 0.9 to 1.0 annual ton of cargo for each square foot of cargo warehouse space available. Higher space utilization rates, ranging from 1.1 to 1.42 annual tons per square foot, are expected for domestic and express cargo, with lower space utilization rates, ranging from 0.5 to 0.6 annual ton per square foot, expected for international freight due to the added time associated with customs clearing and fewer available flights.

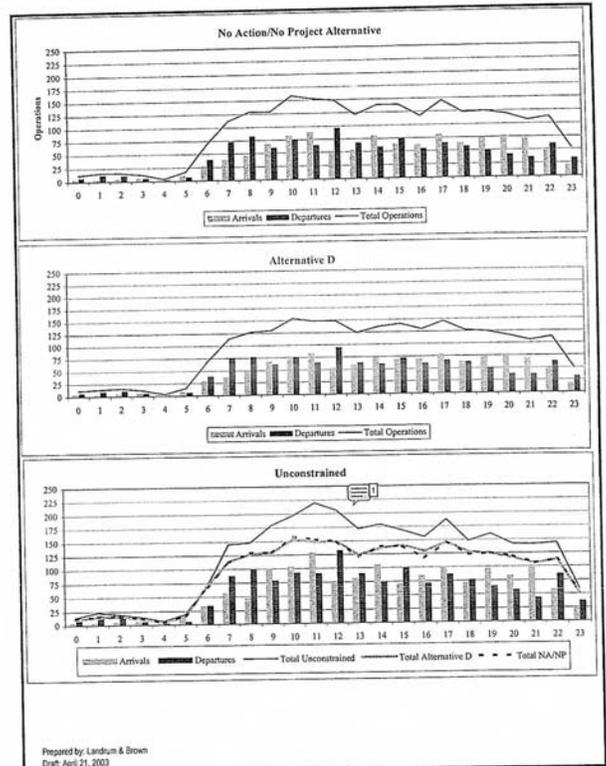
Sequence number: 1
 Author: Denny Schneider
 Subject: Note
 Date: 7/3/2003 10:48:22 PM
 If the statement "average aircraft size would increase from existing levels without significantly exceeding the unconstrained forecast seats..." were true why is the gate mix changing dramatically toward greater utilization of wide body aircraft?

Sequence number: 2
 Author: Denny Schneider
 Subject: Note
 Date: 7/3/2003 10:33:23 PM
 Explain how the cargo operations would be equivalent to No Action. We are told that cargo is currently highly utilized. Without an unauthorized increase of facilities the magnitude of cargo increase forecast by Alt D can't occur.

The space utilization rate (excluding air mail) calculated for Alternative D is 1.22 tons per square foot. This rate is based on 2.3 million square feet of cargo building space and approximately 3.1 MAT of cargo. It is the weighted average of the domestic and express cargo (approximately 2.09 tons per square foot) and international cargo (approximately 0.8 tons per square foot). Based on current cargo activity, the split is 32 percent domestic and 68 percent international.

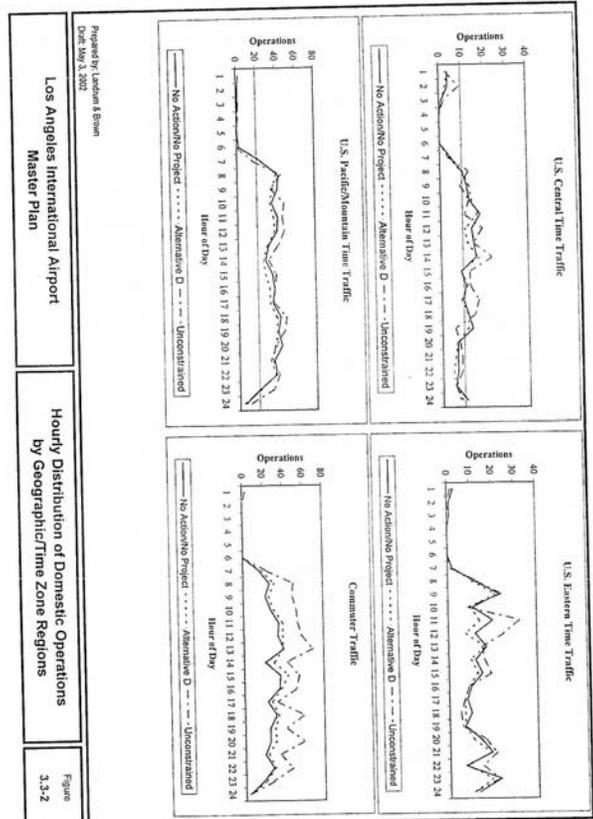
The cargo space utilization rates for Alternative D exceed both the industry benchmark rates and the high utilization rates already experienced at LAX. Improvements in cargo technologies and building efficiencies would be needed to realize the future utilization rates projected for Alternative D. If regional air cargo demand forecasts are achieved, additional cargo demand pressure will be placed on other regional airports to process a greater proportion of the regional cargo activity closer to the source of the demand.

Sequence number: 1
 Author: Denny Schneider
 Subject: Note
 Date: 7/3/2003 10:25:55 PM
 Explain how cargo space growth will occur in the No Action scenario. Is there anything done differently by Alt D to change the split of 22/68 domestic/international cargo?



Sequence number: 1
 Author: Denny Schneider
 Subject: Note
 Date: 7/14/2003 10:34:11 PM
 Explain the definition of the unconstrained totals for operations. Why is there more capacity at the peak hour of 11A? How does this differ from FAA defined operations that includes aircraft movements' impact on calculated totals?

Sequence number: 2
 Author: Denny Schneider
 Subject: Note
 Date: 7/14/2003 10:30:21 PM
 If we accept the number of operations in this chart and note that the passengers/cargo per op will increase in the Air D option mix, then it is not likely that we will have equal capacity. Explain how the assumptions justify the conclusions that D and No Action result in the same passenger and cargo totals.



Sequence number: 1
 Author: Denny Schneider
 Subject: Note
 Date: 7/14/2003 10:37:12 PM
 The totals on this domestic operation chart separated by time zone origination appears to be equal to the totals shown on the other charts which also presume to include foreign carriers. How is this possible and why?

LAX Master Plan Addendum

1997. Physical conditions were represented as they existed in 1997 and in more current years when feasible and appropriate, to provide more up-to-date information.

- Adjusted Environmental Baseline: This baseline comprises the same on-airport historical airport activity (1996) and physical facilities (1997) as in the Environmental Baseline - Existing Conditions, but it includes off-airport land use activity and regional traffic development anticipated for the planning years of 2005 and 2015. Except for these two factors, the Adjusted Environmental Baseline Conditions are identical to the Environmental Baseline - Existing Conditions. This scenario was developed in accordance with CEQA guidelines, to satisfy the CEQA need for determining project impacts.

A.1.2 BASELINE UPDATE

In considering an updated comparison of the Draft EIS/EIR baseline year, 2001 constitutes an anomalous year due to the September 11, 2001 terrorist attacks on the World Trade Center and Pentagon. Those events had a profound impact on aviation as almost all domestic aviation activity after September 11, 2001 was driven downward by those events. In response to the attacks, Congress approved the Aviation and Transportation Security Act. The Act required that all security checkpoints be non-privatized and operated by federal employees hired by the newly formed Transportation Security Administration (TSA) and 100 percent baggage screening be performed at all commercial airports by newly purchased Explosive Detection System (EDS) machines. LAX coordinated with the TSA to meet Congress' deadlines for federally operated security checkpoints (November 2002) and 100 percent baggage screening (December 2002). The heightened level of security at checkpoints also required the increase in the number of passenger through lanes. This was accomplished by purchasing additional Electronic Trace Detection (ETD) machines which allowed more efficient passenger processing.

- Since LAX traffic is projected to eventually fully recover, 2001 baseline-related data tends to overestimate project impacts for many disciplines.
- Further, although the typical month for the design day schedule (August) would be unaffected by September 11, 2001, the ratio of peak month activity to annual activity is exceptionally high, due to the overwhelming fourth quarter decline in activity. This tends to underestimate environmental impacts for many disciplines.

Sequence number: 1
 Author: Danny Schneider
 Subject: Highlights
 Date: 8/1/2003 3:55:56 PM

Sequence number: 2
 Author: Danny Schneider
 Subject: Note
 Date: 8/1/2003 4:00:14 PM
 Why are the off-airport land use and regional traffic development that was anticipated?

APPENDIX A - EXISTING BASELINE COMPARISONS ISSUES - 1996 to 2000

For these reasons, the use of 2001 data as representative of current comparison conditions is inappropriate.

The most recent "normal" year for which a complete dataset is available is 2000. That year is evaluated in this report as the basis for consideration and comparison of how "current" conditions have evolved to some extent from the baseline conditions analyzed in the Draft EIS/EIR. The report also assesses whether the passage of time from the publication of the Draft EIS/EIR has had any material effect on the nature of the "No Action/No Project" alternative.

This change in aviation activity is discussed in detail in the following sections of this memorandum.

A.2 ACTIVITY CHANGES

A.2.1 NATIONAL TRENDS (1996 to 2000)

- In the five-year period between 1995 (a year for which FAA annual data was readily available) and 2000, total enplanements of U.S. commercial airlines increased from 544.9 million to 660.6 million, an increase of 21.2 percent. During this same period, domestic traffic grew from 496.3 million to 605.8 million, or 22.1 percent. International traffic for U.S. airlines grew from 48.6 million to 54.8 million, a 12.8 percent increase. The cause of this commercial airline passenger increase is largely attributed to the continued growth of the U.S. economy; the Gross Domestic Product (GDP) grew from \$7.5 trillion in 1995 to \$9.2 trillion in 2000. During this period the average annual economic growth rate (as determined by GDP) remained over 3 percent; an indicator that passenger traffic should increase at a similar rate. In fact, as measured in constant dollars, the GDP grew at an Average Annual Rate of 4.1 percent between 1995 and 2000.
- A number of trends were apparent in commercial air travel during the 1996 to 2000 period, the most noteworthy being the continued keen competition among airlines. A number of "low-fare" airlines initiated service and while some failed, others were more successful. One of the original "low-fare" airlines, Southwest, continued to expand during the period at a faster rate than most other airlines. The "full-service" airlines such as American, Delta, and United also continued to offer innovative service and expand their route systems to blanket the country and the world. Airline alliances between domestic carriers and foreign flag airlines slightly lowered costs for the members of each alliance.

Sequence number: 1
 Author: Danny Schneider
 Subject: Note
 Date: 8/1/2003 4:06:45 PM
 Why were national trends used instead of actual data for LAX?

Sequence number: 2
 Author: Danny Schneider
 Subject: Note
 Date: 8/1/2003 4:12:27 PM
 The use of the economic data for this period appears to be selective comparisons to result in reduced impacts. Economic conditions in the 1990's appears to be far more positive than presently seen; therefore the growth seen is very optimistic, not the opposite as justified by xxxxxxxxx.

LAX Master Plan Addendum

- Another reason the number of air passengers continues to expand is that the average cost to fly (ticket price or "yield" in airline language) continued to decline from 1996 to 2000. One reason for the decline in fares was the use of newer and more efficient aircraft, as well as the continued reduction in airline ticket sales and distribution costs. Therefore, as the costs of operation to the airlines continues to decline, the airlines have chosen to pass these economics on to the passengers in the form of lower rates.
- Turboprop aircraft continue to be replaced by regional jet aircraft. Passengers perceive this type of aircraft as providing a safer, quicker and more pleasant experience. Regional/commuter passenger traffic grew during the 1996 to 2000 period at approximately twice the rate of all air passengers, partially as a result of this trend.
- Air cargo traffic also continued to grow during the 1995 to 2000 period. Revenue Ton Miles (a ton of air cargo flown 1 mile) increased from 23.2 trillion in 1995 to 30.1 trillion in 2000. International traffic grew at about twice the rate of domestic air cargo, but both benefited as consumers and businesses continued to insist upon "just-in-time" delivery of goods.

A.2.2 REGIONAL TRENDS

- In the period from 1996 through 2000, the roles of the airports in the Los Angeles Basin remained constant. In 2000, LAX continued to serve as the dominant air service airport with almost 70 percent of the domestic enplanements and virtually all of the international enplanements in the region, serving 67.3 million annual passengers (MAP) or 76.0 percent of the regional total; up from 74.3 percent in 1996. It is expected that the market share will decrease over time, however, the number of passengers using LAX will continue to increase. In 2000, a total of 150 destinations were served from LAX: 84 domestic; 5 transborder (Canadian); and 61 other international. John Wayne (SNA), Ontario (ONT), and Burbank-Glendale-Pasadena (BUR) airports augment the air service of LAX. In 2000, SNA served 7.8 MAP, representing 8.8 percent of the region's traffic; down from 9.4 percent in 1996. Physical and policy constrained to limit growth at SNA. The cities served from SNA and ONT are principally western U.S. markets and select mid-continent hub airports. ONT gained international service to Canada and Mexico during the period and likely has the most potential of the secondary airports to accommodate future growth. ONT passenger traffic increased to 6.8 MAP in 2000, yet its market share fell from 8.0 percent in

- Sequence number: 1
 Author: Denny Schneider
 Subject: Note
 Date: 8/2/2003 10:04:39 AM
 ☐ The airlines ticket price reduction is identified as an altruistic action, but the realistic cause is that the demand is down with each airline bidding for the remaining passengers.
- Sequence number: 2
 Author: Denny Schneider
 Subject: Note
 Date: 8/2/2003 10:07:27 AM
 ☐ AA regional jets gain more of the market, why are the gate types moving away from this aircraft type? Could it be that LAVA is making a bid to replace most commuter traffic with NLA's?
- Sequence number: 3
 Author: Denny Schneider
 Subject: Note
 Date: 8/2/2003 10:13:44 AM
 ☐ Whereas cargo continues to grow does it make sense to concentrate it in only one location? Much of the cargo is not for use in the Westside of LA, but throughout greater LA and the rest of the US. Disbursement of cargo to the areas of goods use would improve the system; Ontario is near the rail lines that cross all of the USA.
- Sequence number: 4
 Author: Denny Schneider
 Subject: Note
 Date: 8/2/2003 10:30:34 AM
 ☐ To use the Mayor Hahn analogy, trend impacts changed since Sept. 11. Economy of scale was the dominant reason give for concentration. Now the opposite is true. The risks need to be spread and the cargo destinations are becoming more dispersed.

APPENDIX A - EXISTING BASELINE COMPARISONS ISSUES - 1996 to 2000

1996 to 7.6 percent in 2000. Passenger traffic at BUR declined slightly between 1996 and 2000, dropping its market share to 5.4 percent. The only BUR market east of the Mountain Time zone is Dallas/Fort Worth.

Palm Springs (PSP) and Long Beach (LGB) continued to serve a very limited passenger air carrier role in the region. PSP traffic increased from 1.1 MAP to 1.3 MAP, but its market share remained at 1.4 percent. PSP offered service to 13 domestic and 2 transborder destinations in 2000. Despite its relatively convenient location, scheduled air service at LGB expanded to six markets in 2000 from one in 1996. LGB's market share remains at less than 1 percent.

Oxnard (OXN) and Palmdale (PMD) have historically provided only commuter flights to LAX. There has been no scheduled service from PMD since April 1998.

Table A-1, Passenger and Operations Comparison, 1996 vs. 2000, presents the passengers and aircraft operations at the region's airports in 1996 and 2000.

Table A-1
 Passenger and Operations Comparison, 1996 vs. 2000

	Passengers (000s)			Market Share	
	1996	2000	AAG ¹	1996	2000
Primary					
LAX	57,975	67,303	3.8%	74.3%	76.0%
Secondary					
SNA	7,308	7,773	1.6%	9.4%	8.8%
CNT	6,253	6,756	2.0%	8.0%	7.6%
BUR	4,898	4,749	-0.5%	6.2%	5.4%
PSP	1,115	1,281	3.5%	1.4%	1.4%
LGB	435	638	10.0%	0.6%	0.7%
Commuter					
Other ²	140	111	-5.6%	0.2%	0.1%
Total Region	78,064	88,611	3.2%	100.0%	100.0%
	Aircraft Operations			Market Share	
	1996	2000	AAG	1996	2000
Primary					
LAX	763,866	767,473	0.6%	32.1%	35.6%
Secondary					
SNA	468,811	387,862	-4.6%	19.7%	18.0%
CNT	154,314	155,501	0.2%	6.5%	7.2%
BUR	184,803	160,769	-3.4%	7.8%	7.5%
PSP	90,585	96,103	1.5%	3.8%	4.5%
LGB	477,364	373,399	-5.0%	20.0%	17.6%
Commuter					
Other ²	242,699	206,319	-4.0%	10.2%	9.6%
Total Region	2,382,442	2,153,426	-2.3%	100.0%	100.0%

¹ = AAG = average annual compound growth rate from 1996 to 2000. =
² = Other = Imperial County, Oxnard, and Palmdale. Van Nuys is not included. =
 Source: Landrum & Brown, 2002. =

- Sequence number: 1
 Author: Denny Schneider
 Subject: Note
 Date: 8/2/2003 6:19:53 PM
 ☐ Since 1998 several military base closures have facilitated conversion of military airports to commercial use. These are not even shown in the commercial airports.

- ◆ Growth at many of the regions' airports continued to be limited by caps on daily or annual air carrier aircraft operations, the maximum number of terminal gates, and voluntary/involuntary operating curfews. Terminal congestion and roadway delays also continued to influence future demand and the allocation of demand among the regional airports.
- ◆ The wholesale use of regional jets has not been experienced in the Los Angeles Basin, even though regional jets have been deployed at airports across the country for most flights under 300 miles, except for the densest markets. Turboprop aircraft have become almost extinct at many airports. Regional jets are highly desired by the traveling public over turboprop aircraft due to the availability of cabin service and lavatory facilities, reduced cabin noise, and a perception of safer operation. Most regional jets are configured with 50 seats, although models range from 36 to 70 seats. Regional jets are also frequently used to replace small narrow body aircraft in markets where demand is lower. Often the use of regional jets in place of narrow body aircraft in 'thin demand' markets results in better air service due to an increase in the number of daily scheduled departures. Even so, there was no scheduled service on regional jets from LAX in 2000 and the number of regional jet departures at the other regional airports had dropped 64 percent since 1996.
- ◆ Turboprop and prop aircraft represented a smaller percentage of the regional fleet in 2000 compared to 1996. Wide body (twin-aisle) aircraft maintained their share of the regional fleet between 1996 and 2000. The workhorse class of aircraft in the region remains the narrow body (single-aisle) jet. Narrow bodies can be as small as 60 seats (Fokker F28) or as large as a single class Boeing 757 with 226 seats. Narrow body jets expanded their share of the fleet between 1996 and 2000. The reduction in small turboprop/prop and regional jet aircraft operations and the increased use of narrow body jets, resulted in an increase of 11 percent in the average number of seats on scheduled aircraft, from 120 to 133 seats in the region (125 to 137 at LAX).
- ◆ This increase in average gauge (seats per departure) means more passenger seats are available for the same number of aircraft operations. In the region, PSP provides the most vivid example. Scheduled departures declined 13 percent in the 1996 to 2000 period while gauge increased 30 percent, resulting in an increase of departing seats of 13 percent.
- ◆ At the same time that the average gauge was increasing, the length of the average scheduled flight segment from the regional airports also increased. The average length of haul

Sequence number: 1
 Author: Denny Schneider
 Subject: Noise
 Date: 8/2/2003 6:22:16 PM
 [] Why don't LAXA do more to disburse regional operations since it owns Ontario and Palmdale where the two areas WANT MORE SERVICE?

Sequence number: 2
 Author: Denny Schneider
 Subject: Noise
 Date: 8/2/2003 6:26:55 PM
 [] The statement is made that no scheduled service regional jets were at LAX in 2000. In the past two years, however, at LAX-Community Noise Roundtable meetings it is reported that many, if not most, of the turboprops have been replaced by regional jets.

Sequence number: 3
 Author: Denny Schneider
 Subject: Noise
 Date: 8/2/2003 6:33:56 PM
 [] What data exists for changing the mix from the single aisle jets? There is a substantial shift of gates capable of handling wide body jets in A1-D.

APPENDIX A - EXISTING BASELINE COMPARISONS ISSUES - 1996 to 2000

increased by 20 percent between 1996 and 2000, from 864 miles to 1,038 miles (1,025 to 1,208 miles from LAX).

A.2.3 COMPARISON OF 2000 TO 2001 AND BEYOND

Although 2001 has not been used as an update comparison year for the LAX Draft EIS/EIR, it is useful to acknowledge trends that were observed prior to the September 11, 2001 terrorists attacks to analyze how traffic is recovering and to determine the impact of the recession that began in 2001.

Nationwide Impact of September 11, 2001 and Economic Recession

- ◆ Following September 11, 2001, air travel declined at most U.S. airports; in addition, the economic recession exacerbated the schedule cuts. For the industry as a whole, revenue passenger miles declined 32 percent in September 2001 compared to the previous year. Compared to 2000, traffic decreased 26 percent in October and 20 percent in November. During the holidays (December 20 to January 2) traffic declined 12 percent compared to the holiday season a year ago.¹ As shown in **Figure A-1, Revenue Passenger Miles (RPM) Percent Decrease** from 2000 to 2001, all of the top 10 carriers experienced decreases in traffic in the fourth quarter of 2001, with the exception of Southwest Airlines.
- ◆ While individual airports have been affected differently, activity at most airports appears to be recovering. A review of individual airport statistics shows that the industry averages reflect a wide range of airport traffic fluctuations (see **Table A-2, Los Angeles International Airport Scheduled Seats Comparison**). The cost reduction measures of the airlines have disproportionately affected certain airports, while other airports recovered quickly and are now back to pre-September 11, 2001 activity levels. Particularly hard hit have been the large coastal airports such as LAX, which had much overlap in competing airline service to certain markets, and small spoke airports, which often were marginally profitable. Many of the small "spoke" airports have seen commercial jet service downsized

¹ Air Transport Association, 2002.

Sequence number: 1
 Author: Denny Schneider
 Subject: Noise
 Date: 8/2/2003 6:36:49 PM
 [] This definition of passenger miles after 9-11-01 indicates a significant drop in all but Southwest Airlines. Southwest Airlines fly mainly narrow body aircraft. Explain why these are the aircraft gates in A1-D that are being removed/liquidity reduced.

Table A-2
Los Angeles International Airport Scheduled Seats Comparison

Airport	Oct. 2000	Oct. 2001	% Change	Nov. 2000	Nov. 2001	% Change	Dec. 2000	Dec. 2001	% Change	4th Qtr. 2000	4th Qtr. 2001	% Change
Los Angeles	4,606,081	3,810,709	-14%	4,215,074	3,252,728	-23%	4,311,706	3,970,679	-8%	12,956,861	10,434,116	-19%
Atlanta	1,891,256	1,544,897	-18%	1,676,453	1,230,071	-27%	1,713,274	1,520,294	-11%	5,328,053	5,531,649	4%
Chicago O'Hare	4,390,851	4,564,897	4%	4,502,284	3,875,978	-13%	4,524,287	3,971,774	-12%	14,471,716	13,103,086	-9%
San Francisco	2,509,499	2,138,469	-15%	2,391,898	1,851,008	-23%	2,428,865	1,905,440	-20%	7,893,945	6,983,945	-12%
Denver	2,386,459	2,054,814	-14%	2,166,698	1,801,937	-17%	2,318,006	1,843,919	-21%	6,881,171	5,914,200	-14%
Las Vegas	2,045,648	1,854,888	-9%	1,938,708	1,815,493	-6%	1,978,063	1,843,911	-7%	5,993,501	5,914,200	-1%
Minneapolis/St. Paul	2,175,078	1,840,511	-15%	2,039,701	1,770,854	-13%	2,113,274	1,920,294	-9%	6,328,053	5,531,649	-12%
Phoenix	2,257,048	1,935,221	-14%	2,030,814	1,805,000	-12%	2,122,930	1,884,204	-11%	7,447,852	6,572,660	-12%
Houston	2,850,422	1,907,168	-33%	2,121,612	1,823,949	-14%	2,152,071	1,922,251	-11%	6,503,731	5,662,421	-13%
Newark (NY)	2,288,354	1,864,310	-19%	1,950,027	1,884,287	-3%	2,046,730	1,905,494	-7%	6,039,979	5,899,812	-2%
Miami	1,862,049	1,824,676	-2%	1,776,051	1,744,107	-2%	2,234,358	1,761,155	-21%	6,018,859	5,554,130	-8%
JFK (NY)	2,175,674	1,797,702	-17%	2,035,352	1,549,586	-25%	2,098,599	1,655,524	-21%	6,346,120	4,983,622	-21%
Orlando	1,645,671	1,419,765	-14%	1,593,741	1,471,858	-8%	1,690,840	1,368,868	-19%	4,968,328	4,092,781	-18%
St. Louis	2,108,588	1,827,113	-13%	1,934,741	1,805,883	-7%	2,013,860	1,868,048	-7%	6,020,189	5,673,544	-6%
San Francisco	2,007,469	1,685,085	-16%	1,647,737	1,471,858	-11%	1,713,312	1,530,013	-10%	5,162,833	4,484,974	-13%
Los Angeles (NY)	1,896,653	1,607,054	-15%	1,922,628	1,338,534	-30%	1,915,052	1,433,715	-26%	5,673,889	4,435,374	-21%
Philadelphia	1,658,916	1,693,700	2%	1,733,578	1,595,531	-8%	1,781,015	1,611,374	-10%	5,231,244	4,777,705	-9%
Charlotte	1,310,568	1,121,686	-14%	1,132,639	1,000,428	-12%	1,209,668	1,039,953	-14%	3,922,295	3,136,166	-20%
Honolulu	1,520,855	1,338,575	-12%	1,407,427	1,280,428	-9%	1,465,317	1,372,950	-6%	4,416,279	4,071,663	-8%
Cincinnati	1,362,803	1,291,150	-5%	1,351,324	1,080,769	-19%	1,465,317	1,093,917	-25%	3,660,682	3,466,616	-6%
Washington Dulles	1,192,855	1,116,117	-7%	1,128,148	1,102,887	-2%	1,203,556	1,157,246	-4%	3,524,699	3,289,070	-7%
Salt Lake City	58,342,288	58,184,311	-0%	55,891,070	47,941,894	-14%	57,438,832	48,335,429	-16%	171,682,268	148,961,534	-13%
Total												

Note: Seats shown represent arrival seats.
Source: Official Airline Guide, 2001.

Sequence number: 1
Author: Denny Schneider
Subject: Note
Date: 8/2/2003 8:42:43 PM
This document does it draw any inferences of cause of aircraft seat reduction? Since CA is continuing to experience a serious economic downturn and has not yet turned around, explain what future will look like for various economic conditions.

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- In spite of the aforementioned events and economic downturns, air travel has followed a general upward trend since the 1960s, increasing by an average of over 10 percent annually. An analysis of the major events mentioned above shows that declines in air travel (or very limited growth) were typically followed by robust recovery. The general longer-term growth trend holds true despite these temporary dips. While none of these events is comparable to what occurred on September 11, 2001, the trends observed from these occurrences can provide insight into the future. The new millennium brings a recession and a new "war against worldwide terrorism" that presents its unique set of uncertainties. However, if aviation history provides any guidance, the current downturn will be offset by a pronounced rebound.
- Two of the nation's major air carriers, US Airways and United Airlines, filed for bankruptcy protection in the second half of 2002. Most of the major airlines were losing money before the events of September 11, 2001 due to reductions in business travel brought on by the economic recession. The protracted duration of the recession has led many industry observers to believe that full-fare business travel may never return to the levels experienced in the 1990s. Business travel has experienced a fundamental shift to advance purchase tickets, extending trips to take advantage of lower fares that require Saturday night stays, and conducting more meetings via video conferences.

LAX Activity 2000 to 2001

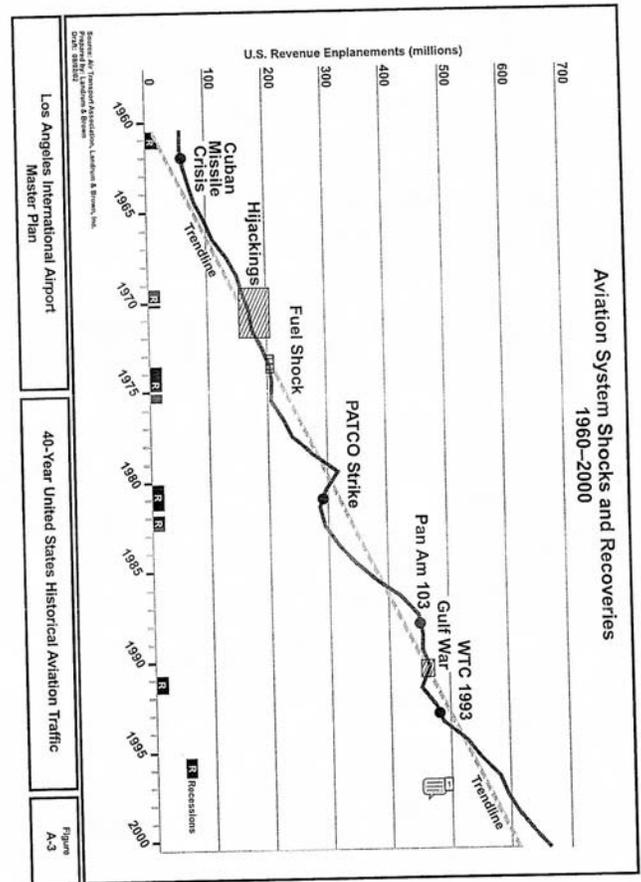
- Prior to September 11, 2001, the number of passengers served at LAX was relatively constant with 2000 levels; after the terrorist attacks, LAX was one of the disproportionately affected airports in the U.S. LAX passenger traffic declined by 25 percent for the fourth quarter of 2001 compared to the same period in 2000. As shown in Figure A-4, 2000 and 2001 Total Passenger Comparison, LAX is showing gradual recovery; traffic was down 33 percent in September, improving to a decrease of 20 percent in December. During January and February 2002, passenger traffic was down only 17.5 percent, compared to the same two months in 2001.
- In October of 2001, the airlines introduced regional jet service at LAX. The introduction of regular regional jet service was likely a reaction to reduced passenger demand following September 11, 2001 and the demise of United Shuttle.

Sequence number: 1
Author: Denny Schneider
Subject: Note
Date: 8/2/2003 6:52:53 PM
The assumption of major rebound is possibly right, but not supported. The proportion of business travel is changing with the advent of the internet, teleconferencing, etc. What proportion of the passenger travel demand does this represent? It has been 3 years since 2000 and the increases are not being seen at LAX- except for cargo. More definitive explanation of the future needs should be provided.

Sequence number: 2
Author: Denny Schneider
Subject: Note
Date: 8/2/2003 6:54:51 PM
One explanation for the sharp decline at LAX might be the high profile concentration of air traffic for all of Southern California and the fear of terrorist attack. Explain how expanding the capacity at LAX will alleviate this reduction.

Sequence number: 3
Author: Denny Schneider
Subject: Note
Date: 8/2/2003 6:58:39 PM
This paragraph notes that Jan-Feb of 2002 was ONLY down 17.5% compared to the same period in 2001. A reduction of less magnitude is still in the wrong direction. This is far from a rebound. Explain why this continued decrease is a positive sign that a rebound is occurring.

Sequence number: 4
Author: Denny Schneider
Subject: Note
Date: 8/2/2003 7:00:35 PM
This observation that regional jet service was introduced in 2001 is not addressed several pages earlier which noted that no scheduled regional jet service exists at LAX. How is this justified?



APPENDIX A - EXISTING BASELINE COMPARISONS ISSUES - 1996 to 2000

Regional jets continued to operate at LAX into 2002. In August of 2002, regional jets were scheduled to serve 13 markets, with over 59 flights per day.⁵ In 2000, all but two of these markets (Fresno and Santa Barbara), were exclusively air carrier markets and where not served by commuter aircraft. It is expected that regional jet activity at LAX will continue to increase in the future.

A.2.4 AVIATION AT LAX

In support of the baseline year comparison update for various environmental impact analyses, a year 2000 design day flight schedule was developed. This schedule was developed based on LAX Air Traffic Control Tower (ATCT) daily airport operations counts, LAWA traffic statistics, radar data, and the Official Airline Guide (OAG) published schedule of arrivals and departures.

Background Assumptions in the 2000 Design Day Schedule

The ATCT daily activity counts from January through December 2000 were used to define the volume of annual operations that correspond to the design day. The daily counts were reviewed to identify the peak activity month and to compare fluctuations in activity volumes by day of the week. August was identified as the peak month with 68,871 total operations. Operations for the Peak Month Average Weekday (PMAWD) in August were calculated to be 2,277.

The daily operations counts for all weekdays in August were reviewed to identify the day that would serve as the base for the preparation of the flight schedule. Wednesday was considered a good candidate day because it is a "busy" day, has a good representation of international activity, and is not likely to be affected by potential peculiar service patterns such as Monday or Friday. Wednesday, August 16, 2000, was selected as the representative day for air carrier and commuter activity for the 2000 design day flight schedule. The OAG schedule for this day was then modified as follows:

- ♦ United Shuttle typically scheduled more flights each day than would actually operate. Forty (40) flights were removed to adjust for this (737-300 and 737-500 aircraft only). The number of flights to remove was determined by comparing the number of actual flights to scheduled flights from the OAG.
- ♦ Saturday is the typical peak day for international operations. To fully reflect international service, 12 international flights from the

⁵ Official Airline Guide, August 14, 2002.

Sequence number: 1
Author: Denny Schneider
Subject: None
Date: 8/2/2003 8:10:11 PM
Is the number of "operations" FAA or LAX count? FAA includes all aircraft movements—ground or to and landings whereas LAX is only take offs and landings. How does this value of 2277 compare with the theoretical max? If I assume 1.5K average hourly rate this is about 140+ during peak time

Sequence number: 2
Author: Denny Schneider
Subject: None
Date: 8/2/2003 8:06:26 PM
Is the development of a typical day was to be in August, why wasn't August 2001 also calculated? This was the highest values prior to Sept 11. Then a Peak Month Aver Weekday could be more appropriately compared for 2002 trending as well.

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Saturday, August 19, 2000 OAG schedule were added to the design day schedule.

- ▶ Three charter flights were added to represent typical operations.

August 3, 2000 was selected as a representative day for all-cargo operations. This was the busiest day of the month for cargo operations. Design day cargo operations increased from 76 in 1996 to 117 in the 2000 design day schedule.

- ♦ August 3, 2000 was also used for general aviation operations. The hourly distribution of general aviation operations was adjusted to correspond to the average hourly distribution for general aviation operations for August. Design day general aviation activity remained at 104 operations in 2000.

Highlights of the 2000 Design Day Schedule

The resulting 2000 flight schedule totaled 2,275 operations, some 40 more than the 1996 baseline schedule and an increase of slightly more than 1 percent. Commercial passenger operations remained similar to the levels observed in 1996 (2,055 in 1996, 2,054 in 2000). The principal increase in design day operations from 1996 to 2000 was in all-cargo activity, which mainly occurs in off-peak hours.

Several changes occurred between 1996 and 2000 in the level of activity for each air service category, primarily in the level of commuter activity. **Table A-3**, 1996 and 2000 LAX Design Day Activity, shows the number of design day operations and passengers for each air service category in the 1996 and 2000 schedules. **Tables A-4**, Hourly Forecast Design Day - Arrival Operations By User - Year 2000, **A-5**, Hourly Forecast Design Day - Departure Operations By User - Year 2000, and **A-6**, Hourly Forecast Design Day - Total Operations By User - Year 2000, show the hourly distribution of the 2000 schedule by region. Commuter activity was somewhat lower in 2000 than it was in 1996, while domestic air carrier and international traffic was higher.

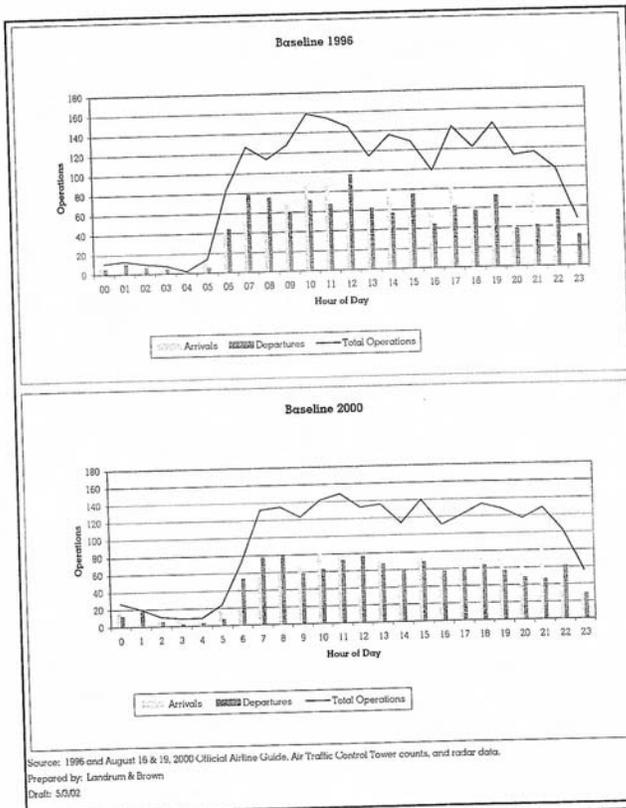
Sequence number: 1
Author: Denny Schneider
Subject: None
Date: 8/2/2003 8:19:57 PM
Of the 117 cargo operations of the "design day" in 2000 were these pure cargo versus cargo in the cargo hold? The subsequent paragraph implies that these are pure cargo. It would be appropriate to do additional monitoring of cargo flights since this component continues to increase while the others remain decreased.

Table A-8
Hourly Design Day Arrival Operations by Airline - Year 2000

Time	ZT	AA	AC	AM	AS	AVA	BA	CA	CM	CO	CE	DL	FB	FL	GA	HA	HP	IL	IM	IR	KL	LC	MC	NZ	NE	NW	NZ	OZ	QF	SE	SY	TA	UA	US	YS	YX	YK	YQ	ZZ			
00:00-01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
01:00-02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
02:00-03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
03:00-04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04:00-05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
05:00-06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
06:00-07:00	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
07:00-08:00	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
08:00-09:00	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
09:00-10:00	0	13	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
10:00-11:00	0	13	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
11:00-12:00	0	13	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
12:00-13:00	0	8	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
13:00-14:00	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
14:00-15:00	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
15:00-16:00	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
16:00-17:00	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
17:00-18:00	1	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
18:00-19:00	0	17	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
19:00-20:00	0	14	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
20:00-21:00	0	14	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
21:00-22:00	0	17	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
22:00-23:00	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
23:00-24:00	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
TOTALS	3	202	13	9	1	43	0	2	60	1	24	2	150	4	1	51	5	26	94	6	1	9	2	5	16	5	1	25	5	2	6	1	1	2	13	3	530	18	2	123	4	1,137

Source: Official Airline Guide, Air Traffic Control Tower counts, and radar data, August 16 & 19, 2000.

Sequence number: 1
Author: Denny Schneider
Subject: Noise
Date: 8/22/2003 8:52:22 PM
What is the current distribution? How would these charts look broken down by types of aircraft and gate requirements?



Source: 1996 and August 16 & 19, 2000 Official Airline Guide, Air Traffic Control Tower counts, and radar data.
Prepared by: Landrum & Brown
Draft: 5/0/02

Los Angeles International Airport Design Day Hourly Operations Figure A-5

Sequence number: 1
Author: Denny Schneider
Subject: Noise
Date: 8/22/2003 8:24:26 PM
Since there were all of these changes in hourly takeoffs/landings why was the reduction of number of flights not reflected in a change in noise contours? Explain why the shift to evening takeoffs in landings didn't change the noise contours or CNEL calculations.

Table A-11 (1 of 2)
HOURLY DESIGN DAY ARRIVAL OPERATIONS BY AIRCRAFT TYPE YEAR 2000

Aircraft Type	Arrival Operations																								
	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
TOTALS	4	1	2	22	43	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Source: Official Airline Guide, Air Traffic Control Tower counts, and radar data, August 16 & 17, 2000.

A-41

Draft June 2003

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Sequence number: 1
Author: Denny Schroeder
Subject: Noise
Date: 8/2/2003 9:04:03 PM
It would be appropriate to make these comparisons for several key years to see actual trends. The data for 1996 should be compared with 2000 and also 2002. Do these tables include cargo?

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Table A-14

Design Day Passenger Factors Summary

Region	1996 Assumptions		2000 Assumptions	
	O&D	Connecting	O&D	Connecting
Domestic				
Pacific	72.76%	27.24%	71.84%	68.10%
Central	72.76%	27.24%	71.84%	68.10%
Eastern	72.76%	27.24%	71.84%	68.10%
Commuter ¹	49.24%	50.76%	47.86%	49.24%
Hawaii	72.76%	27.24%	89.80%	68.10%
International				
Canada	59.73%	40.27%	76.47%	64.88%
Mexico	59.73%	40.27%	76.47%	64.88%
Europe	59.73%	40.27%	76.47%	64.88%
Asia-Pacific	59.73%	40.27%	76.47%	64.88%

¹ Based on 2000 domestic and international O&D ratios and 1994 commuter O&D ratios.

Source: Landrum & Brown, 2002.

Table A-15

Design Day Passenger Summary Comparison

Region	1996 Passengers			2000 Passengers		
	O&D	g	Total	O&D ¹	g	Total
Domestic						
Central	18,255	6,971	25,226	20,556	9,446	30,002
Eastern	23,392	8,929	32,321	25,613	11,762	37,375
Commuter	3,394	4,291	7,595	3,731	4,501	8,232
Hawaii	9,074	3,442	12,516	7,892	3,588	11,480
Total Domestic:	104,448	43,080	147,528	106,509	51,768	158,277
International						
Canada	1,990	1,364	3,354	3,749	2,071	5,820
Mexico	6,105	4,181	10,286	9,526	5,129	14,654
Europe	4,799	3,226	7,995	6,974	3,816	10,790
Asia-Pacific	10,950	7,029	17,979	17,004	9,300	26,304
Total International:	23,184	15,800	38,984	37,053	20,315	57,368
Total Passengers:	127,632	58,880	186,512	143,562	72,083	215,645

¹ Based on 2000 domestic and international O&D ratios and 1994 commuter O&D ratios.

Source: Landrum & Brown, 2002.

Sequence number: 1
Author: Denny Schroeder
Subject: Noise
Date: 8/2/2003 9:14:09 PM
According to the load factor comparisons the loading is increasing. Based on the new Alt D approach of restricting gates instead of the present traffic constraint then more flights will bring in more people based on an equal number of flights. Explain how the load factor and frequency, as well as size of aircraft will not increase capacity given a fixed number of gates. Note that Alt D already calls for a mix of gates that increases the size of aircraft.

Table A-17
1996 and 2000 LAX Annual Activity

	Passengers		Operations	
	1996	2000	1996	2000
Domestic Air Carrier	41,182,037	47,008,533	386,733	436,988
Commuter	2,758,991	2,918,282	233,832	172,770
International	14,032,531	17,376,367	91,641	101,033
Cargo	N/A	N/A	23,682	37,270
General Aviation	N/A	N/A	27,978	19,412
Total	57,974,559	67,303,182	763,866	767,473

Source: LAWA records and air traffic control tower counts, 2000.

A.2.5 LAND USE

The Geographic Information Services (GIS) off-airport land use database used in the Draft EIS/EIR has already been updated to reflect year 2000 data. That database identified parcel-level information and consisted of two major components: off-airport land uses and sensitive receptors (non-residential):

Although the original off-airport land-use data was derived in 1994, it was updated in early 2000 with data purchased from TRW.¹⁸

Working with Psomas, PCR and Landrum & Brown cooperatively updated and refined the sensitive receptors database from October 1999 to February 2000. As a result, all GIS land-use and noise grid-point databases are consistent throughout the Draft EIS/EIR.

Through similar research techniques, PCR plans to verify and update the sensitive receptors previously identified in early 2000 (e.g., schools) if needed. Other off-airport land uses could also be updated through the purchase of GIS data from a vendor such as TRW.

A.2.6 GROUND TRANSPORTATION

On-Airport Traffic

Airport-generated vehicle trips are primarily a function of O&D passengers, not connecting passengers. They are measured and analyzed during the peak hour of airport activity, which is 11:00 a.m. to Noon during the airport's peak month/average weekday, which is a Friday in August. As a result, vehicular traffic is only indirectly related to MAP, and the changes in vehicular traffic between years can

¹⁸ PCR communication with Matt Caraway of Psomas, 2002.

Sequence number: 1
Author: Denny Schneider
Subject: Note
Date: 8/2/2003 9:24:10 PM
Off-airport land use data updated in early 2000 was using data from what time period? Any data has some lag time between gathering and actual conditions. There has been a substantial change since 1996. What changes have been documented? What are they? There were substantial problems with the numbers of impacted residents in the original 2001 study. How has this been improved? Where in this massive document are the details of this upgraded information?

Sequence number: 2
Author: Denny Schneider
Subject: Note
Date: 8/2/2003 9:27:37 PM
Earlier in the document a Wednesday was chosen as a busy, typical day because Fridays were so variable. Why, here, does the analysis use a Friday?

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appear counter-intuitive when comparing to MAP changes during those same years.

To determine the change in airport-generated vehicle trips between 1996/1997 and 2000, Central Terminal Area (CTA) traffic count information was collected from LAWA's in-pavement traffic count program. The peak hour of commuter traffic is from 8:00 a.m. to 9:00 a.m. and from 5:00 p.m. to 6:00 p.m. The 1996 airport peak hour traffic data was collected in August, while the commuter peak hour traffic count data was collected in March 1997. Both inbound and outbound CTA traffic counts were collected at that time.

To obtain year 2000 traffic count information for comparison to the 1996/1997 traffic count data, the corresponding data was obtained for the airport peak hour on Friday, August 4, 11, and 18, 2000. The data was averaged to produce traffic volumes from a representative Friday in August. A similar methodology was used to estimate the inbound and outbound CTA volumes for the commuter peak hours. That data was obtained on March 17 and 24, 2000. The 1996/1997 CTA traffic counts were then compared to the updated (year 2000) traffic counts.

The inbound and outbound CTA traffic volumes fluctuated according to peak hour aviation activity. During the airport peak hour, CTA traffic was approximately 7 percent higher in 2000 (see Table A-18, CTA Traffic Comparison, 1996 to 2000). During the morning commuter peak hour, CTA traffic was about 6 percent lower, and during the evening commuter peak hour, it was about 2 percent higher. These trends accurately reflect LAX aviation activity, whose hourly peaking characteristics were adjusting between 1996 and 2000, as discussed in the "Highlights of the 2000 Design Day Schedule" in Section 2.4, Aviation at LAX. Although the daily passenger activity increased, the activity occurring during the morning commuter peak hour decreased, as activity shifted to adjacent hours.

Sequence number: 1
Author: Denny Schneider
Subject: Note
Date: 8/2/2003 9:12:26 AM
CTA traffic is not the only airport generated traffic. Many people park in the large, private lots and are shuttled into LAX. Also, rental car and hotel parking traffic exists. Also visits to LAX for people going through LAX is another factor.
Explain why all data was taken on Fridays where as the argument made earlier in this document was for using a Wednesday as the "design day."

Table A-18

CTA Traffic Comparison, 1996 to 2000

Time Period	CTA Traffic ¹		Total
	Inbound	Outbound	
August 1996 Airport Peak Hour ²	5,910	5,390	11,290
March 1997 A.M. Commuter Peak Hour ³	4,100	3,280	7,380
P.M. Commuter Peak Hour ⁴	4,160	4,480	8,640
August 2000 Airport Peak Hour ⁵	6,500	5,600	12,100
March 2000 A.M. Commuter Peak Hour ⁶	3,760	3,170	6,930
P.M. Commuter Peak Hour ⁷	4,390	4,410	8,800

¹ Los Angeles World Airport, LAX AVI traffic count data.
² Peak hour defined as 11:00 a.m. to 12:00 noon. Source: Update Existing Conditions to 1996, On-Airport Transportation; June 9, 1998, Leigh Fisher Associates.
³ Peak hour defined as 8:00 a.m. to 9:00 a.m. Source: Update Existing Conditions to 1996, On-Airport Transportation; June 9, 1998, Leigh Fisher Associates.
⁴ Peak hour defined as 5:00 p.m. to 6:00 p.m. Source: Update Existing Conditions to 1996, On-Airport Transportation; June 9, 1998, Leigh Fisher Associates.
⁵ Average of peak hour traffic on August 4, 11, and 18, 2000.
⁶ Average of peak hour traffic on March 17 and 24, 2000.
⁷ Average of peak hour traffic on March 17 and 24, 2000.
 Source: Landrum & Brown, 2002.

Off-Airport Traffic

Off-airport traffic analyses use the Adjusted Environmental Baseline scenario to determine traffic impacts and mitigation under CEQA. The Adjusted Environmental Baseline scenario does not use baseline off-airport traffic conditions. Rather, it combines future off-airport traffic conditions with baseline on-airport traffic conditions. Therefore, the off-airport traffic analysis is only dependant on the baseline year as it pertains to the on-airport traffic, which is discussed above. As a result, unlike the analyses for the other disciplines, which use an existing baseline condition, the potential changes in off-airport conditions that may have transpired since 1996 are irrelevant for the off-airport surface transportation analyses.

However, even though the Adjusted Environmental Baseline Alternative uses only future traffic conditions, the regional traffic facilities that are incorporated into the modeling of these alternatives; roadway lanes, turning lanes, traffic signal improvements, etc. should reflect the most recent changes in the area's road network. Therefore, in coordination with the Los Angeles Department of

Sequence number: 1
 Author: Denny Schneider
 Subject: Note
 Date: 8/20/2003 9:28:55 AM
 Off-airport road changes were determined to only be Lincoln @ Venice by LADOT during the period of 1996 to 2000. What about all of the CalTrans, MTA, and LA Bureau of Public Works projects? Freeway off-ramps at Howard Hughes and La Tijera were improved during this time, for instance. Since the traffic count info is assumed to be based on on-airport instead of baseline why wasn't more recent data used as a "sanity check" since many area changes have been in process since 2000.

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Transportation (LADOT), the roadway network facility improvements that were implemented after 1996 were identified. A lane configuration change on Lincoln Boulevard at Venice Boulevard was the only change that took place on off-airport roadways since 1996.

A.3 AIRPORT FACILITY CHANGES

The baseline year used in the current analyses is defined as the airport activity that existed in 1996 and the facilities that existed in 1997, which is the year of the Notice of Intent (NOI)/NOP. The facility changes at LAX which have become operational since 1997 are illustrated on **Figure A-9**, Changes in Existing Conditions 1997 to 2000. These facility changes are briefly summarized below.

A.3.1 AIRPORT PROPERTY

Since 1997, LAWA has acquired property under the Aircraft Noise Mitigation Program (ANMP) in two areas, Manchester Square and the Belford area. The land uses in the property acquisition areas are primarily residential and have remained fairly static. Changes that have occurred between 1997 and 2000 are:

LAWA has acquired approximately 289 units of 2000 total units in Manchester Square, which is bounded by Century Boulevard to the north, Arbor Vitae Street to the south, Aviation Boulevard to the east, and La Cienega Boulevard to the west.

LAWA has acquired approximately 245 of 585 units in the Belford Area, which is bounded by Arbor Vitae Street to the north, 98th Street to the south, Bellanca Avenue to the east, and Airport Boulevard to the west.

Land acquisition for the ANMP is on-going, and LAWA does not intend to use these parcels for aviation purposes in the No Action/No Project Alternative.

A.3.2 AIRFIELD

Since 1997, no changes were made on the north airfield and seven modest modifications were made to the taxiways on the south airfield:

- New Taxiway A4 was constructed and began operation in 2000. Taxiway A4 connects Runway 7R and Taxiway A and is 100 feet wide.
- New Taxiway C3 was constructed and began operation in 2000. Taxiway C3 connects Runway 25R to Taxiway B and is also 100 feet wide.

Sequence number: 1
 Author: Denny Schneider
 Subject: Note
 Date: 8/20/2003 9:29:19 AM
 299 units were acquired before 2001, how many are now acquired? I believe 289 was a quoted number in 2002 by Sound Proofing Bureau in meetings outside of the Master Plan considerations. What are the correct numbers and at what dates?

Sequence number: 2
 Author: Denny Schneider
 Subject: Highlight
 Date: 8/20/2003 9:29:50 AM

Sequence number: 3
 Author: Denny Schneider
 Subject: Note
 Date: 8/20/2003 9:31:30 AM
 Manchester Square and Belford areas will not be used for aviation purposes in no action? What do they plan as its purpose. This statement is in conflict with verbal statements made in numerous meetings.

Sequence number: 4
 Author: Denny Schneider
 Subject: Note
 Date: 8/20/2003 9:32:37 AM
 Are the north airfield changes were identified, when were all of the new gates added subsequent to 1994? Are the added gates west of Bradley considered north side? These gates are noted as 1997 additions in Figure A-9.

A.3.3 TERMINAL

There have been several reconstruction and renovation projects within the existing terminal buildings during the period from 1997 to 2000. These projects focused principally upon adding international arrivals processing facilities or Federal Inspection Services (FIS) facilities and improvements to passenger convenience. These improvements did not create additional passenger handling capacity. A brief description of the terminal improvements completed between 1997 and 2000 are provided below:

Terminal 1

- Terminal 1 modifications have been limited to relocations of airline ticket counter positions, airline gate positions, and ATO Office space. Several concessionaires have been replaced and updated with new concession opportunities. In 1996, six commuter aircraft affiliated with US Airways operated out of Gate 14. In 1999, USAir Express and States West (the commuter affiliate of TWA Airlines in Terminal 3) constructed a commuter aircraft facility containing five aircraft parking positions in the TWA maintenance facility west of the Tom Bradley International Terminal (TBIT) for joint-use. This new facility was never utilized and the regional component of these airlines is now being served via United Express as part of the United Airlines Commuter Facility located in the United Maintenance Area. Gate 14 at Terminal 1 is currently being used by Southwest Airlines. There have been various concessions redevelopment within the terminal, which resulted in no new net additional square footage to the terminal building.

Terminals 2, 3, and 5

- No additional aircraft parking positions or net square footage have been added to Terminals 2, 3, or 5. However, like Terminal 1, airlines have relocated to and within these terminals, and there has been concessions redevelopment in each.

Tom Bradley International Terminal (TBIT)

- The Tom Bradley International Terminal had a concessions expansion and renovation project completed in 1998, although no aircraft gates or parking positions were added. This project added approximately 15,000 square feet of terminal area, representing a 1.5 percent addition to the existing 993,244 square feet. This area was limited to news and gifts stores, food and beverage concessions and seating areas. As part of this redevelopment the security screening areas were modified to accommodate new passenger circulation. On the arrivals level a

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Sequence number: 1
 Author: Denny Schneider
 Subject: None
 Date: 8/3/2003 9:39:31 AM
 If a gate renovation was classified as to expedite movement of passengers why was it not concurrently capacity expansion since the gates become available more frequently.

Sequence number: 2
 Author: Denny Schneider
 Subject: Highlight
 Date: 8/3/2003 9:36:37 AM

Sequence number: 3
 Author: Denny Schneider
 Subject: None
 Date: 8/6/2003 9:42:55 AM
 If a commuter aircraft facility was created "in Terminal 3 containing five aircraft parking positions" why is this not classified as adding capacity?

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new Interline Baggage Recheck facility was expanded to provide a better level of service for passengers transferring from international flights to domestic flights.

Terminal 4

- In 1999, America Airlines constructed a remote commuter apron area with 13 aircraft parking positions in the area immediately east of their low-bay hangar west of the TBIT building. These aircraft parking positions were previously located in the apron area around Gate 46. This provided American Airlines one additional gate position upon the relocation of the commuter aircraft. This terminal is also undergoing a renovation project that will be completed in 2002. The project includes expanding the ticket lobby and baggage claim areas; and adding holdroom seating space, concessions areas, and an FIS processing area to accommodate international flights. A separate environmental analysis done prior to commencement of this project determined that there was no capacity increase inherent in the project.

Commuter Terminal

- United Airlines commuter operations located in the maintenance area east of Sepulveda Boulevard remained unchanged from its configuration in 1997.

A.3.4 ROADS AND PARKING

The only roadway change at LAX was the realignment of Avion Drive, which provides internal access to the Century Cargo Complex located south of Century Boulevard. The primary circulation roadway (World Way West) and the primary access roads (Lincoln Boulevard, Sepulveda Boulevard, Westchester Parkway/Arbor Vitae Street, Pershing Drive, and Imperial Highway) remain unchanged.

The number of short-term parking spaces in the CTA increased due to the construction of Parking Structure 6. Located adjacent to Terminal 6, the structure was opened in 2000. This hourly/daily-rate garage includes 989 stalls; however, it adds only 686 new spaces to the CTA since it replaced a 295-stall surface parking lot. This parking garage was accounted for in the Draft EIS/EIR as part of the future No Action/No Project alternative.

A.3.5 CARGO

Some changes have occurred in the Century Cargo Complex and the South Cargo Complex East. The existing cargo facilities are concentrated in four areas: the Century Cargo Complex (located between Century Boulevard and the south airfield), the Imperial

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Sequence number: 1
 Author: Danny Schneider
 Subject: Note
 Date: 8/3/2003 9:47:59 AM
 [] Again, who is a project that adds ticket lobby and baggage claim areas, and adding holdroom seating space. "not an improvement? On what basis does an environmental analysis prior to the project determine "no capacity increase?" If a gate can be used for more flights than it is capacity enhancement. In some cases this might not be bad, but it must be acknowledged.

Sequence number: 2
 Author: Danny Schneider
 Subject: Highlight
 Date: 8/3/2003 9:44:21 AM
 I

Sequence number: 3
 Author: Danny Schneider
 Subject: Note
 Date: 8/3/2003 9:50:08 AM
 [] Weren't there also roadway improvements on the south side to accommodate changes to the cargo facilities?

Cargo Complex (on the northwest corner of Imperial Highway and Aviation Boulevard), the South Cargo Complex West (along Imperial Highway west of Sepulveda), and the South Cargo Complex East (along Imperial Highway east of Sepulveda). Changes that have occurred since between 1997 and 2000 are:

- ◆ Singapore Airlines Cargo Building - New 64,000-square foot building located in the South Cargo Complex East and opened in 1999.
- ◆ Mercury Air Cargo Building - Renovated 176,000-square foot building located in the Century Cargo Complex and opened in 1998.
- ◆ FedEx Expansion - 73,000-square foot expansion of the existing facility located in the South Cargo Complex East and opened in 1999.
 - ▶ Cargo Building A - New 153,000-square foot building located in the Century Cargo Complex replaced Cargo Buildings 5 and 6 and opened in 1999.

All of these cargo changes were accounted for in the Draft EIS/EIR as part of the future No Action/No Project alternative.

A.3.6 ANCILLARY FACILITIES

Two new ancillary facilities have come online between 1997 and 2000:

- ◆ USAir Express and States West (the commuter affiliate of TWA Airlines in Terminal 3) constructed a commuter aircraft facility in 1999 containing five aircraft parking positions in the TWA maintenance facility west of the TBT for joint-use. This new facility was never utilized by the airlines and is now being used by the LAWA Emergency Coordinator and the LAPD.
 - ▶ A new United States Post Office opened in 1999 on the corner of Arbor Vitae Street and Airport Boulevard.

A.3.7 COLLATERAL FACILITIES

Collateral facility changes focus primarily on the Manchester Square and Belford areas. These changes are discussed in the Airport Property section above.

- ◆ A new 9,000-square foot First Flight Child Development Center was constructed on vacant land in 1997 to 1998. It opened in 1999 and is located at 9320 Lincoln Boulevard.

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Sequence number: 1
 Author: Danny Schneider
 Subject: Note
 Date: 8/3/2003 9:52:27 AM
 [] When the USPS Office was opened in 1999 the old facility was converted to cargo. Why is this cargo expansion not mentioned?

Sequence number: 2
 Author: Danny Schneider
 Subject: Note
 Date: 8/3/2003 9:55:43 AM
 [] The First Flight Child Development Center opened at 9320 Lincoln is stated to be part of the Manchester Square and Belford areas. This location is NOT even adjacent to MS or Belford. What other properties were procured by LAWA during this period?

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A.4 OPERATIONAL CHANGES

A.4.1 NOISE ABATEMENT

Under FAA guidelines, aircraft noise analysis must be conducted for the average annual day, and not for the design day. The issues presented below recognize this FAA requirement.

Changes in Fleet Mix (Encompassing Stage 2 Phase Out and Conversion to Heavies)

- ◆ Since 1996, heavy aircraft operations increased by only seven per day (351 operations per day in 1996 and 358 operations per day in 2000). Prop aircraft have been reduced from 705 per day in 1996 to 560 in 2000, with a commensurate increase in medium and light jet operations (from 1,021 daily in 1996 to 1,228 per day in 2000). Note that these fleet mix statistics differ from the design day schedule information presented earlier in the "Highlights of the 2000 Design Day Schedule" section of this report. This is due to the fact that the design day schedule is based on the Peak Month Average Weekday and was modified for the analysis to include several heavy international flights that occur on Saturdays, as explained in that section. By contrast, the aircraft noise analysis is based on the Average Annual Day fleet mix.

The "4Q2000" input files used in LAWA's Quarterly Report for the final quarter of 2000 were obtained and served as the basis for the baseline contours for 2000, after quality control checks and insertion of ground noise sources. With the exception of 21 jet aircraft not subject to the phase out provisions of ANCA, the jet fleet was composed of Stage 3 aircraft. Therefore the noise levels would be expected to be reduced from previous years, particularly in those areas principally impacted by noise from departing aircraft. Using this assumption, a comparison of the flight portion of the 2000 contour with the 1996 baseline reveals the following observations (see **Figure A-10, Comparison of Year 2000 and 1996 Noise Exposure Contours**).

- ◆ The noise contours along the approaches to both the north and south runway complexes were somewhat longer under the 2000 baseline condition than they were under the 1996 baseline. This is likely a function of the addition of approximately 200 more jets to the operational mix each day and a shift of traffic to the evening and night hours.

- ▶ Conversely, the noise contours to the north and south of the airport were narrower under 2000 conditions than in 1996. This is a direct result of the completion of the phase out of

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Sequence number: 1
 Author: Denny Schneider
 Subject: Noise
 Date: 8/3/2003 10:00:11 AM
 This report assumes aircraft are coming straight in not spread around the area. Ground contours of the area are not considered for impact to the movement or amplification of noise.

Sequence number: 2
 Author: Denny Schneider
 Subject: Noise
 Date: 8/3/2003 10:02:11 AM
 The weighting of the contour is accounted for by addition of 200 more jets. The shift to more evening and night hours is also acknowledged. What remains missing from this is the noise frequency range changes. Much more low frequency noise is being generated.

- ▶ Stage 2 jets, which were noticeably louder on takeoff than are Stage 3 jets. Impact computations have not yet been conducted.

Additional assessments will be completed as impact calculations are prepared.

Changes of Runway Landings

- ◆ Since 1996, there has been a slight shift of landings from the inboard runways to the outboard runways, and of takeoffs from the outboard to the inboard runways during both the nighttime and 24-hour period. It is unlikely that these shifts will present substantive effects on the shape of the baseline noise contour pattern.

Changes in Time of Day Distributions

- ◆ An evaluation of the distribution of operations between the day, evening and night hours indicates a modest shift of between 2 percent and 4 percent of daytime operations into the evening and nighttime hours among all three primary aircraft groups (heavy jet, medium/light jet, and propeller aircraft). Owing to the penalty on evening and night activity imposed by the CNEL noise metric, this shift may result in a tendency to increase the contour size from 1996 baseline conditions. However, this tendency is likely to be over-shadowed by the contour reduction occasioned by the completion of the conversion from Stage 2 to Stage 3 jets at the end of 1999, particularly along the sidelines of the contour in El Segundo and Westchester. The contour extensions to the east are less pronounced along flight tracks that are predominantly used for landings.

Changes in Run-Up Activity and Location

- ◆ Ground noise for the baseline condition was estimated based on the assumptions of the future No Project/No Action conditions. Because LAWA no longer maintains records of the ground run-up activity at the airport, ground noise can no longer be based on records of actual activity.

Potential Changes in Land Use Patterns and Availability of 2000 Census for Impact Determination

- ◆ As discussed in the Land Use section above, the land use patterns used as underlays for the noise maps were last updated in 1999 to 2000. The land uses in the impact areas are largely built out, and therefore fairly static. The United States Census for 2000 has become available since the Draft EIS/EIR was released for public

Sequence number: 1
 Author: Denny Schneider
 Subject: Noise
 Date: 8/3/2003 10:03:31 AM
 It has been theorized that run-up activity still has an impact on surrounding communities. When were the record keeping requirements removed?

Sequence number: 2
 Author: Denny Schneider
 Subject: Highlight
 Date: 8/3/2003 10:06:38 AM

Sequence number: 3
 Author: Denny Schneider
 Subject: Highlight
 Date: 8/3/2003 10:07:51 AM

Sequence number: 4
 Author: Denny Schneider
 Subject: Noise
 Date: 8/3/2003 10:09:38 AM
 The assumptions that areas are largely built out and static is invalid. The Westchester Playa del Rey Community Plan Update investigations showed marked increases in population due to increased density from replacement of existing buildings.

review. Year 2000 population and dwelling unit information for the 2000 year have been developed.

Changes in Traffic Routes With Impacts from Changes in Flight Tracks

- ◆ Although the air traffic routes from LAX have been modified since 1996, the noise contour patterns developed by LAWA for the preparation of the "4Q2000" Quarterly Report do not indicate that areas of the South Bay communities would be affected at noise levels in excess of 60 CNEL.

Changes in Night Traffic/East Flow Characteristics

- ◆ During 2000, the number of over-ocean arrivals during the late night hours increased by approximately 10 percent. This percentage change did not result in a corresponding reduction of the number of late night arrivals over land. This was because total nighttime landings increased from 129 to 141 nightly.
- ◆ The number of departures to the east at night increased. The Automated Radar Terminal System (ARTS) data files used in the development of the Quarterly contours for 2000 indicate that the number of east departures at night averaged 1.7 per night (614 annually) in 1996, as compared to 2.9 per night (1,069 annually) in 2000.

A.4.2 AIR TRAFFIC CONTROL

From an airspace and air traffic control perspective, the years between 1996 and 2000 have seen minimal changes:

The combination of five major approach control facilities, four from the immediate Los Angeles metropolitan area and the San Diego facility, have produced little in the way of airspace modifications. The combination of these facilities, completed in late 1996, has not resulted in substantive modification to routes or procedures. The internal coordination among the facilities has been enhanced by the imposition of a single management team; however, airspace boundaries between the five facilities have changed little.

- ◆ There have been six airspace changes since 1996. The two principal changes include an actual change in the airspace structure and a change in how airspace is managed. The first change involved a modification to the Los Angeles Class B airspace that occurred on July 7, 1997. This modification involved an extension of the Class B airspace to the southeast to better contain turbojet and turboprop departures. Since much of this modification took place offshore, there has been little impact on the general aviation operation. A smaller airspace modification

Sequence number: 1
Author: Denny Schneider
Subject: Note
Date: 8/3/2003 10:11:29 AM
There is a statement that the 2000 Census data was not yet available? Since this Addendum was presumably done during 2002-3 why was it not used? How would the Land Use Patterns be modified?

Sequence number: 2
Author: Denny Schneider
Subject: Note
Date: 8/3/2003 10:13:50 AM
This statement is one of very few acknowledging changes in air traffic routes ever made in writing. What are they and when were they implemented?

Sequence number: 3
Author: Denny Schneider
Subject: Note
Date: 8/3/2003 10:16:30 AM
An average of 2.9 eastern departures per night! What is the value subsequent to 2007?

occurred in 1998 with the closure of Marine Corps Air Station (MCAS) El Toro. As a result of the relocation of the Marine aviation units to MCAS Miramar, the El Toro Class C airspace was rescinded, thus making additional airspace available east of John Wayne Airport.'

A jurisdiction change was made in airspace between the Los Angeles ARTCC (ZLA) and Southern California TRACON (SOCAL). Airspace east of LAX in the vicinity of ARNES intersection was redelegated from ZLA to SOCAL. A new sector was established within SOCAL. This sector is identified as East Feeder. As part of the operating procedures for this sector, a new arrival route (Paradise 4 Arrival) was established. This provided SOCAL an opportunity to fine-tune arrivals from the east and determine, at a much earlier stage, what runway complex would be utilized for the final approach and landing. Another procedural change has been the elimination of some of the confusion surrounding initial altitude assignments to LAX departures. Depending on enroute traffic offshore, LAX departures were subject to departure restrictions of either 2,000 feet or 3,000 feet. The 2,000-foot restriction has been removed and all departures now climb to 3,000 feet. This has eliminated coordination for the controller and reduced the confusion that sometimes surrounded this procedure.

Air traffic has established a Visual Flight Rules (VFR) route over the eastern boundary of LAX. Los Angeles ATCT controls this route for several hours in the early morning, and the rest of the time the route is controlled by SOCAL. The intent of this route was to allow departures to climb to a higher altitude; however, this has not become reality. The major stumbling block at this point is a debate between the Tower and SOCAL as to how much control tower staffing is required to make this procedure effective. This must be solved in order to get LAX departures climbing as rapidly as possible.

Runway incursions have plagued LAX for the last seven years, with the airport ranking among the highest in the nation for runway incursions. As a result, a new approach to the control of arriving aircraft has evolved. Prior to 1996 SOCAL often assigned runway complexes convenient to where the arrival aircraft would park. This often resulted in an overloaded south runway complex. The concern for runway incursions and the establishment of the East Feeder Sector at SOCAL has resulted in a more balanced runway assignment for arriving aircraft. Though this sometimes has a negative impact on the ground movement of aircraft, it provides airborne efficiencies.

Technological advancements have not materialized to the point that airspace capacity has been enhanced. The Center-Terminal Automation System (CTAS) has been installed at SOCAL, but it is not

Sequence number: 1
Author: Denny Schneider
Subject: Highlight
Date: 8/3/2003 10:22:37 AM

Sequence number: 2
Author: Denny Schneider
Subject: Note
Date: 8/3/2003 10:28:12 AM
Runway incursions is noted as a significant problem. What types have occurred and are they resolvable by runway change only or are they mainly person error related?

Appendix B

2000 BASE AIRSIDE SIMULATION ASSUMPTIONS AND RESULTS

The airside performance of existing conditions at Los Angeles International Airport (LAX) was originally defined by the Master Plan based on 1994 aircraft activity. Due to changes in the volume and characteristics of aircraft operations at LAX between 1994 and 1996, the airside performance baseline was updated to reflect 1996 activity in 1998. The airside performance baseline was updated again in 2002 to reflect 2000 conditions.

The assumptions and results of the 1994 airside performance analysis are documented in Chapter II of the Draft LAX Master Plan - Existing Conditions Working Paper. The 1996 airside performance analysis is documented in Appendix D of the Draft LAX Master Plan. This appendix presents the assumptions and results of the 2000 baseline airside performance analysis for LAX.

B.1 OPERATING ASSUMPTIONS

Airside performance was defined in terms of aircraft taxi time, delay, and throughput, using simulation modeling. The FAA's SIMMOD model was used for the simulations. The assumptions about the LAX operating environment are the same as those used in the 1994 and 1996 airside simulations including the following:

- ◆ Primary Runway Operating Configurations
- ◆ Noise Abatement Procedures
- ◆ Airspace Operating Assumptions
- ◆ Airfield Operating Assumptions

These assumptions are described in detail in Chapter II of the Draft LAX Master Plan.

The design day schedule used for the 2000 baseline simulations was developed based on actual operations from August 16, 2000. This day was selected as representative of the Peak Month Average Weekday (PMAWD) in 2000. The 2000 design day schedule assumptions and activity are described in Appendix A - Existing Baseline Update Document - 1996 to 2000.

Table B-2
 Los Angeles International Airport Master Plan
 PEAK HOUR THROUGHPUT - YEAR 2000

Configuration	Annual Use	Peak Arrival Throughput Hour			Peak Departure Throughput Hour			Peak Total Operations Throughput Hour		
		Arrivals	Departures	Total	Arrivals	Departures	Total	Arrivals	Departures	Total
VFR Visual West Flow	69.70%	86	64	146	77	71	147	76	71	147
VFR ILS West Flow	15.69%	70	68	138	74	71	140	69	71	140
VFR East Flow	3.21%	79	68	138	74	71	140	69	71	140
Average VFR	90.80%	79	65	144	76	71	145	74	71	145
IFR West Flow	9.10%	92	63	132	73	73	140	67	73	140
All Weather Average	100.00%	78	65	143	76	71	145	74	71	145
Hour										
				10:00-11:00						
				10:00-11:00						
				10:00-11:00						
				12:00-13:00						
				08:00-09:00						
				08:00-09:00						
				08:00-09:00						
				15:00-16:00						
				11:00-12:00						
				15:00-16:00						
				15:00-16:00						
				15:00-16:00						

Note: East flow throughputs are assumed to be equivalent to VFR ILS west flow.
 Source: SIMMOD simulation output

Appendix C

LOS ANGELES REGION'S SECONDARY AIRPORTS

The following sections discuss the existing conditions and published plans for each of the secondary airports in the Los Angeles Region. Figure 1.3-1, located in Section 1.3 of this document depicts the following facilities in their geographic location.

C.1 ONTARIO INTERNATIONAL AIRPORT

Ontario International Airport (ONT), owned by the City of Los Angeles and operated by LAWA, is located approximately 35 miles east of downtown Los Angeles. About one-third of the airport's 1,463 acres is available for future expansion. The airport is well located within the regional ground transportation system, lying between the I-10 Freeway on the north and the SR-60 Pomona Freeway on the south; it is also accessible via a well-developed system of arterial and local roadways. ONT has two parallel runways, both of which are capable of accommodating large jet aircraft, but are too closely spaced to permit independent aircraft arrivals. The 26-gate terminal was designed to allow for future expansion that could add 13 more jet gates.

ONT's air service has grown over the past 15 years as development in the region has expanded into the eastern end of the Los Angeles region, known as the Inland Empire, and air travel demand in the area has correspondingly increased. ONT served 6.8 MAP in 2000. Scheduled passenger service remains predominantly short-haul (68.7 percent) in 2002, but medium-haul now represents 27.6 percent and long-haul 3.7 percent. ONT is the only secondary airport to offer international non-stop air service. ONT offers service to two Mexican cities: Guadalajara and Hermosillo. Service to Hermosillo was added in 2002.

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. The local community supports the airport's growth, and Ontario has the potential to capture a much larger share of total regional demand.

The draft demand passenger forecast for the ONT master plan update includes both regionally unconstrained and constrained scenarios. The unconstrained forecast represents the demand generated within the airport's catchment area. The regionally constrained scenario assumes that other airports in the LA region will be constrained to capacities less than their collective shares of regional demand. Collectively, LAX, Long Beach, John Wayne, and



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Sequence number: 1
Author: Denny Schneider
Subject: Note
Date: 8/3/2003 12:00:18 PM
Note: If the "secondary" airports will reach capacity at approximately the time that A/D would be completed then there would be no reasonable option to accommodate growth at that time. What in the forecast suggests to start growth improvements at the "secondary" airports NOW?

Sequence number: 2
Author: Denny Schneider
Subject: Highlight
Date: 8/3/2003 11:53:52 AM

LAX Master Plan Addendum

Barbank airports are expected to reach their capacity and/or policy limitations between 2010 and 2015.

The regionally constrained scenario assumes that local passenger demand in excess of the capacity of the other airports in the region would flow, in part, to ONT. Even if ONT captures a larger share of the local LA region O&D demand, significant passenger activity would still be lost to airports outside of the LA region. Some connecting passengers would be routed over other domestic hubs and international gateways in other cities.

Through 2010, the regionally unconstrained and the regionally constrained forecasts for ONT are identical. O&D traffic at ONT is forecast to increase significantly between 2010 and 2015, when other regional airports would no longer be able to accommodate growth.

The ONT master plan forecast presents projected activity levels for years 2010, 2020, and 2030. The regionally constrained scenario projects passenger demand to be 9.9 MAP in 2010 and 25.4 MAP in 2020. An interpolation of passenger demand between 2010 and 2020 results in an activity level of 15.9 MAP in 2015¹. This 2015 activity level represents an increase of approximately 4.1 MAP over the regionally unconstrained scenario.

Just as LAX today serves a larger percentage of regional demand than the demand generated within its catchment area, under the regionally constrained scenario ONT is forecast to absorb a portion of the unserved demand from the constrained airports in the region beginning between 2010 and 2015. This level of captured passenger demand is forecast to reach approximately 11 MAP in 2020 and 13 MAP in 2030.

The ONT master plan forecast assumes that the percentage of domestic connecting passengers would be maintained at the historical level of 6 to 7 percent throughout the forecast horizon. International passengers are forecast to increase from 40,447 in 2002 to 1.9 MAP by 2030.

The regionally constrained scenario is recommended for use in future planning for ONT. Should the capacity issues at other LA region airports be resolved, planned improvements at ONT could be scaled back or not implemented.

¹ Since the ONT forecast does not present interim year passenger data for 2015, an interpolation was performed to calculate the 2015 value. The interpolation assumed a constant average annual compound growth rate between 2010 and 2020 of 9.8 percent. The 2010 forecast of 9.9 MAP, increased for each of 5 years at 9.8 percent results in an activity level of 15.9 MAP in 2015. Growing the 2015 interpolated forecast of 15.9 MAP each year for 5 years results in the 2020 forecast demand of 25.4 MAP.

Sequence number: 1
Author: Denny Schneider
Subject: Highlight
Date: 8/3/2003 11:54:00 AM
T

Sequence number: 2
Author: Denny Schneider
Subject: Note
Date: 8/2/2003 12:13:58 PM
The statement, "LAX today serves a larger percentage of regional demand than the demand generated within its catchment area..." acknowledges that people are being forced to travel beyond the reasonable distance to get to LAX. What is being done to remedy this?

Sequence number: 3
Author: Denny Schneider
Subject: Highlight
Date: 8/2/2003 12:10:01 PM
T

Sequence number: 4
Author: Denny Schneider
Subject: Highlight
Date: 8/2/2003 12:13:58 PM
T

APPENDIX C - LOS ANGELES REGION'S SECONDARY AIRPORTS

C.2 JOHN WAYNE AIRPORT-ORANGE COUNTY

About 28 percent of the region's 2015 domestic O&D demand (23.8 MAP) will be located within John Wayne Airport-Orange County's 60-minute access zone, but only 5.6 MAP in its catchment area. The airport served 7.8 MAP in 2000. The airport has only one relatively short air carrier runway (and a general aviation runway), limited facilities, significant environmental constraints, and severe policy restrictions. A court order issued in 1985 restricts passenger activity to 8.4 MAP and caps daily air carrier operations until 2005. The Orange County Board of Supervisors and the Newport Beach City Council adopted an amendment to this settlement agreement that will add 6 terminal gates and allow annual passenger activity to grow to 10.8 MAP through 2015. The FAA has agreed to the amendment of the 1985 settlement agreement that continues limits on the number of daily commercial operations. Based on these factors, the airport is expected to continue to provide service primarily to short-haul markets (59.6 percent in 2002), with limited service to major medium- and long-haul markets (32.6 percent and 7.8 percent in 2002, respectively).

C.3 BURBANK-GLENDALE-PASADENA AIRPORT

Burbank's catchment area is the second largest in the region, with 17.7 percent of the region's 2015 domestic O&D demand (14.9 MAP). Approximately 24 million domestic air travelers are projected to originate their trips within the 60-minute access zone in 2015. However, the forecast that was prepared as part of the recently completed Part 161 study shows Burbank with an activity level of only 7.2 MAP in 2020. The forecast took into account the physical constraints of the airport's infrastructure and the policy constraints of the governing body that owns the airport. The forecast found that the airport has environmental, physical, and policy constraints that will severely limit its ability to fully serve the demand potential of its market area. Scheduled passenger service remains almost exclusively short-haul (68.7 percent) and medium-haul (17.0 percent) in 2002, with only 1.3 percent of scheduled departures destined for a long-haul market (Honolulu).

C.4 LONG BEACH AIRPORT

Approximately 43 percent of the region's domestic O&D market is projected to fall within Long Beach's 60-minute access zone by 2015, making it the airport most accessible to the greatest number of the region's O&D passengers after LAX. However, the catchment area for Long Beach overlaps the 60-minute access zones for LAX and

Sequence number: 1
 Author: Denny Schneider
 Subject: Note
 Date: 8/20/03 12:17:17 PM
 ☐ What about cargo for the area? What does the evaluation and constraints say about cargo? Can a significant increase in cargo also occur? If not, why not?

Sequence number: 2
 Author: Denny Schneider
 Subject: Note
 Date: 8/20/03 12:28:22 PM
 ☐ Does the review of this airport usage reflect policy of the airport, of the airlines serving it, or physical constraints? If policy changes were to be invoked, could Burbank airport serve more medium and long-haul passengers? What can be done to accommodate this? What about cargo at this airport?

John Wayne Airport, both of which have more extensive existing airline service. Long Beach's potential to attract additional passenger activity is further constrained by the current City of Long Beach policy limiting air carrier flights to 41 per day. With new service by jetBlue Airways and renewed interest from American Airlines, the airport will be close to its policy limit of air carrier flights in early 2003. The airport's scheduled service in 2002 is split fairly evenly among short-haul (25.0 percent), medium-haul (32.6 percent), and long-haul (42.4 percent) destinations.

C.5 PALM SPRINGS INTERNATIONAL AIRPORT

This airport is located 105 miles from Los Angeles in Riverside County, at the edge of the Los Angeles region, and is a resort destination--not an alternative arrival location for Los Angeles. Palm Springs' scheduled air service is limited to commuter aircraft (89.3 percent) and only 3.6 percent of departures bound for destinations east of the Pacific and Mountain Time zones. Palm Springs served 1.3 MAP in 2000.

C.6 OXNARD AIRPORT

Oxnard Airport is located approximately 65 miles from downtown Los Angeles. Oxnard's catchment area in 2015 is forecast to contain 3.9 MAP in 2015. The airport consists of a single short runway with limited terminal, parking, and ground access facilities. The airport's only scheduled air service is to LAX. Increased air service at Oxnard will depend primarily on local demand and the willingness of airlines to establish service to other markets. In addition, the airport sponsor has no plans to improve airport facilities, thus limiting the airport's potential to provide direct service to most markets. About 80,000 passengers used the airport in 2000.

C.7 PALMDALE REGIONAL AIRPORT

Palmdale Regional Airport is located on land leased from the Air Force at the Palmdale Production/Test Installation Air Force Plant No. 42, a military installation. This facility is separate and apart from the adjacent 17,000 acres purchased by the City of Los Angeles in the 1960s for future airport development. Civilian use of the Plant 42 airfield is permitted under a joint use agreement with the Air Force. The airfield includes two air carrier-length runways. The terminal facilities on the Plant 42 property consist of one 9,000-square foot terminal with two aircraft parking positions. The airport is approximately 61 miles from the Los Angeles Central Business District with access from State Route 14 (no direct freeway access is provided).

Sequence number: 1
 Author: Denny Schneider
 Subject: Note
 Date: 8/20/03 12:31:22 PM
 ☐ Same basic question about Long Beach as the others; must this be constrained and how can it be modified? What about cargo handling and infrastructure to address this?

Sequence number: 2
 Author: Denny Schneider
 Subject: Note
 Date: 8/20/03 12:33:44 PM
 ☐ As business expands in the Inland Empire Palm Springs Airport will become a closer alternative for the eastern based businesses. Being near a major rail line, this could also become useful for cargo. What needs to be done to facilitate growth here?

Sequence number: 1
 Author: Denny Schneider
 Subject: None
 Date: 6/20/2003 2:03:09 PM
 How could this be for CY 1995 and the previous chart Table C-19 be for CY 2000 with exactly the same number of OMD passengers?

Table C-19
Scheduled Seats in the Region's Top Domestic OMD Markets
CY 1995

Rank	City / Airport Code	Airport Code	Miles	Miles	Passenger		Load Factor		Scheduled Load Factor	
					1995	1995	1995	1995	1995	1995
1	Atlanta	LAX	271	9	2,178,000	72.7%	85%	85%	85%	85%
2	San Francisco	SFO	318	5	2,042,000	68.0%	85%	85%	85%	85%
3	Phoenix	PHX	368	5	2,042,000	68.0%	85%	85%	85%	85%
4	San Francisco	SFO	318	5	2,042,000	68.0%	85%	85%	85%	85%
5	San Francisco	SFO	318	5	2,042,000	68.0%	85%	85%	85%	85%
6	San Francisco	SFO	318	5	2,042,000	68.0%	85%	85%	85%	85%
7	San Francisco	SFO	318	5	2,042,000	68.0%	85%	85%	85%	85%
8	San Francisco	SFO	318	5	2,042,000	68.0%	85%	85%	85%	85%
9	San Francisco	SFO	318	5	2,042,000	68.0%	85%	85%	85%	85%
10	San Francisco	SFO	318	5	2,042,000	68.0%	85%	85%	85%	85%
11	San Francisco	SFO	318	5	2,042,000	68.0%	85%	85%	85%	85%
12	San Francisco	SFO	318	5	2,042,000	68.0%	85%	85%	85%	85%
13	San Francisco	SFO	318	5	2,042,000	68.0%	85%	85%	85%	85%
14	San Francisco	SFO	318	5	2,042,000	68.0%	85%	85%	85%	85%
15	San Francisco	SFO	318	5	2,042,000	68.0%	85%	85%	85%	85%
16	San Francisco	SFO	318	5	2,042,000	68.0%	85%	85%	85%	85%
17	San Francisco	SFO	318	5	2,042,000	68.0%	85%	85%	85%	85%
18	San Francisco	SFO	318	5	2,042,000	68.0%	85%	85%	85%	85%
19	San Francisco	SFO	318	5	2,042,000	68.0%	85%	85%	85%	85%
20	San Francisco	SFO	318	5	2,042,000	68.0%	85%	85%	85%	85%
21	San Francisco	SFO	318	5	2,042,000	68.0%	85%	85%	85%	85%
22	San Francisco	SFO	318	5	2,042,000	68.0%	85%	85%	85%	85%
23	San Francisco	SFO	318	5	2,042,000	68.0%	85%	85%	85%	85%
24	San Francisco	SFO	318	5	2,042,000	68.0%	85%	85%	85%	85%
25	San Francisco	SFO	318	5	2,042,000	68.0%	85%	85%	85%	85%

Note: Ranked by OMD passengers.
 Mile - (Rank 1) - San Fran 100 miles
 Mile - (Rank 2) - Phoenix 100 miles
 Mile - (Rank 3) - San Fran 100 miles
 Source: Department of Transportation, Data from Products, 1995 and OMD data for CY 1995.

Prepared by: Landrum & Brown
 Draft: June 2003

Table C-21
International O&D Enplanements for Airports with Greater than One-Half Million International O&D Enplaned Passengers
CY 2000, 1995, and 1990

Rank	Airport	Code	2000		1995		1990	
			O&D Enp	% Share	O&D Enp	% Share	O&D Enp	% Share
1	New York Kennedy	JFK	2,896,834	6.6%	2,545,700	7.9%	2,642,640	9.6%
2	Los Angeles International	LAX	2,779,253	6.3%	2,296,470	7.1%	2,412,200	8.7%
3	Miami International	MIA	2,551,529	5.8%	2,374,240	7.3%	1,924,340	7.0%
4	San Francisco International	SFO	2,247,700	5.1%	1,524,860	4.7%	1,587,600	5.7%
5	Newark International	ORD	2,078,962	4.7%	970,370	3.0%	757,600	2.7%
6	Chicago O'Hare	ORD	1,931,159	4.4%	1,403,640	4.3%	1,129,930	4.1%
7	Boston Logan	BOS	1,537,516	3.5%	1,157,030	3.6%	1,141,550	4.1%
8	New York La Guardia	LGA	1,416,856	3.2%	1,125,790	3.5%	1,126,220	4.1%
9	Atlanta Hartsfield	ATL	1,175,011	2.7%	699,160	2.2%	462,200	1.7%
10	Orlando International	MCO	1,146,412	2.6%	813,880	2.5%	532,180	1.9%
11	Dallas/Ft. Worth International	DFW	1,129,275	2.6%	801,890	2.5%	566,190	2.0%
12	Houston Bush Intercontinental	IAH	979,681	2.2%	575,430	1.8%	475,620	1.7%
13	Las Vegas McCarran	LAS	954,975	2.2%	440,760	1.4%	221,380	0.8%
14	Seattle/Tacoma International	SEA	922,209	2.1%	582,670	1.8%	616,590	2.2%
15	Detroit Wayne County	DTW	879,687	2.0%	583,530	1.8%	479,480	1.7%
16	Philadelphia International	PHL	788,403	1.8%	569,720	1.8%	498,620	1.8%
17	Minneapolis/St. Paul	MSP	745,352	1.7%	502,280	1.6%	373,420	1.4%
18	Washington Dulles	IAD	724,635	1.7%	528,680	1.6%	408,360	1.5%
19	Denver International	DEN	707,935	1.6%	469,780	1.5%	343,050	1.2%
20	Honolulu International	HNL	665,411	1.5%	1,055,810	3.3%	970,050	3.5%
21	San Juan Luis Munoz	SJU	640,028	1.5%	467,130	1.4%	368,100	1.3%
22	Washington Reagan National	DCA	629,562	1.4%	492,870	1.5%	572,780	2.1%
23	Guam International	GUM	595,880	1.4%	688,140	2.1%	373,810	1.4%
Total			30,124,977	68.8%	22,669,930	70.0%	19,985,910	72.3%
US Total			43,796,321	100.0%	32,363,780	100.0%	27,629,350	100.0%

Source: Department of Transportation (DOT), Transborder and International 1995 Origin & Destination Survey

Sequence number: 1
 Author: Denny Schneider
 Subject: Note
 Date: 8/2/2003 2:29:31 PM
 A premise is that LA would lose OAD to another international airport if LAX doesn't expand. Only one airport, SFO, is capable of accepting passengers at a west coast destination that could travel semi-conveniently to Southern California. Explain how these other airports could possibly become more convenient in place of another SoCal destination.

Table C-22
 INS Enplaned Passengers Traveling from the U.S. to International Destinations
 By World Region (excludes Canada)

Gateway City	CY 2000 International Enplanements			Region % Share	Total
	Atlantic % Share	Latin % Share	Pacific % Share		
New York	8,931,499	2,806,348	684,223	5.4%	12,422,070
Miami	1,340,973	4,405,475	729	0.0%	7,747,177
Los Angeles	1,769,824	2,668,717	625,036	4.9%	7,626,928
Chicago	2,626,245	710,261	1,741,314	13.8%	3,561,542
San Francisco	1,187,901	338,231	66,572	0.5%	2,561,618
Atlanta	1,506,172	588,874	2,542,621	20.1%	2,544,164
Honolulu	1,321	0.0%	88,979	0.3%	2,487,497
Houston	536,362	1,882,156	125,711	1.0%	1,881,715
Washington, D.C.	1,662,330	90,654	204,700	1.6%	1,873,795
Dallas/Ft. Worth	475,059	1,194,006	1,458,091	11.5%	1,438,392
Guam	0	0.0%	176	0.0%	1,413,656
Boston	1,400,137	13,323	0	0.0%	1,043,360
San Juan	37,690	1,005,670	0	0.0%	972,916
Detroit	699,559	77,268	285,989	2.3%	838,238
Orlando	695,387	152,845	6	0.0%	838,238
Seattle	263,858	329	362,635	2.9%	626,822
Philadelphia	559,113	56,070	27	0.0%	615,210
Minneapolis	312,473	5,253	0	0.0%	615,210
Charlotte	256,897	211,983	68	0.0%	468,948
Fort Lauderdale	9,891	391,564	23	0.0%	401,478
Cincinnati	298,859	15,086	0	0.0%	313,945
Pittsburgh	289,750	2,187	0	0.0%	291,937
Sanford	240,211	5,583	0	0.0%	246,114
Anchorage	8,781	198	240,794	1.9%	246,114
Phoenix	66,311	163,328	0	0.0%	249,763
Baltimore	126,963	57,380	0	0.0%	229,839
San Jose	0	73,592	0	0.0%	184,343
Portland	0	0	70,337	0.6%	143,929
Denver	93,150	26,753	139,905	1.1%	139,905
San Antonio	0	103,816	0	0.0%	119,903
Subtotal	25,366,716	18,812,223	12,586,900	99.4%	56,801,441
US Total	25,750,057	19,151,880	12,657,894	97.7%	57,559,831
% of US Total	98.5%	98.4%	99.4%		

Source: INS Records

Sequence number: 1
 Author: Denny Schneider
 Subject: Note
 Date: 8/2/2003 2:11:41 PM
 The percentages on this chart only have nominal significance for a total number of passengers. A different, better percentage to view would be that of percentage from the region.

Table D-1
2015 Activity Comparisons

	Commercial Passenger Operations										Total Commuter	Total Cargo	GA and MI	Total
	Air Carrier	Commuter	General	Other										
Design Day Operations	1,113	435	51	1,599	117	386	415	486	119	82	2,178		2,178	
2005 Alternative D	1,075	516	52	1,643	104	415	486	119	82	2,279		2,279		
2008 Alternative D	975	532	53	1,560	104	486	119	82	2,279		2,279			
2013 Alternative D	140,819	7,676	14,481	162,786	74,597	237,253	245,137	262,758	27,400	35,000	745,000			
2005 Alternative D	137,842	7,676	14,276	162,490	74,597	245,137	262,758	27,400	35,000	781,000				
2008 Alternative D	134,862	11,837	14,702	161,621	101,137	262,758	27,400	35,000	781,000					
2013 Alternative D	171,9	17,19	284,14	101,80	199,23	119,94	127,68	127,68	27,400	35,000	745,000			
2005 Alternative D	128,32	19,03	283,19	98,50	199,15	119,94	127,68	127,68	27,400	35,000	745,000			
2008 Alternative D	138,44	22,44	277,40	103,60	203,09	119,94	127,68	127,68	27,400	35,000	745,000			
2013 Alternative D	379,900	148,300	17,000	545,200	156,300	681,500	708,800	713,100	36,100	35,000	1,745,000			
2005 Alternative D	367,000	176,200	17,000	560,200	156,300	708,800	713,100	36,100	35,000	1,745,000				
2008 Alternative D	333,000	182,800	17,600	533,400	179,600	713,100	36,100	35,000	35,000	781,000				
2013 Alternative D	41,978,500	2,276,000	4,264,200	48,518,700	22,272,500	70,811,200	73,278,200	78,894,100	30,285,300	46,597,600	1,745,000			
2005 Alternative D	41,118,000	2,295,000	4,264,200	47,677,200	22,272,500	70,811,200	73,278,200	78,894,100	30,285,300	46,597,600	1,745,000			
2008 Alternative D	40,334,500	3,694,900	4,598,200	48,627,600	22,272,500	70,811,200	73,278,200	78,894,100	30,285,300	46,597,600	1,745,000			
2013 Alternative D														

Note: Cancellation passengers and operations are included in the international totals.
Prepared by: Laramie & Brown
Date: June 2003

Sequence number: 1
Author: Denny Schneider
Subject: Noise
Date: 8/3/2003 2:26:59 PM
The 3 cargo values can't be the same if it is assumed that cargo will increase from 2 MAT to 3.5 MAT. If the assumption is larger aircraft, how will LAX handle these aircraft.

APPENDIX D - INTERIM YEAR ACTIVITY ANALYSIS

D.1 2005

A 2005 activity profile for Alternative D was developed for use in the airside simulations. The output of the 2005 Alternative D airside simulations was used to provide input to the SEIS/EIR noise analysis.

The Alternative D activity profile was developed based on the capacity of the alternative in 2005. Runway 25L would be closed for construction in 2005 and LAX would consist of a three-runway airfield. No new gate facilities would be constructed by Alternative D and the available gate facilities would be the same as the No Action/No Project Alternative.

If Alternative D had four runways in 2005, its capacity and resulting activity profile would be equivalent to the No Action/No Project Alternative. The No Action/No Project Alternative would have the ability to accommodate 71.2 MAP and 779,500 annual operations.

With only three runways available, airfield capacity would be reduced. It is assumed that the airlines would choose to not schedule a portion of the commuter activity in response to the constraint. In addition, it is assumed that general aviation activity would be reduced from the 2005 No Action/No Project Alternative levels in response to the delays and congestion that would result from the closure of Runway 25L/7R.

The capacity of a three-runway airfield was determined through an iterative process that involved testing the 2005 No Action/No Project activity profile against the three-runway airfield using the FAA's Airport and Airspace Simulation Model (SIMMOD). This testing process determined the hourly profile of activity that could be accommodated on a three-runway airfield at reasonable delay levels. Delays were permitted to increase beyond the maximum range of 10 to 15 minutes per operation (the range used in the development of the 2015 activity profiles for Alternative D and the other Master Plan alternatives) because the runway closure would be a temporary condition. It is assumed that the airlines would accept higher delays on a temporary basis in order to serve demand. See Appendix E for a discussion on the airside simulation assumptions for 2005.

Based on the capacity of a three-runway airfield, Alternative D in 2005 would have the ability to accommodate 70.8 MAP and 745,000 annual operations.

Sequence number: 1
Author: Denny Schneider
Subject: Noise
Date: 8/3/2003 2:37:44 PM
Where is the back-up data for these interim periods? What is the aircraft mix assumed? What changes are assumed to get each interim value? How is the noise analysis used with regard to flight track noise? What assumptions of runway use, alternative routes, etc. are part of the noise analysis? What about topological and weather conditions? Does the increase of aircraft operations add pollutants which makes the noise conditions worse?

Sequence number: 2
Author: Denny Schneider
Subject: Noise
Date: 8/3/2003 2:47:25 PM
The statement that 2005 All D conditions are NOT equivalent to NANSF. In the earlier portion of this Appendix D it calls for closure of 25L. NANSF doesn't have this closure in place.
At this point no air field gates or other runway action is supposed to have occurred. This means that at a minimum the often repeated 78 MAP inherent value for NANSF applies, not 71.2. Whenever the north runway work is started then there will be a temporary change to account for the reduced number of runways.
Since the current constraint is traffic at Century and Sepulveda not air or gate ops, the theoretical capacity of LAX would actually go up because this constraint would be eliminated.

D.2 2008

A 2008 interim year activity profile was developed for Alternative D to assist in the landside modeling for the SEIS/EIR. The following sections present the capacity constraints associated with Alternative D in 2008 and the expected impact on air service.

D.2.1 AIRCRAFT OPERATIONS CAPACITY CONSTRAINTS

Alternative D consists of a four-runway airfield in 2008. Similar to the 2015 case, the 2008 Alternative D peak hour aircraft operations activity was defined based on the capacity of the existing four-runway system at LAX in visual operating conditions. Peak hour operations in the 2008 activity scenario were assumed not to exceed the levels observed in 1996 and operations were permitted to increase in other hours as warranted by market demand.

D.2.2 PASSENGER CAPACITY CONSTRAINTS

There would be no new gate or landside facilities constructed by 2008 with Alternative D. The level of passengers that could be expected in 2008 with Alternative D was therefore determined based on the ability of the existing ramp to accommodate larger aircraft and the ability of the existing landside facilities to accommodate a higher level of origin and destination (O&D) passengers. Alternative D in 2008 would have the ability to accommodate the 2008 unconstrained forecast fleet size by making use of the remote west pad for aircraft parking. The existing landside facilities would have the capacity to process the activity generated by the runways and gates.

D.2.3 CARGO CAPACITY CONSTRAINTS

The cargo facilities available in 2008 for Alternative D would be equivalent to the those available in 2015. Therefore, cargo activity for Alternative D in 2008 was assumed to be equivalent to 2015 Alternative D cargo levels (3.1 million annual tons).

D.2.4 AIR SERVICE IMPLICATIONS

The air service impacts of the above constraints for Alternative D in 2008 are summarized below:

- High priority was given to accommodating O&D activity. By limiting the amount of connecting activity, Alternative D would be

Sequence number: 1
Author: Denny Schneider
Subject: Note
Date: 8/2/2003 2:56:33 PM
Why was the 2008 scenario assumption that 1996 levels would not be exceeded for peak hour ops? What is the basis of this?

Sequence number: 2
Author: Denny Schneider
Subject: Note
Date: 8/2/2003 3:03:23 PM
What is the theoretical capacity of NANP at this point since it is indicated that Alt D in 2008 will use the remote west pads.

Sequence number: 3
Author: Denny Schneider
Subject: Note
Date: 8/2/2003 3:04:52 PM
Alt D talked about upgrading and adding cargo facilities in the south and west areas. How is the capacity equivalent at the intermittent times?

APPENDIX D - INTERIM YEAR ACTIVITY ANALYSIS

able to accommodate 100 percent of the 2008 unconstrained forecast O&D demand.

- Commuter operations were reduced (from 1996 levels) consistent with the 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 was assumed that some commuter service would be replaced by air carrier service. It was also assumed that commuter connecting service through LAX would decrease in order to meet 100 percent of forecast O&D demand. This results in 38 percent of forecast commuter connecting passengers not being served at LAX in 2008.
- Air carrier connecting activity was decreased from 2015 forecast levels to reflect the loss of connecting passengers from commuter flights.
- The domestic air carrier hourly profile was de-peaked and service was reduced from 2015 forecast levels in the Central, Eastern, and Pacific regions to reflect the response from the airlines to the airfield constraints. It is assumed the airlines would adjust their schedules to allow for more profitable international operations to be scheduled at peak periods.
- It is assumed that 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 percentage of connecting passengers would decrease.
- The average aircraft size was increased from existing levels without significantly exceeding the 2008 unconstrained forecast seats per departure for each air service component.
- General aviation activity was maintained at 1996 and 2000 levels, although activity was moved out of peak hours.

Alternative D would have the ability to serve 73.3 MAP and 781,000 annual operations in 2008. Alternative D would meet 100 percent of the unconstrained 2008 forecast O&D passenger demand and 90 percent of the 2008 forecast international passenger demand in 2008. Cargo facility constraints would prevent Alternative D from reaching the forecast 2005 annual cargo tonnage demand level in 2008.

Sequence number: 1
Author: Denny Schneider
Subject: Note
Date: 8/2/2003 4:00:49 PM
How is the commuter ops going to be limited?

Sequence number: 2
Author: Denny Schneider
Subject: Note
Date: 8/2/2003 4:04:55 PM
Isn't there a difference between peaks of domestic and international? If the peaks differ, then they're not mutually exclusive and there is no expectation that the airlines will reduce operations.

E.1.1.2.1 2015 Terminal Facilities

In Alternative D, due to the relocation of Runway 24L and its associated parallel taxiways, existing Terminals 1, 2, 3, and Tom Bradley International Terminal (TBIT) north concourses would be demolished and reconfigured into one east/west linear facility with a total of 18 gates. TBIT would be expanded to accommodate aircraft on the west side of the terminal. A new West Satellite Concourse would be constructed west of TBIT and would contain 43 aircraft gates. In total, there would be 32 commuter positions and 121 jet positions in 2015.

E.1.1.2.2 2005 Terminal Facilities

None of the new terminal facilities would be constructed by 2005. Therefore, the 2005 terminal facilities would be identical to the No Action/No Project Alternative (see Appendix J of the Draft LAX Master Plan for a description of the No Action/No Project terminal facilities). Gates located at the terminal would include 3 commuter positions and 112 jet positions. There would be 29 remote commuter positions and 19 remote jet positions.

E.1.1.3 CARGO AND GENERAL AVIATION AREAS

In 2015, one building in the South Cargo Complex would be removed to make room for a proposed general aviation facility. There would be a total of two general aviation facilities in Alternative D. The existing facility north of Imperial Highway and east of Sepulveda Boulevard would remain and a new facility would be located north of Imperial Highway and west of Sepulveda Boulevard.

This development would not be completed by 2005. Therefore, the 2005 cargo and general aviation facilities would be identical to the No Action/No Project Alternative.

E.1.2 DESIGN DAY ACTIVITY

Design day flight schedules were developed for Alternative D for 2005 and 2015. The methodology and assumptions for assigning gates to the flights are discussed in Section 3 of this appendix. Detailed profiles of hourly aircraft operations for Alternative D are contained in Appendix F. The resulting design day operations are summarized in Table E-1. For a detailed discussion of the methodology and assumptions used to derive the design day schedules see Section 3 of the Draft LAX Master Plan Addendum and Appendix D.

LAX Master Plan Addendum

Table E-1
 DESIGN DAY ACTIVITY SUMMARY COMPARISON

	Design Day Operations	
	2005	2015
Air Carrier	1,113	975
Commuter	435	532
General	51	53
Total Domestic	1,599	1,560
International	380	498
Total Commercial	1,979	2,058
Cargo	117	117
GA and MI	82	104
Total	2,178	2,279

Note: Canadian passengers and operations are included in the international totals

Commercial operations would be lower in 2005 than in 2015 due to the closure of Runway 25L. Without the use of Runway 25L in 2005, the airlines would most likely choose to schedule fewer flights than they would with four runways available. It is assumed that fewer commuter flights would be scheduled as a result of the temporary runway closure. In addition, general aviation activity is assumed to be lower due to the congestion that would result from the runway closure. If Runway 25L was open, the 2005 No Action/No Project schedule would serve as the 2005 Alternative D schedule.

In 2015, Alternative D would have the same number of total commercial operations as the No Action/No Project Alternative and Alternative C (refer to Chapter V, Section 3.3.2 of the Draft LAX Master Plan for a description of the activity associated with the final iteration alternatives). Alternative D cargo and general aviation operations would be the same as the No Action/No Project Alternative.

E.1.3 AIRCRAFT GATE ASSIGNMENTS

Flights in the design day schedules were classified into general airline groupings for the purpose of assigning the aircraft to the gates and allocating passengers to the terminal area. Similar to the other alternatives, the airline groupings were formed by classifying the airlines in the schedule according to operating characteristics, while maintaining the dominance of some single carriers at LAX. The airline groupings are listed in Appendix A of the Draft LAX Master Plan. The resulting layout, gate size, and airline allocation for Alternative D

Sequence number: 1
 Author: Danny Schneider
 Subject: None
 Date: 8/2/2003 4:48:16 PM
 This assumes that the movement of 25L will be done with/without All D. Where is this written? What documentation authorizes and approves this construction?
 Similarly in the next paragraph of E.1.2 where is the authorization for expansion of cargo facilities?

for 2015 and 2005 are illustrated in **Figures E-3 and E-4** respectively. Alternative D in 2005 maintains the same gate layout used for the No Action/No Project schedule.

Table E-2 shows the number of gates that can be accommodated in Alternative D in 2015. See Appendix A, Section 3.1 and 3.2 of the Draft LAX Master Plan for the gate layouts and number of gates that can be accommodated in the final iteration alternatives. Alternative D provides fewer gates than the No Action/No Project Alternative (153 compared to 163), however the Alternative D layout would include 6 NLA positions. Alternative C also has six NLA positions but can accommodate more passengers than Alternative D with 168 total gates at a larger overall size.

All flights in the 2005 and 2015 design day schedules 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 (see Appendix A of the LAX Draft Master Plan) were also applied in this alternative.

The results of the Alternative D gate assignments are illustrated on **Figures E-5 and E-6**. The utilization of each gate throughout the day is shown by solid flight bars that mark the total time that a flight occupies the gate. Upside down triangles at the beginning and end of each bar denote an arrival and departure operation, respectively. The absence of a triangle indicates a low operation. The aircraft type is displayed on the flight bar, as space permits. The flight bars are color coded by airline group.

Sequence number: 1
 Author: Danny Schneider
 Subject: None
 Date: 8/2/2003 4:50:53 PM
 If the gate layout will be according to the type of aircraft, how many of the airlines will have to move their operations to be in multiple terminals based on the layout of the gate capacity types?

The assumptions used for the Alternative D simulations are described in this section.

E.1.4.1 RUNWAY OPERATING CONFIGURATIONS

Simulations were conducted for the three primary¹ runway operating configurations at LAX at the 2005 and 2015 levels of activity:

- ◆ West Flow Visual Approaches (Visual)
- ◆ West Flow VFR Instrument Approaches (ILS/LDA)
- ◆ West Flow IMC (IFR)

The anticipated use of the runways for arrivals and departures under each operating plan for the final iteration alternatives and Alternative D in 2015 and 2005 is shown in **Figures E-7 and E-8**.

All alternatives with four runways would operate like the existing airfield. This is the case for 2015 Alternative D, Alternative C, and the No Action/No Project Alternative. The primary use of the runways is assumed to be arrival operations on the outboard runways 24R/6L and 25L/7R and departure operations on the inboard runways 24L/6R and 25R/7L. Simultaneous approaches to the outboard and inboard runways are conducted only in west flow under visual approach procedures.

In 2005, Alternative D would have only three runways due to the temporary closure of Runway 25L for construction. The north runways, 24R/6L and 24L/6R would operate similar to the assumptions used in the four runway cases. Runway 24R/6L is assumed to be primarily an arrival runway, and Runway 24L/6R a departure runway. Runway 25R/7L would be operated as a mixed operations runway with both arrivals and departures.

E.1.4.2 AIRSPACE OPERATING ASSUMPTIONS

Airspace routes for Alternative D would be the same as the No Action/No Project Alternative and Alternative C. Airspace arrival routes were defined from each arrival fix to the runway ends and departure routes were defined from each runway to each departure fix. Routes were also defined for local traffic from Ontario, Santa Ana, Santa Barbara and Burbank Airports.

¹ East flow performance was not modeled due to its low annual occurrence. Rather, east flow performance was estimated based on previous simulations.

Sequence number: 1
 Author: Denny Schneider
 Subject: Highlight
 Date: 8/3/2003 5:06:22 PM
 If there is a substantial difference (38% movement south) between NAMP and All D runways on the north side why is it assumed that the patterns to approach will be the same?
 Also, if cargo will be increased and moved along with a different mix of aircraft for various airlines how will the "offshore" runway be used to assure landing nearest the gates?

E.1.4.2.1 West Flow

Figure E-9 illustrates the primary airspace routes from and to the airspace fixes as well as the local airports for west flow. Existing patterns at Santa Monica, Hawthorne, and El Monte Airports are included in these illustrations as a reference. These locations were identified as the most likely to be impacted by changes to the LAX airspace.

The routes correspond to anticipated patterns under instrument approaches. In visual procedures, the north approach may be intercepted about 5 or 6 nautical miles closer to the airport. The arrival routes in Alternative D would be the same as the No Action/No Project Alternative where an addition of a second Cvet outer fix has been incorporated.

E.1.4.2.2 East Flow

Figure E-10 illustrates the primary airspace routes from and to the airspace fixes as well as the local airports for east flow. The east flow airspace assumptions are similar to that of the west flow. The east flow performance was estimated based on the performance of the west flow ILS configuration and final iteration simulated east flow cases (see Appendix J of the Draft LAX Master Plan) and the east flow airspace was not modeled for Alternative D.

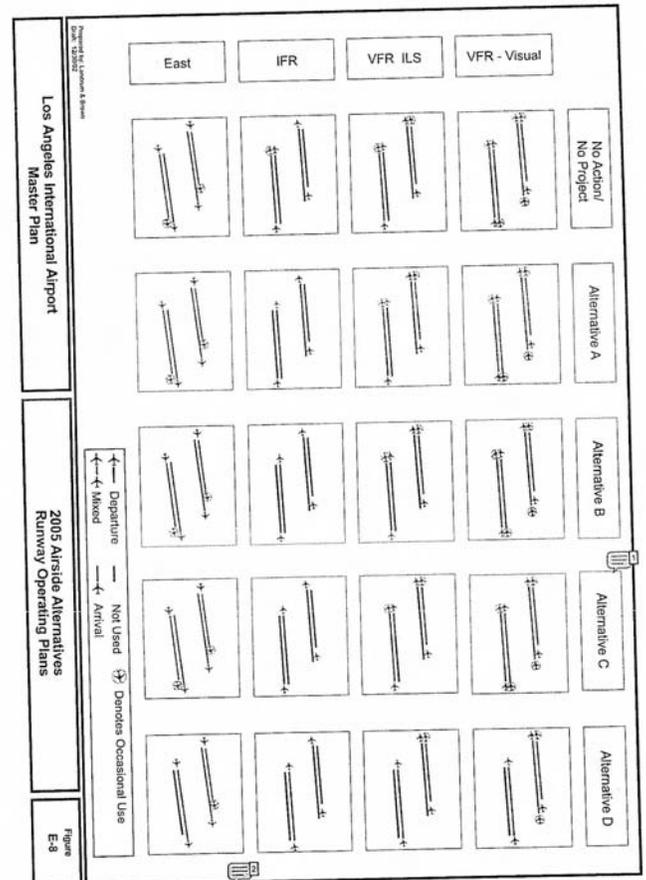
E.1.4.3 AIRFIELD OPERATING ASSUMPTIONS

For the simulation of Alternative D in 2005 and 2015, assumptions were made about the direction traffic would flow on the taxiways and about how flights should be gated within the simulation. These assumptions are discussed in the following sections.

E.1.4.3.1 Taxi Flows

The anticipated flow of aircraft between the runways and the terminal gates assumed for the 2015 and 2005 simulation analysis is illustrated in Figures E-11 and E-12 respectively. These taxi flows are based on the visual west flow operating plan. These general routings are applicable to all of the west flow operating plans. The anticipated taxi flows for east flow are shown in Figures E-13 and E-14. The east flow condition was not simulated for Alternative D, rather performance was estimated based on previous simulations.

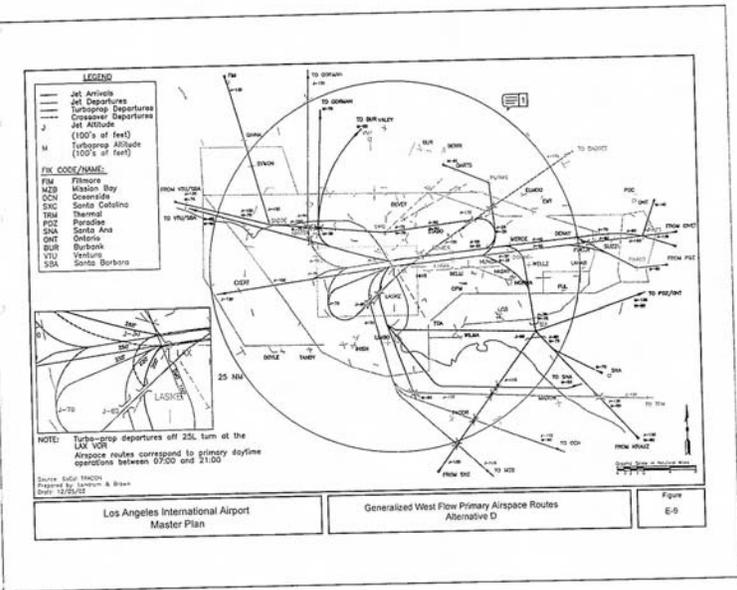
Sequence number: 1
 Author: Denny Schneider
 Subject: Highlight
 Date: 8/3/2003 5:15:59 PM
 T
 Sequence number: 2
 Author: Denny Schneider
 Subject: Note
 Date: 8/3/2003 5:17:54 PM
 How was the noise model completed without this modeling? Was it assumed that the 50% of the flights in the other direction were sufficient? If there are changes in the flight paths going east and/or west is it not important to note them even if it doesn't push the noise over the 65 CNEL threshold?



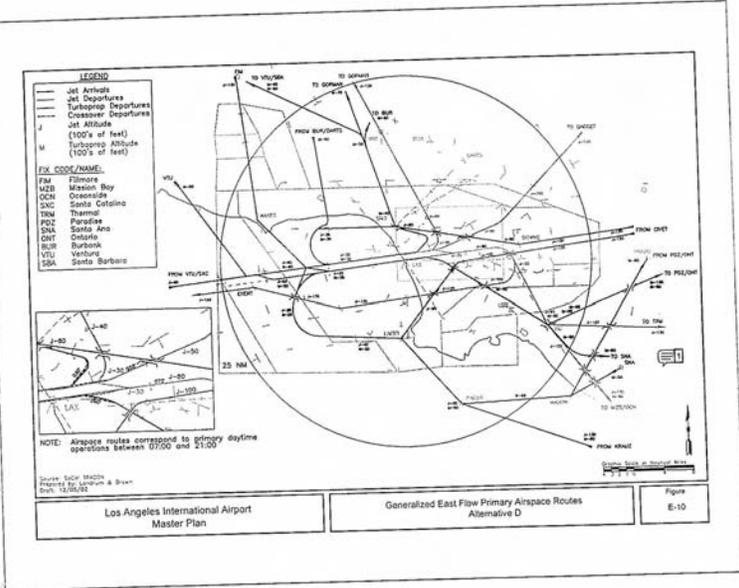
Sequence number: 1
Author: Danny Schneider
Subject: Noise
Date: 8/2/2003 5:24:10 PM
One important flow is not shown; night time ops which take off and land over ocean. Why is this not addressed? What impacts will this have on the models and noise or pollution impact predictions?

Sequence number: 2
Author: Danny Schneider
Subject: Noise
Date: 8/2/2003 5:27:31 PM
In eastern ops the north takeoffs make a hard left to the north which is not shown. The south side turns slightly to the south for spacing. These general flows doesn't help with the analysis of impact on local communities or areas as much as 10-15 miles out where aircraft are already on descending approaches at 3000' and less. Where are these analyses in this report document? How are the impacts taken into consideration and at all mitigated? This is especially true for eastern ops when takeoffs are done exclusively over highly populated areas instead of an ocean.

Sequence number: 1
Author: Danny Schneider
Subject: Noise
Date: 8/2/2003 5:30:42 PM
There are several variations to the routes shown on this diagram. How are they taken into consideration for this analysis?

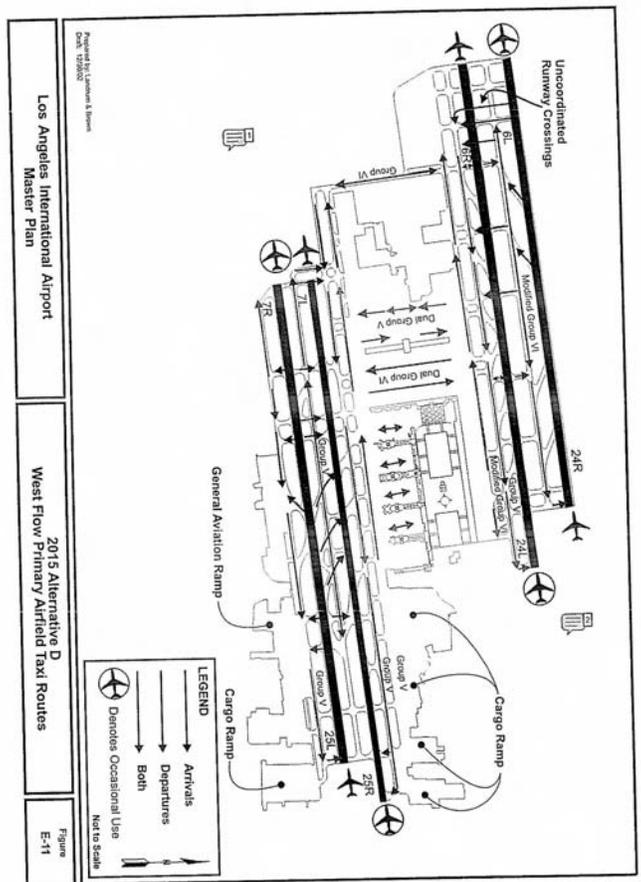


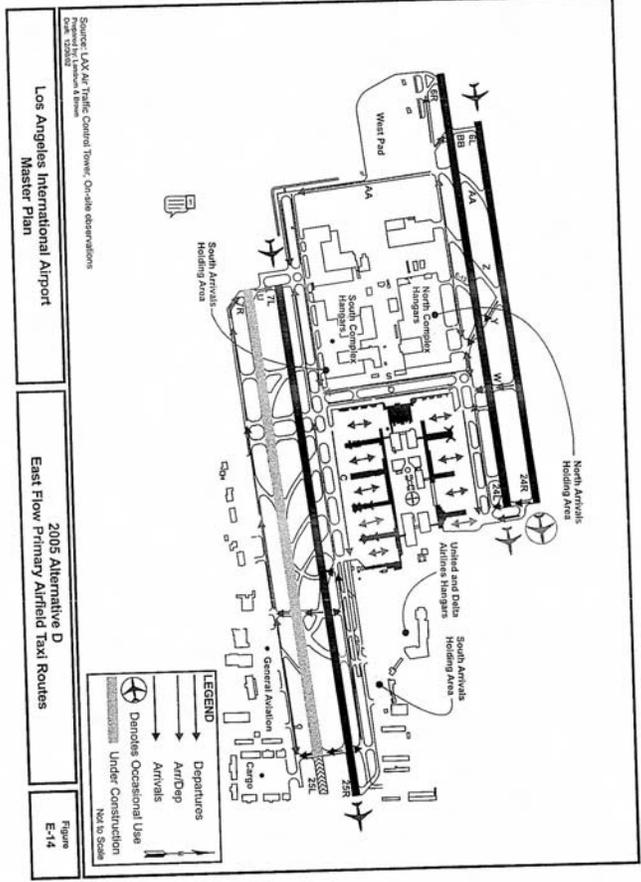
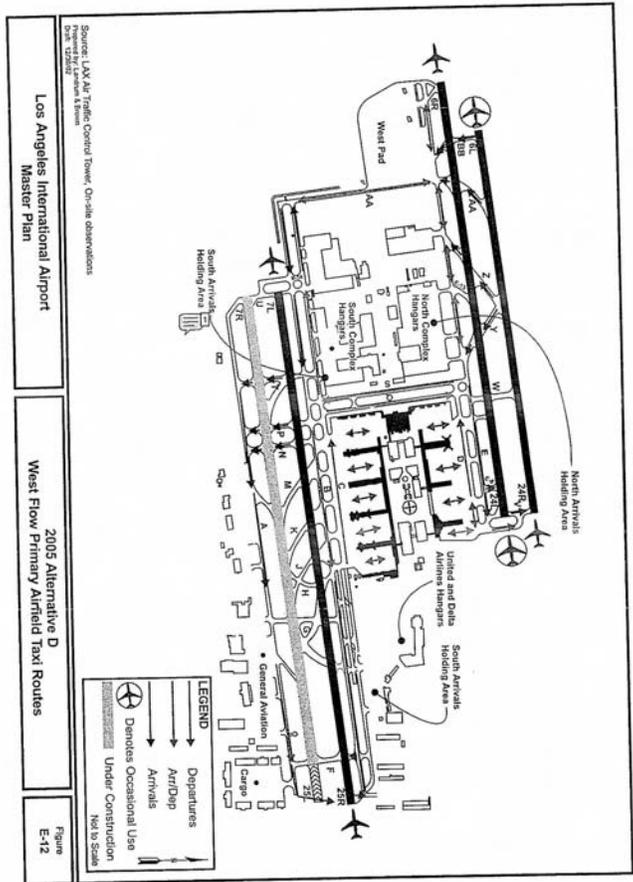
Sequence number: 1
Author: Denny Schneider
Subject: Note
Date: 8/2/2003 5:31:51 PM
The eastern ops the southern pathway shows straight out to Downey. In actuality more planes turn south to go west after takeoff.



Sequence number: 1
Author: Denny Schneider
Subject: Note
Date: 8/2/2003 5:41:16 PM
Do the taxiway directions change with a change in direction of ops? If safe spacing between the runways requires a taxiway distance, why are the dual direction taxiways on the side of the runways nearest the terminals not an even greater spacing? Will they be dual directional, but not be allowed to be used in both directions at the same time?

Sequence number: 2
Author: Denny Schneider
Subject: Note
Date: 8/2/2003 5:37:21 PM
What is an uncoordinated runway crossing? With all the rationale used to justify the runway movements to reduce incursions how is it justified that those crossings are not managed?





Page: 308

Sequence number: 1
 Author: Denny Schneider
 Subject: None
 Date: 8/2/2003 5:46:09 PM
 While this is under construction on 25L, the taxiways appear to be using a method similar to the end around studied at Ames. If this is found to be effective will it continue to be used?

Where are the existing terminal pads going to be utilized? How will busses be routed to avoid the aircraft?

Sequence number: 1
 Author: Denny Schneider
 Subject: Note
 Date: 8/3/2003 5:48:12 PM
 This applies to all of the figures depicting aircraft ground movements. Note take into consideration the night time ops condition of take-offs and landings to the west.

runways was used for arrivals and departures in the VFR visual west flow configuration.

The runway use in 2015 is similar to Alternative C. As shown, Cvet and Filmore traffic is split between the complexes due to the high number of flights originating from these fixes. All four runways were used for arrivals and departures in the VFR visual west flow configuration.

In general, arrivals from any fix would be able to reach any of the available approaches as needed, in order to balance demand and minimize delay. Departure traffic to the Thermal outer fix was primarily assigned to the south runways. As needed, Thermal departures were diverted to Dagget and assigned to the north or south runways to balance departure demand and minimize delay. Departures to Exert outer fix were assigned primarily to the north runways but were diverted to the south runways, as needed to minimize delay.

E.1.5.2 AIRCRAFT DELAY AND TAXI TIME

The average annual all weather delay for Alternative D and the final iteration alternatives is summarized in **Table E-3** and illustrated in **Figure E-17** for 2015.

Table E-3
 2015 ALL WEATHER AVERAGE DELAY AND FLIGHT CANCELLATIONS

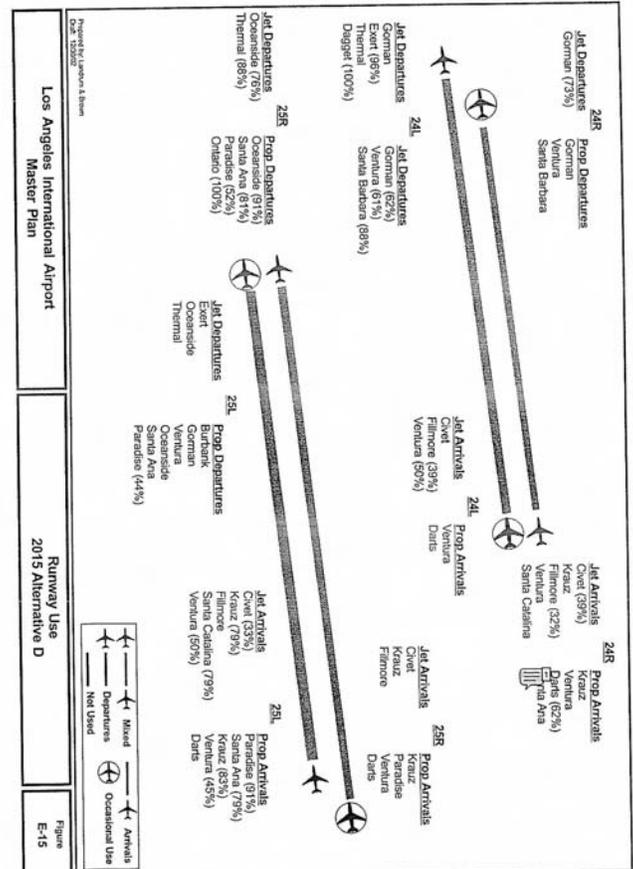
Alternative	Average Delay	Cancelled Flights
No Action/No Project	13.24	29
Alternative A	9.86	45
Alternative B	10.88	26
Alternative C	13.82	46
Alternative D	11.56	28

Note: Delay is expressed in minutes per operation

As in the final iteration analysis, flow control and flight cancellations were modeled in cases that result in excessive arrival airspace delays. In these cases the flight schedules were submitted through a flow control process before running the airside simulations in the SIMMOD model. Flights were cancelled, as needed, in order to process all arrivals prior to midnight. Alternative D in 2015 would require flight cancellations during non-visual configurations.

Sequence number: 1
 Author: Denny Schneider
 Subject: Note
 Date: 8/3/2003 5:51:57 PM
 This is the assumption that flights would be cancelled to process arrivals prior to midnight? This doesn't happen now at night or during switchover from westerly to eastern ops.

Sequence number: 2
 Author: Denny Schneider
 Subject: Highlight
 Date: 8/3/2003 5:50:51 PM



Sequence number: 1
 Author: Denny Schneider
 Subject: Noise
 Date: 8/3/2003 5:56:50 PM
 What do the percentages mean? I.E. on 24R and 24L, Krauz is listed without % whereas on south complex 25R has no % yet 25L shows 79%?? Explain what these mean and how they were determined. Also how are these factored into the model to determine pollution patterns and noise patterns.

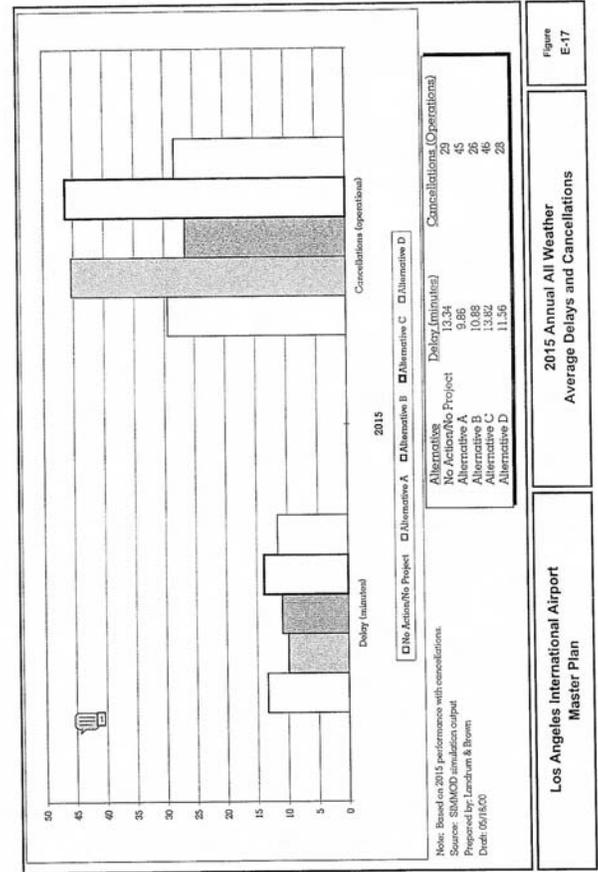


Figure E-17

2015 Annual All Weather Average Delays and Cancellations

Los Angeles International Airport Master Plan

Sequence number: 1
 Author: Denny Schneider
 Subject: Noise
 Date: 8/3/2003 5:58:53 PM
 What is assumed in NAMP? In several areas NAMP included south runway changes despite nothing in writing approving it.
 What about night time ops impact?

APPENDIX E - ALTERNATIVE D AIRSIDE ANALYSIS

Table E-6
 PEAK HOUR THROUGHPUT ALTERNATIVE D
 (Peak 3 Hour Average)

2015 Alternative D				
Configuration	Annual Use	Peak Arrival Operations	Peak Departure Operations	Peak Total Operations
VFR Visual/West Flow	69.70%	75	76	144
VFR ILS West Flow	15.49%	66	73	135
VFR East Flow	5.21%	66	23	135
Average VFR	90.50%	73	76	142
IFR West Flow	9.10%	64	69	131
All Weather Average	100.00%	72	75	141

2005 Alternative D				
Configuration	Annual Use	Peak Arrival Operations	Peak Departure Operations	Peak Total Operations
VFR Visual/West Flow	69.70%	69	69	132
VFR ILS West Flow	15.49%	63	69	129
VFR East Flow	5.21%	63	62	129
Average VFR	90.50%	67	69	131
IFR West Flow	9.10%	65	68	118
All Weather Average	100.00%	67	69	130

Notes:
 1. Peak hour throughput for arrivals, departures, and total operations may not correspond to the same hour.
 2. East flow performance is assumed to be equivalent to ILS west flow.
 Source: SIMMOD simulation output

Table E-7
 2015 ALL WEATHER AVERAGE PEAK HOUR THROUGHPUT

Alternative	Peak Hour Operations		
	Arrivals	Departure	Total
No Action/No Project	73	75	140
Alternative A	92	85	172
Alternative B	91	86	172
Alternative C	73	71	138
Alternative D	72	75	141

Note: Peak hour throughput for arrivals, departures, and total operations may not correspond to the same hour.

APPENDIX E - ALTERNATIVE D AIRSIDE ANALYSIS

E.2 ALTERNATIVE D ADDITIONAL INTERIM YEAR AIRSIDE ANALYSIS

The DEIS/EIR required the analysis of additional interim years for Alternative D. The year 2008 was determined to be the peak traffic year for construction and airport traffic, thereby requiring design day flight schedules with gate assignments for the traffic modeling (but not airside simulations). The year 2013 was defined as the peak emissions year for air quality analyses in the DEIS/EIR. The facilities available and the resulting activity levels in 2013 would be similar to 2015. Therefore, airside performance was estimated for 2013 based on the 2015 analysis in order to provide data for the air quality modeling. Detailed simulations were therefore not necessary for 2013.

The following sections discuss the 2008 and 2013 Alternative D analysis. For a detailed discussion of the interim year activity refer to Appendix F.

E.2.1 2008 ALTERNATIVE D

By 2008, the construction in the south airfield would be completed and a parallel taxiway between the south runways would be open. The north airfield facilities would remain unchanged from the existing airfield.

No new terminal facilities would be available in 2008 with Alternative D. The NLA would be required to park at the remote gates in the west pad area. Alternative D in 2008 would retain the existing cargo and general aviation facilities.

A design day flight schedule was developed for Alternative D in 2008. The methodology and assumptions used to derive the design day schedule are discussed in Appendix D. A detailed profile of hourly aircraft operations for Alternative D in 2008 can be found in Appendix F. Alternative D would have the ability to serve 73.3 MAP and 781,000 annual operations in 2008.

As discussed in Section 1.3 of this appendix, flights in the design day schedules were classified into general airline groups for the purpose of assigning the aircraft to the gates and allocating passengers to the terminal area. The resulting layout, gate size, and airline allocation for Alternative D in 2008 are shown in Figure E-18.

Sequence number: 1
Author: Denny Schneider
Subject: None
Date: 8/20/03 8:43:00 PM
Why are these queue length charts mean? Is it number of aircraft? Is it minutes? what...

Table G-5
Los Angeles International Airport Master Plan
2015 ALTERNATIVE D ALL WEATHER AVERAGE
AVERAGE HOUR QUEUE LENGTH

Table with 9 columns: Hour, 24L, 24R, 25L, 25R, 6L, 6R, 7L, 7R. Rows include hours 0-23 and a MAX row.

Prepared by: Landrum & Brown
Date: June 2003

Sequence number: 1
Author: Denny Schneider
Subject: None
Date: 8/20/03 8:46:19 PM
Why are the max taxi periods at strange hours (in 2 AM, 5 AM) for arrivals and more steady, but high all the time for departures?

Table G-6 (2 of 6)
Los Angeles International Airport Master Plan
2015 ALTERNATIVE D ALL WEATHER AVERAGE
DELAY AND TAXI TIME BY RUNWAY

Table with columns for Arrivals and Departures, including Runway, Hour, Arr. Count, Total Taxi, Area Taxi, Total Delay, Area Delay, Dep. Count, Total Taxi, Area Taxi, Total Delay, Area Delay. Rows include runways 6R, 7R, 8R, 9R, 10R, 11R, 12R, 13R, 14R, 15R, 16R, 17R, 18R, 19R, 20R, 21R, 22R, 23R and a MAX row.

Prepared by: Landrum & Brown
Date: June 2003

Table with columns for Runway, Hour, and various delay metrics (Arr. Count, Total Taxi, Area Taxi, Total Delay, Area Delay, Dep. Count, Total Taxi, Area Taxi, Total Delay, Area Delay). Rows include runways 7C, 7D, 7E, 7F, 7G, 7H, 7I, 7J, 7K, 7L, 7M, 7N, 7O, 7P, 7Q, 7R, 7S, 7T, 7U, 7V, 7W, 7X, 7Y, 7Z and a MAX row.

Appendix H

CONCEPT DEVELOPMENT

H.1 INTRODUCTION

The following figures document the genesis and development of the Alternative D concept. The development of Alternative D was an iterative process that included Los Angeles World Airports (LAWA) senior management, and members of the consulting team.

H.2 INITIAL CONCEPTS

In the initial concept classification category, five (5) concepts were developed (Figures H-1 through H-5). These concepts were focused in the area defined as north of Imperial Highway, east of Aviation Boulevard, south of Arbor Vitae, and west of Interstate 405. The intent of the concepts were to:

- 1) Remove private and commercial vehicles from the Central Terminal Area (CTA),
- 2) Create new permanent passenger pick-up and drop-off facilities,
- 3) Increase short and long term parking capacity;
- 4) Provide a direct automated people mover (APM) system to connect to the CTA and the Metropolitan Transit Authority (MTA) Green Line Station.

The initial concepts were developed without consideration given to the following hard constraints:

- 1) Available land (not currently owned by LAWA),
- 2) FHWA coordination requirements,
- 3) Commercial, and industrial property acquisition limitations,
- 4) Environmental processing and mitigation requirements

It was determined through several meetings with LAWA senior management and members of the consulting team that the only viable locations for passenger pick-up and drop-off facilities were identified as Manchester Square and the land envelope defined as the area bounded north of Imperial Highway, east of Aviation Boulevard, south of 104th street, and west of La Cienega Boulevard.

LAX Master Plan Addendum

It was concluded that these were the two most viable sites given the following factors:

- 1) Accessibility to the arterial street network,
- 2) Curbfront requirements,
- 3) Building height and use restrictions within the runway protection zone,
- 4) Commercial, and industrial property acquisition limitations

At the completion of the initial concept development it was determined that the land envelope defined as the area bounded north of Imperial Highway, east of Aviation Boulevard, south of 104th Street, and west of La Cienega Boulevard was not feasible because of significant access constraints due to close proximity to the Interstate 405 and 105 interchange and the limited space for queuing, circulation, and storing of vehicles on the surrounding roadways. In addition, the site area has several height restrictions due to FAA airspace criteria.

H.3 ALTERNATIVE DEVELOPMENT

As Manchester Square emerged as the preferred location for passenger pick-up and drop-off facilities, six (6) new alternatives were developed. These alternatives entailed various configurations to accommodate facilities that included:

- 1) Passenger pick-up and drop-off facilities,
- 2) Terminal facilities,
- 3) Parking facilities,
- 4) APM stations,
- 5) Access roadways,
- 6) MTA facility

Alternative 1 (Figure H-6) - creates a multi-passenger pick-up and drop-off facility campus around a central parking core. While this concept met the curbfront demand it was determined that a closed ring roadway circulation system was a disadvantage and created similar congestion and vehicular circulation problems that currently exists within the CTA. In addition, the terminal configuration would require multiple APM stations causing longer transit times beyond acceptable standards.

Sequence number: 1
 Author: Denny Schneider
 Subject: Note
 Date: 8/2/2003 8:54:46 PM
 What was the basis for the refinement to move the APM connection south? How much curb space is needed?

Alternative 2 (Figure H-7) - attempted to de-centralize the passenger pick-up and drop-off facility with adjacent parking. To meet the curbfront requirement, the facility would need to be three levels. This presented significant issues related to accessibility from arterial streets and vehicular flow within the access system.

Alternative 3 (Figure H-8) - attempted to de-centralize the passenger pick-up and drop-off facilities with adjacent parking in order to meet the curbfront demand. The concept was deemed inefficient requiring multiple APM stops and considerable land area. Also, it was determined that passenger facilities located in the runway protection zone were not recommended. The de-centralization of facilities also created significant signage and passenger way finding challenges.

Alternatives 4 and 5 (Figures H-9 and H-10) - were two similar ideas of a concept to utilize Manchester Square as the primary location for passenger pick-up and drop-off facilities. No parking adjacent to these facilities was associated with this concept. All short and long-term parking would be located north of I-105, south of 104th Street, west of La Cienega Boulevard, and east of Aviation Boulevard. It was determined that separating long and short-term parking facilities from the primary passenger pick-up and drop-off areas was not advantageous.

Alternative 6 (Figure H-11) - was based on the ideas generated in Alternatives 4 and 5 including both long and short-term parking facilities associated with the passenger pick-up and drop-off facilities. Commercial and private vehicles would access these facilities with upper and lower level curbfronts. In order to get the necessary curbfront linear footage, parallel piers were developed. The arrangement was set at an angle to allow for proper turning radii for consistent vehicular flow in and out of the system. Initially the Intermodal Transportation Center (ITC) connecting the MTA Green Line to the APM was located at the corner of Century Boulevard and Aviation Boulevard. Further refinement of Alternative 6 relocated this facility closer to the MTA Green Line at the northeast corner of Aviation Boulevard and I-105.

Alternative 6 was selected to move forward based on its ability to meet the curbfront demand on a land envelope large enough to accommodate both parking and passenger facilities that was accessible to the arterial street network and not within a runway protection zone. The concept was refined into Alternative D based on significant landside analysis creating an access system capable of delivering the most efficient vehicular flow in and out of the facilities.

Sequence number: 1
 Author: Denny Schneider
 Subject: Highlight
 Date: 8/1/2003 9:44:01 AM

Sequence number: 2
 Author: Denny Schneider
 Subject: Note
 Date: 8/1/2003 9:46:42 AM
 What was the basis for the refinement to move the APM connection south? How much curb space is needed?

H.4 CTA SECURITY MODIFICATION ANALYSIS

An analysis was conducted which looked primarily at the existing CTA, evaluating opportunities which existed for modifications to the infrastructure to accommodate the primary APM component of Alternative D. The intent was to modify the existing CTA terminals to accommodate the need for expanded outbound baggage make-up areas for 100% Explosives Detection System (EDS) screening as well as increased areas for security screening and passenger processing. These options maintained the parking structures in the CTA and the existing road structures. In some cases additional roads were built at a third level to help with vehicular circulation.

While it was determined that the CTA could be modified to accommodate security mandated directives, these approaches failed to address the threat of private and commercial vehicles present to the facilities and gates. In addition, all of the approaches failed to make any significant changes to undersized and aging passenger processing facilities.

Option 1 (Figures H-12 and H-13) - shows in plan the components of Alternative D with an additional 50'-0" bay built on to the backside of all terminals to help accommodate the additional areas needed for passenger security screening and the 100% EDS screening of all checked baggage. The APM would be located atop existing parking structures with pedestrian bridges connecting stations with the terminal facilities.

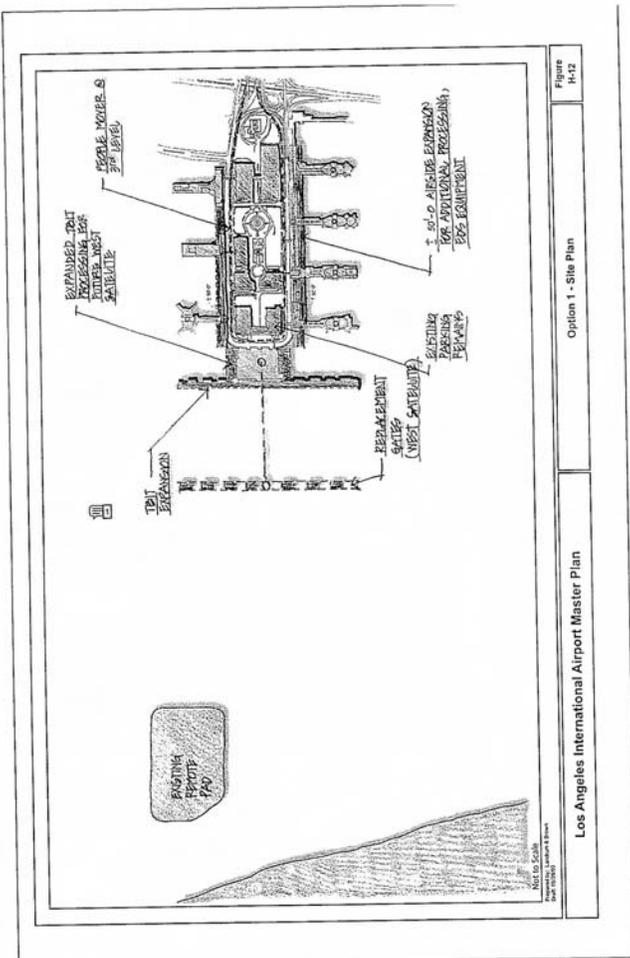
Option 2 (Figures H-14 and H-15) shows a modified CTA, which places new baggage claim facilities on the roof of existing or rebuilt parking garages. A new third level arrivals curb would be located adjacent to baggage claim with the APM at a level above. Moving baggage claim to a new facility would allow the lower level of the CTA to be utilized primarily for 100% automated EDS screening of all checked bags as well as opportunities for expansion of concessions and a limited amount of passenger processing.

Option 3 (Figure H-16) is a variation of Option 2 placing the third level arrivals curb on the opposite side of baggage claim in an elevated structure.

Option 4 (Figure H-17) is a variation of Option 2 that re-builds all the parking structures with an integrated arrivals hall, and a baggage claim facility at the second level. The existing open space between the existing arrivals curb and parking structures

Sequence number: 1
 Author: Denny Schneider
 Subject: Note
 Date: 8/4/2003 9:48:08 AM
 Why is the 100% EDS screening being done in the CTA instead of the time baggage is first checked resulting in a one-time review. This way people will not have to carry all of their luggage from the GTC to the CTA.

Sequence number: 1
 Author: Denny Schneider
 Subject: Note
 Date: 8/4/2003 9:53:23 AM
 This option talked about replacement gates but the north side is shown intact. Was this an accident in the first option that was just overlooked?



would support an expanded second level roadway system for a new arrivals curb.

Option 5 (Figures H-18 and H-19) moves the APM to the upper level roadway of the existing CTA. The existing upper level roadway would be maintained for emergency vehicle access. A new departures curb and ticketing hall would be built atop of the reconfigured or rebuilt parking garages.

Option 6 (Figures H-20 and H-21) moves the APM to the upper level roadway of the existing CTA. A new ticketing hall and baggage screening system would be built at the second level of the existing or rebuilt parking structures. The upper level roadway access would be maintained for emergency vehicle access. The existing open space between the arrivals curb and the parking structure would support an expanded second level roadway system for a new departures curb. Departing passengers would use an overhead pedestrian bridge to access the gates. The area in the existing terminals previously used for ticketing and airline ticket offices would be converted to concession areas.

Figures H-22 and H-23 show a recommended approach for modifications in the CTA including a renovation of the existing processors for expanded ticketing, security screening, and baggage screening by creating a third level accessible across the roadway system to the APM.

While the CTA can accommodate some changes in its infrastructure to adapt to future security and security related space expansion requirements, the landside will continue to be constrained. All of the options had considerable drawbacks related to cost/benefits, implementation and phasing. Each of these options considered allowing private and commercial vehicles into the CTA, a threat that Alternative D eliminates.

It was determined through meetings with LAWA senior staff and the consultant team that any recommended security modifications within the CTA be consistent with the long-term planning for all Master Plan Alternatives.

H.5 ALTERNATIVE D REFINED CONCEPTS

As part of the refinement of Alternative D, additional concepts were evaluated to determine which elements, and their corresponding configuration, warranted further analysis. The following figures depict several configurations that were considered for Alternative D.

Sequence number: 1
 Author: Denny Schneider
 Subject: Note
 Date: 8/4/2003 10:01:41 AM
 What is the meeting of the statement, "It was determined through meetings... any recommended security modifications within the CTA be consistent with the long-term planning for all Master Plan Alternatives." Of the 4 alternatives only D calls for elimination of personal vehicles.

Sequence number: 2
 Author: Denny Schneider
 Subject: Highlight
 Date: 8/4/2003 9:59:30 AM

LAX Master Plan Addendum

East Land Envelope Constraints Diagram (Figure H-24) – depicts the hard and soft constraints surrounding the east land envelope. The consultant team was given direction by senior LAWA staff as to which facilities were to be considered as hard constraints. Every attempt was made to avoid impacts to the following areas:

- ◆ Hotel and commercial area located at the northwest corner of Century and La Cienega Boulevard,
- ◆ Hotel, commercial, and industrial area located at the southwest corner of Century and La Cienega Boulevard
- ◆ U.S. Customs facility located at the northwest corner of La Cienega Boulevard and 111th Street, and
- ◆ Commercial area located at the northwest corner of La Cienega Boulevard and Imperial Highway, up to 111th Street.

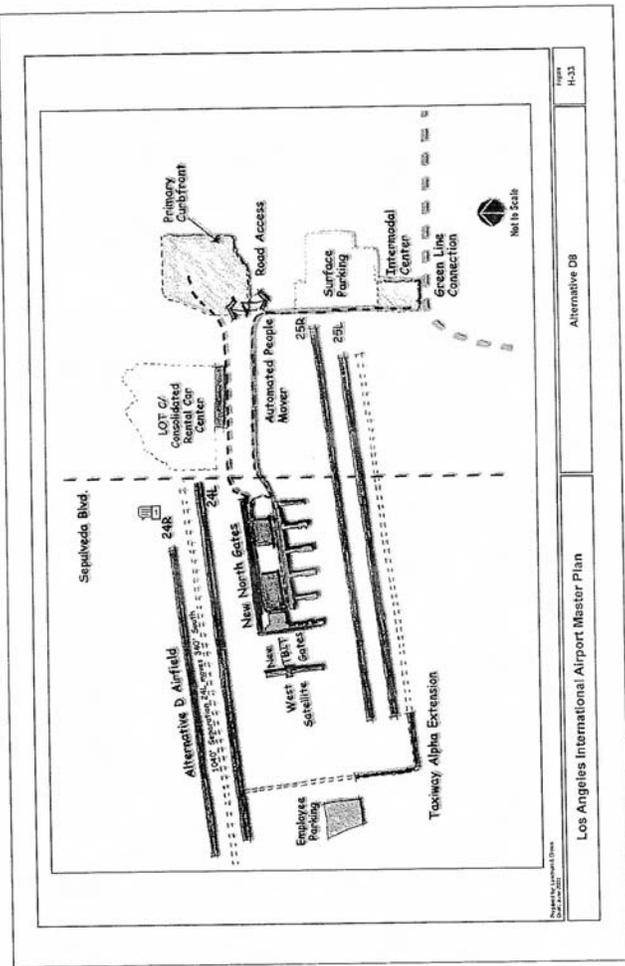
Alternative D1 (Figure H-25) – "Alternative D Airfield" key features include:

- ◆ Relocation of existing Runway 24L to the south and lengthening to east over Sepulveda Boulevard
- ◆ New centerline taxiway between Runways 24L and 24R
- ◆ Taxiway Alpha extension
- ◆ New north CTA gates (removal of Terminals 1, 2, and 3)
- ◆ New Midfield Satellite and Tom Bradley International Terminal (TBIT) gates
- ◆ Primary curbfront and consolidated rental car facility located in Manchester Square
- ◆ New parking structure located at the northeast corner of Imperial Highway and Aviation Boulevard (old Continental City property)
- ◆ APM connection between the CTA, Manchester Square, and parking structure at the old Continental City property
- ◆ Green Line connection

Sequence number: 1
 Author: Denny Schneider
 Subject: Note
 Date: 8/4/2003 10:03:30 AM
 What are the hard constraints that were given by senior LAWA management as to which facilities were to be considered as hard constraints?

Sequence number: 2
 Author: Denny Schneider
 Subject: Highlight
 Date: 8/4/2003 10:04:56 AM

Sequence number: 3
 Author: Denny Schneider
 Subject: Note
 Date: 8/4/2003 10:07:11 AM
 At what point was the lengthening of 24L over Sepulveda abandoned? As we have said regularly, it would be a sad day to have all 4 runways destroyed by a truck bomb on Sepulveda.



Sequence number: 1
 Author: Denny Schneider
 Subject: Note
 Date: 8/4/2003 10:28:33 AM
 What is the separation distance for 24R/L? Several places show 340' but another says 388'? How was this value determined?

LAX Master Plan Addendum

From an operational and customer service perspective, the best design is Option 1. It involves constructing the customer service building and ready/return area on the current Budget, Avis and National sites. Though it would require relocating those companies to Lot C, there are a number of key advantages to this option:

1. The customer service building would be used in the final phase long-term consolidated rental car facility.
2. The ready/return area is located directly across the street from Hertz, Avis, National and Budget, which makes shuttling vehicles quick and easy. Those companies represent 66% of the LAX rental car market (based on 2000 figures).
3. The site could accommodate approximately 2,500 ready/return spaces. To increase capacity and reduce shuttling, it may also be possible to deck the site and construct a quick turn around facility (OTA) where vehicles can be quickly washed, vacuumed and fueled. This area could then be used as a storage site once the final phase long-term consolidated rental car facility is built.
4. Double busing is minimized which is beneficial from both a customer service and environmental perspective.

Ultimately, the biggest advantage to this option, and the others as well, is the fact that all involve the use of a common busing operation. Common busing would drastically reduce curb congestion and traffic in the terminal core. At Houston George Bush Intercontinental Airport, for example, the rent-a-car (RAC) industry uses 125 vehicles to transport rental car customers. A common bus fleet of only 24 Gillig 40-foot low floor buses is replacing those vehicles. Logically, this also improves air quality. Dallas/Fort Worth International Airport estimates that the common busing operation at its consolidated rental car facility has reduced particulate emissions by more than 460 tons each year.

Site Accessibility (Figure H-34)

The general site area that was considered for the Phase 1 - Consolidated Rental Car Options includes Lot C, existing rental car areas west of Airport Boulevard, and the Belford Area (LAWA owned). Primary access to the site is via Sepulveda Boulevard, Airport Boulevard, 96th and 98th Street and Arbor Vitae Street.

Sequence number: 1
Author: Denny Schneider
Subject: Note
Date: 8/4/2003 10:38:59 AM
The Bedford area, like Manchester Square, is not LAWA owned-yet.

Appendix I

COMPARATIVE SECURITY ANALYSIS OF ALTERNATIVE D AND THE NO ACTION/NO PROJECT ALTERNATIVE

1 EXECUTIVE SUMMARY

Alternative D, the Enhanced Safety and Security Alternative, provides Los Angeles International Airport (LAX) a much higher degree of safety and security than the No Action / No Project (NA/NP) Alternative in the proposed LAX Master Plan. Alternative D allows for the dispersal of people and security processes away from critical points on the airport complex. This allows for consistent levels of screening, an increased ability for law enforcement and security personnel to respond to threats, and the protection of people and critical facilities essential to the continued operation of the airport.

The postulated threat against LAX is terrorist actions, particularly those using a vehicle or truck bomb. LAX's primary function is the movement of passengers and cargo into and out of the airport. The level of security implemented at LAX must not limit the ability of the Airport to accomplish its primary function. Analysis shows that the potential of a vehicle bomb to cripple LAX and inflict a high number of casualties is the primary vulnerability and focus of security planning.

Alternative D's unique effectiveness as an enhanced safety and security plan lies in the establishment of a new and more effective concept of security operations for LAX. This concept involves the use of multiple concentric rings of security that provides 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 Central Terminal Area (CTA). The use of concentric rings in the development of a deterrent and mitigation strategy is based upon the concept of protecting, detecting, assessing, and responding (PDAR) to threats to passengers and the airport. This is best accomplished through the dispersal of potential hostile events in such a manner as to allow increased distance and time from a threat to give law enforcement and security personnel time to assess the threat and respond to it.

Sequence number: 1
Author: Denny Schneider
Subject: Note
Date: 8/6/2003 8:22:17 AM

The entire theory of security expounded upon by this Appendix I of the Alt D Addendum corresponds to the SAIC study report of concentric levels of security. It also states that LAX is too small to be secure and need the additional lands of Manchester Square, Bedford Square, and all of the other areas out to the 405 freeway to implement the security strategy. Explain why the present land mass is insufficient and why some of the less used areas can not be secured in place of more land being added. Explain why the lesser used cargo must be further developed to allow for an increase of 1.5 MAT

5 THREAT

5.1 LOS ANGELES INTERNATIONAL AIRPORT
(LAX) AS A TARGET

LAX is a potential target for a terrorist attack due to its significance as an international gateway and the third-busiest airport in the United States. LAX accounts for \$60 billion in the Southern California economy and one in twenty jobs in Southern California is attributed to LAX operations.

5.1.1 POTENTIAL ADVERSARIES

The obvious and primary adversaries to LAX are transnational terrorist groups and the criminal element. Both need to be considered in developing the final concept and design for Alternative D. The external threats to all elements of the airport, but particularly at the CTA, include terrorist and non-terrorist groups using traditional bombing tactics, such as the following events:

- On April 19, 1995, at 9:02 AM, a large vehicle bomb containing approximately 4,800 pounds of an ammonium nitrate and fuel oil (ANFO) mixture concealed in a 1993 Ford F700 20-foot cargo van detonated at the north side of the Alfred P. Murrah Federal Building in Oklahoma City, Oklahoma. The investigation revealed that Timothy McVeigh had conducted pre-attack analyses of numerous Federal buildings looking for one that met his requirements. He developed a three-pronged targeting criterion that called for a building occupied by children as well as agents of the Federal Bureau of Investigation (FBI) and the Bureau of Alcohol, Tobacco, and Firearms (BATF) as retribution for the Waco, Texas incident a year earlier. He was also looking for a target with minimal protective measures. He selected the Murrah building because it represented an extremely soft target that allowed him to park his vehicle within 10 feet of the building. The Murrah Federal Building bombing proved that a small group of anti-government individuals can cause significant loss of life and damage to property using relatively unsophisticated explosive devices.
- The 1993 World Trade Center (WTC) bombers used a truck bomb to cause significant damage to the WTC. This attack, in addition to the Murrah building bombing in Oklahoma City, supports the concern about the vulnerability of a facility to an unsophisticated

Sequence number: 1
Author: Denny Schneider
Subject: Note
Date: 6/8/2003 8:09:43 AM
LAX accounts for 1 in 20 jobs of Southern California. This makes LAX one very significant target! Explain why LAX has to be so dominant in air commerce instead of being a key in a more regionally dispersed system.

Sequence number: 2
Author: Denny Schneider
Subject: Highlight
Date: 6/8/2003 8:08:09 AM
T

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Responses to Comments

Preface

Page: 4, Sequence #3

- ◆ **When will the FAA have a say? Is the FAA veto only? In the event of a conflict between FAA and the LAWA, who is the referee to determine a final resolution?**

Response: The FAA has been continually reviewing the Draft LAX Master Plan throughout its development. It is anticipated that the Los Angeles City Council should make its decision on the LAX Master Plan in the fall of 2004. 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. It is currently anticipated that the FAA's Record of Decision on the Airport Layout Plan would take in late 2004.

The Los Angeles City Council makes the decision on which alternative to implement. The FAA issues a Record of Decision that depicts the City Council's decision.

NEPA and CEQA require that prior to approval of a proposed project, the approving agency/body must determine whether the necessary environmental document has been completed in fulfillment of the applicable requirements. In the case of the LAX Master Plan, the FAA will have to determine whether the EIS meets the requirements of NEPA prior to approving the project through a Record of Decision, and the Los Angeles City Council will have to determine whether the EIR meets the requirements of CEQA prior to approving the project by resolution. Should either or both approving authorities determine that the EIS/EIR does not meet the requirements necessary for the agency to approve the project, the affected lead agency(ies) would need to assess and determine the nature, extent, and process for, providing the necessary information. Such an assessment and determination would depend on the specific facts of, and reasons for, the approval authority's decision.

Executive Summary

Page: 17, Sequence #3 and #4

- ◆ **Didn't TSA say they prefer one complete baggage check as early as possible?**

Response: No, the TSA stated that the baggage screening should take place as close as safely possible to the aircraft to reduce the distance and time to transport the baggage to the aircraft after inspection, to minimize the possibility of tampering. It was envisioned in the Master Plan that a single baggage inspection facility would be developed. The advanced planning process will further refine the location and number of screening areas.

Page: 17, Sequence #5 and #6

- ◆ **How will emergency response get from the LAX body to the outlying GTC across open public areas? How will evacuation be accomplished?**

Response: The specifics of emergency response and evacuation provisions and procedures would be determined in conjunction with the more detailed advanced planning and design of the GTC. Please see Response to Comment SAR00006-6 and Response to Comment SPC00064-8 regarding emergency response. In addition, please see Appendix I of the Draft LAX Master Plan Addendum and Topical Response TR-SEC-1 regarding evacuation.

Page: 17, Sequence #8

- ◆ **This increases potential through put for more flights per gate.**

Response: As discussed in Appendix D, Section 3.1, of the Draft LAX Master Plan Addendum, the most constraining component of an airport defines the practical capacity of the entire airport. In the case of Alternative D, the gate facilities are the limiting factor. The Alternative D airfield improvements do not increase capacity. The taxiway improvements enhance safe aircraft operations and reduce the potential for runway incursions. Enhanced airfield safety is achieved through airfield facility modifications that mitigate the primary causes of runway incursions at LAX. Further, airfield safety and improved airfield efficiency are achieved through taxiway development that matches the future fleet of larger aircraft. The increase in runway length proposed in Alternative D would reduce

5. Responses to Comments from Dennis J. Schneider

airfield congestion and eliminate excessive coordinated crossings in the air. None of these airfield improvements allow LAX to serve additional demand.

Page: 18, Sequence #2

- ◆ **How will baggage be delivered from the GTC? Will people have to carry it? Is this defined or slated for future development?**

Response: Please see Section 2.2.8, Ground Transportation Center (GTC) of the Draft LAX Master Plan Addendum regarding accommodations for baggage between the GTC and the CTA.

Page: 18, Sequence #3

- ◆ **Will the remaining gates be more utilized than ones replaced? Are they to be modernized to handle larger aircraft more frequently? Will all gates be modernized or only some of them? How will this be controlled for limiting future growth?**

Response: The average size of the gates is increasing as well as load factors, the gates on average are very highly utilized and would remain so. By replacing the remote gates with contact gates, that portion of the gates would become more utilized, however there is an overall reduction in gate numbers from 163 to 153. Please see Table 2.2-2 of the Draft LAX Master Plan Addendum. The design day schedule that was developed assumed a fleet mix and a utilization of gates that are higher on an annual passenger per gate ratio for all comparable airports similar in size and nature for LAX.

Page: 18, Sequence #5 and #6

- ◆ **What controls on cargo access will preclude access to the planes since 50% of the cargo is in the belly of the passenger aircraft? How will cars at the GTC and RAC be screened? If no parking at curbside in these is enacted, how will the cars parked in the adjacent parking structures be screened?**

Response: All cargo destined for passenger aircraft is subject to security screening today and would likely be subject to enhanced security measures in the future as technology improves.

Please see Section 2.2.8 of the Draft LAX Master Plan Addendum regarding vehicle screening at the GTC. Please see Section 2.2.10 of the Draft LAX Master Plan Addendum regarding vehicle screening at the RAC.

Page: 18, Sequence #10

- ◆ **If the GTC is the "PRIMARY POINT OF PICKUP AND DROP-OFF" were the press conference comments that people in the RAC and ITC Green Line transfer areas would go directly to the GTC mean that security needs to be able to easily get to all three off-airport sites? What proportions will be initially checked at each site?**

Response: The security needs, provisions, and procedures for the GTC, RAC, and ITC would be determined in conjunction with the advanced planning and design of those facilities. Please see Response to Comment SPC00165-10 regarding vehicle access to the GTC. Also, please see Section 2.2.8, Ground Transportation Center (GTC) of the Draft LAX Master Plan Addendum regarding security screening.

Page: 18, Sequence #12

- ◆ **Will the new ITC become a broad access to other mass transit such as buses and rapid buses?**

Response: The ITC would provide curbside for charter, regional, and other bus activity. Additional buses will be accommodated at the park-and-ride facility at the Aviation/Imperial Green Line station, with access to the ITC via a pedestrian walkway over Imperial Highway. LAWA will work with the LAC-MTA and other transit providers during the advanced planning stage of the ITC to accommodate their services.

Page: 18, Sequence #14

- ◆ **For those rental car agencies not included in the 10 consolidated will they be bused to the RAC for processing or will people go to the GTC and be transferred to the outlying car agencies from there?**

Response: Alternative D assumes that all car rental patrons of both on-airport and off-airport companies would travel from the CTA via the Automated People Mover to the RAC. Customers of off-airport rental car companies would than be shuttled to the individual private company. The RAC would include a passenger drop-off and pick-up curbside for servicing these off-airport rental car patrons.

Page: 18, Sequence #16

- ◆ **Will there be separate lines to each facility or will they all be in series? Will hotel and other stops also be included in the same line? How will security be enacted if people can get on and off at the various stops?**

Response: Please see Section 2.4, Automated People Mover - Alternative D of the Draft LAX Master Plan Addendum for a description of the APM system. Please see Figure 2.4-1 of the document, which depicted proposed APM stations. Please also see Topical Response TR-SEC-1 regarding security concerns related to the APM.

Page: 19, Sequence #2

- ◆ **Since the Jan 2001 document never specified Alt D will this document refer to that documentation in table format so that it is consolidated for Alt D review? Where is such a table?**

Response: The Draft LAX Master Plan and Draft LAX Master Plan Addendum documents will not be consolidated. However, documentation contained in the Draft EIS/EIR and the Supplement to the Draft EIS/EIR is consolidated in the Final EIS/EIR. Please see Table F3-1, Summary of Activity by Alternative - 2015 and Table F3-2, Summary of Facilities by Alternative - 2015 for a comparison in table format of the Master Plan alternatives.

Page: 21, Sequence #1

- ◆ **What accommodations for the additional traffic to the West Employee Parking Garage? What security controls will be in place? This structure would be a great launching site for attacking aircraft.**

Response: Please see Section 2.3.6, Employee Parking, of the Draft LAX Master Plan Addendum and Section 4.3.1, On-Airport Surface Transportation, regarding West Employee Parking Garage. Please see Response to Comment SPC00260-3 regarding security concerns on employee parking garage.

Page: 21, Sequence #2

- ◆ **The fuel farm is not shown as moving in other detailed drawings. Will it be too close to the new runways?**

Response: Please see Section 2.6.3 of the Draft LAX Master Plan Addendum describing modifications to the fuel farm. The fuel farm would not be too close to relocated Runway 6R/24L.

Page: 21, Sequence #3

- ◆ **The definition of Group VI airfield is not firm. When the separation distances are found to be inadequate in two years will the plan be modified to accommodate the new numbers? If it is so critical to the north side, why is it not done on the south side where the majority of cargo facilities are situated?**

Response: FAA has established separation standards for Group VI aircraft. Alternative D was designed using FAA's most recent separation standards for Group VI aircraft.

5. Responses to Comments from Dennis J. Schneider

Additional constraints exist on the south side complicating the ability to provide additional separation beyond the 800 feet designated in Alternative D without undesirable impacts to existing facilities. The difference in runway to taxiway separation between the north and south airfield would allow for NLA to hold perpendicular to the north runways without penetrating the runway OFZ. Although this will not be possible on the south side, the center parallel taxiway would provide improvements in airfield safety resulting in an expected decreased risk of runway incursions.

Page: 21, Sequence #4

- ◆ **Does the People Mover system preclude any other use of the MTA right of way along Aviation Blvd? This will be critical for future development of a mass transit system to support LA because this right of way from the South Bay all the way to Downtown LA.**

Response: The APM does not use the MTA alignment along Aviation Boulevard.

1. Planning Objectives

Page: 23, Sequence #1

- ◆ **Growth Master Plans for these two airports were previously written when the South Side Development plan was done in the late 80s/early 90s. Why are these not being implemented instead of redoing those plans? If the Alternative D is a result of comments to A, B, & C, why are these not deleted from the alternatives?**

Response: Airport master plans are typically updated every 5 to 10 years. While some of the physical improvements recommended in master plans of the late 80s/early 90s might still be relevant, other priorities and conditions have probably changed. For example, Palmdale's inability to sustain scheduled air service was not factored into the old projections, and changes in population growth patterns and air service patterns at other regional airports need to be factored in.

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

1.1 Policy and Planning Objectives

Page: 23, Sequence #3

- ◆ **If the community needs have been taken into consideration, why has the Manchester Square area been designated for airport use when it is currently residential and in Mar 2001 the LA City Council determined that it should be put in the Westchester/Playa del Rey Community Plan Update as a park because of the paucity of recreation open space in this area?**

Response: In the proposed Westchester/Playa del Rey Community Plan update, no change in the zoning or land use designation for Manchester Square is proposed. The City is proposing to add the following footnote to the Plan: "Area Under Study." Please see Topical Response TR-MP-3 regarding the use of Manchester Square and Subtopical Response TR-MP-3.6 in particular, which addresses changes to the General Plan and zoning designations of acquisition areas.

Page: 23, Sequence #5

- ◆ **The Mayor signed a no expansion pledge and this document expresses the intent to restrict present capacity. Why is it then saying that it plans to add new facilities as a number one priority.**

Response: Alternative D, Enhanced Safety and Security Plan, has been designed to serve a level of future (2015) airport activity comparable to that of the No Action/No Project Alternative, and will make the airport safer and more secure convenient and efficient. 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.

Page: 23, Sequence #7

- ◆ **Shouldn't safety of residential areas be at the same level as airport users?**

Response: Master Plan Goal 2 is to ensure the safety of all airport users. Included in Master Plan Goal 5 is the protection of the surrounding neighborhoods.

Page: 23, Sequence #9

- ◆ **Efficient operation? How will baggage movements be accomplished? This critical action is not firmed up at all. Studies are being released to state that the economic benefits are NEUTRAL for Alternative D. Studies to determine regional economic benefits should be done to determine if equivalent expansion/development at locals other than LAX is more rewarding. This study should include secondary impacts such as lost efficiencies due to exacerbating LAX area congestion and increase pollution resulting in health and social welfare impacts.**

Response: Curbside check-in facilities would be available at the GTC for those passengers wishing to check-in at that location. In additional baggage carts will be allowed upon the APM system.

The Southern California Association of Governments (SCAG) Economic Development staff makes available the vast economic and demographic data available for the SCAG region, counties, subregions, and cities. Please refer to SCAG's report, The State of the Region 2003, released in February 5, 2004. Also refer to the 2004 Draft Regional Transportation Plan (RTP) for information on the regional economy, aviation and the other transportation modes, environment, and environmental justice. Both of these studies are available on SCAG's website at <http://www.scag.ca.gov>. Please also see Section 4.4.1 of the Final EIS/EIR regarding employment and economic output for Alternative D.

Page: 23, Sequence #11

- ◆ **Use of regional highways is another euphemism for all of the major streets through the communities around LAX. In Westchester-Playa del Rey there is no more room to expand these streets without removing homes or moving them far too close to homes. Additional manipulation of signals to foster flow is also limited as the egresses from the residential areas has already limited the number of autos able to leave and pedestrians to safety cross streets.**

Response: Comment noted. Please see Topical Response TR-ST-4 regarding airport area surface traffic concerns.

Page: 25, Sequence #1 and #2

- ◆ **The Master Plans already exist for Ontario and Palmdale. Why were these never implemented? Why, for instance, is a top post still existing to recruit business for LAX instead of placing even greater emphasis on other regional airport**

Response: Master plan updates for both Ontario and Palmdale are currently underway. The master plans will recommend the needed improvements to meet the projected demand for both passengers and cargo. For additional information, please see Topical Response TR-RC-1 regarding the LAX Master Plan role in the regional approach to meeting demand.

Alternative D, Enhanced Safety and Security Plan, has been designed to serve a level future (2015) airport activity comparable to that of the No Action/No Project Alternative, and will make the airport safer and more secure, convenient and efficient. 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.

5. Responses to Comments from Dennis J. Schneider

1.2 Facility Constraints

Page: 25, Sequence #2

- ◆ **Master Plans already exist for Ontario and Palmdale. Why were these never implemented? Why, for instance, is a top post still existing to recruit business for LAX instead of placing even greater emphasis on other regional airports?**

Response: Please see the responses to the comments pertaining to Page: 23, Sequence #1 and Page: 25, Sequence # 1 and #2 regarding the master plans for Ontario and Palmdale. 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.

Page: 26, Sequence #4

- ◆ **Page 1-4 has an incomplete sentence indicating the constrained activity profiles are somewhere in Chapter V of the LAX Master Plan Draft.**

Response: As indicated on pages 1-4 and 1-5 of the Draft LAX Master Plan Addendum, the constrained activity profiles for Alternatives A, B, and C were discussed in Chapter V, Concept Development, of the Draft LAX Master Plan in Section 3.3.2, Final Iteration Constrained Activity.

Page: 26, Sequence #6

- ◆ **The footnote stating a 98 MAP estimate for Alt A or B states that it assumes voluntary air service adjustments such as reducing the number of flights to LAX.**

Response: Comment noted.

Page: 27, Sequence #2

- ◆ **This basic premise of limiting Alt D via gates indicates an assumption of specific numbers and types of gates. This addendum does not have this detail and in LAX working Group meeting LAWA officials were unable to define how gates were to be modified.**

Response: Detailed information about the Alternative D aircraft gates was described in Section 2.2.7 of the Draft LAX Master Plan Addendum, Aircraft Gates. Figure 2.2-4 in Chapter 2 of the Draft LAX Master Plan Addendum, 2015 Alternative D Gate Layout and Utilization is a detailed illustration of each aircraft gate proposed under Master Plan Alternative D.

Page: 29, Sequence #1

- ◆ **Figure 1.2-1 graphs Alternative Capacity Constraints. Where is the back up materials listing the assumptions?**

Response: Detailed information regarding various build alternatives and their forecast capacities can be found in the Draft EIS/EIR, the Draft LAX Master Plan, the Supplement to the Draft EIS/EIR and the Draft LAX Master Plan Addendum.

Page: 30, Sequence #2

- ◆ **It is commendable that the space utilization rate takes improved modernization into consideration. Has the ground trucking limitation also been considered? What is that limitation?**

Response: It is not clear what the commentor is referring to by ground trucking limitation. Please see Sections 4.3.1, On-Airport Surface Transportation and 4.3.2, Off-Airport Surface Transportation in the Supplement to the Draft EIS/EIR.

1.3 Regional Impact of Alternative D

Page: 36, Sequence #1

- ◆ **Note the previous section 1.3.2 states the 2015 regional demand as 146.5 while Table 1.3-3 shows the 2015 demand as 167 with 30 MAP as potential unmet...**

Response: Please see Topical Response TR-MP-2 regarding the SCAG Regional Transportation Plan.

Page: 36, Sequence #3

- ◆ **SCAG forecast of 2015 is 10 years beyond the planning horizon of the LAX Master Plan? It will take almost that long to finish this LAX project. Doesn't this plan look that far into the future?**

Response: As described in Figure S3-15 in the Supplement to the Draft EIS/EIR, 2015 Conceptual Summary Schedule, Alternative D could be constructed by 2015. As described in the Draft LAX Master Plan, the LAX Master Plan is a plan for the LAX through 2015.

Page: 37, Sequence #2

- ◆ **With 12 years in the future why can't emphasis to create this infrastructure be done?**

Response: The cost and environmental consequences involved in upgrading other facilities to accommodate extensive international passenger and cargo volume would likely be prohibitive.

Page: 37, Sequence #4

- ◆ **Stating that regional airport share matches use demonstrates market balance does not take into consideration disparity in ticket pricing and flight availability. With incentive pricing equal to LAX ticket costs many people living in other areas of the LA region would use their local airports.**

Response: Comment noted. Operations were accounted for in Table 1.3-4 accounting for flight availability.

Page: 39, Sequence #1

- ◆ **Figure 1.3-2 Forecasts demand based on 1997 information. The 2000 Census showed marked changes and high growth in outlying areas. If this is to be an accurate representation it should use more current information than that of almost 6 years ago.**

Response: Please see Appendix A of the Draft LAX Mater Plan Addendum regarding the Baseline Update.

Page: 40, Sequence #1

- ◆ **For 60 minute travel distance assumptions was the "present" SCAG estimate of 36 mph on fwy assumption used or the 18 mph for 2015? Similarly, what assumptions where used for economic AND population growth for travellers?**

Response: Neither. Please see Response to Comment AL00018-110.

Page: 41, Sequence #1

- ◆ **Data Source and dates covered? The chart says it was prepared in 2002, but what year data is this?**

Response: Data Sources: US DOT and OAG; Dates: 2000 and August 2002;

Page: 43, Sequence #2

- ◆ **Concentration of air service at a primary airport may be true in medium sized markets, but other major cities such NY, Chicago, or Washington DC have multiple airports served.**

Response: Comment noted. However, even in these multiple airport regions the airlines tend to concentrate on one of the airports in the region. In Chicago, United hubs at ORD while they do not

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serve MDW. In Washington D.C., United hubs at IAD and offers limited service out of BWI and National. In San Francisco, United hubs at SFO while offering limited service out of OAK and SJC. This is an example of how airlines typically concentrate the majority of their efforts and a single primary airport though they may offer some service to other regional airports. This trend is even more pronounced with regard to international service.

Page: 43, Sequence #3

- ◆ **Domestic vs Int'l with LAX having a high O&D rate may not bear the assumptions out.**

Response: Though LAX has a high O&D rate, it plays a very important role in domestic to international connections for trans-Pacific travel to Asia.

Page: 44, Sequence #2

- ◆ **Recent LA County studies show that Palmdale has a sizeable market that warrants air service.**

Response: Comment noted.

Page: 49, Sequence #1

- ◆ **The argument that Gateways are becoming more important because their % of passengers is increasing is spurious. Explain why this same data can not also be explained by the deregulation efforts to concentrate air traffic into specific hubs.**

Response: Please see Section 1.3.5 of the Draft LAX Master Plan Addendum, which described various influences on the role of international gateways.

Page: 50, Sequence #1

- ◆ **What documentation exists to demonstrate this strong statement?**

Response: Please see Chapter I, Section 3.2.2, Regional Airport Facilities, of the Draft LAX Master Plan.

2. Alternative D Development and Refinement

Page: 52, Sequence #2

- ◆ **The limitation of growth at LAX is an impetus to growth in other regional airport ONLY outside of those owned/operated by LAWA.**

Response: As described in Chapter 2 of the Draft LAX Master Plan Addendum, the Alternative D design would encourage other airports in the region to develop facilities to accommodate regional demand beyond the level served at LAX.

Constraining LAX's ability to accommodate the demand for air travel in the Southern California region would likely create stronger demand for increased levels of air service from all other air carrier airports in the region regardless of their ownership or operator.

Page: 53, Sequence #1

- ◆ **Why do Explosive Detection System (EDS) baggage screening in the CTA instead of at the initial point of check in? Isn't the objective of closing off the CTA to preclude bombs inside the CTA?**

Response: As described in Chapter 2.2.8 of the Draft LAX Master Plan Addendum, 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. Further, Chapter 2.2.8 also stated that the GTC would be designed to accommodate second level security screening at any time.

Page: 53, Sequence #2

- ◆ **How would emergency facilities be easily accessible to both LAX and the GTC since they are separated by uncontrolled public space?**

Response: By LAX it is assumed the commentor is referring to the CTA. The CTA and GTC would both be easily accessible to emergency response vehicles and their associated teams via the existing and proposed road network. Though the CTA would be closed to private vehicle traffic it would still be accessible by some vehicles such as the FlyAway buses and emergency vehicles. Emergency response teams may use the public space and surface streets in the airport vicinity just as they would today. The public space between the GTC, ITC and other parts of LAX would not differ much from public space adjacent to LAX today.

Page: 53, Sequence #3

- ◆ **Have any incursions occurred on this side in the past five years? What Grades -- ie A, B, C D? What percentage of these would NOT have been precluded by the separation -- ie operator error?**

Response: Please see Response to Comment SPC00275-28. It is not possible to calculate the number of runway incursions that would not have occurred had the airfield been designed differently without being purely speculative.

Page: 53, Sequence #5

- ◆ **How can airfield mods improve level of service without adding capacity? If the purpose on the north side is to support NLA how is it explained that the north runways are insufficient for fully loaded takeoffs?**

Response: Airfield improvements can improve level of service without adding capacity because the airfield is a system of runways and taxiways. Alternative D does not add any additional runways. Therefore, the total hourly throughput capacity would remain unchanged. The proposed airfield modifications would improve safety and efficiency for taxiing aircraft thereby improving level of service.

As described in the Draft LAX Master Plan Addendum, the purpose of modifying the north airfield is to improve safety and efficiency. However, the modifications would be designed to safely accommodate the Airbus A380, which is scheduled to enter commercial service in 2006. Airbus has stated that the A380 would require 10,000 feet of runway at MTOW for departure operations. Runway 6R/24L would have 11,700 feet of pavement length and a Take Off Distance Allowed of 12,000 feet with the application of Declared Distances and a 300 foot clearway west of the runway end.

Page: 53, Sequence #7

- ◆ **Although the RAC will have many of the rental agencies in one place, won't some still be "off site?" There are better ways to connect the Green Line to the CTA wherever it is placed.**

Response: Yes, it is anticipated that some rental car companies would remain off site and would bus their customers from the GTC to their respective facilities. Please see Response to Comment SPHL00022-2 regarding the most feasible alignment of the Green Line.

Figure: 56, Sequence #1

- ◆ **Alt D calls for high density mixed use called for west of Sepulveda between La Tijera and Westchester parkway adjacent to residential areas.**

Response: Comment noted. Please see Chapter 2.9, Collateral Development, in the Draft LAX Master Plan Addendum for information about the LAX Northside Plan.

5. Responses to Comments from Dennis J. Schneider

2.1 Airside Facilities - Alternative D

Page: 57, Sequence #1

- ◆ **Group VI runway spacing criteria have not been finalized by the FAA. Will the criteria call for a change in these runways in another 5 years?**

Response: USDOT FAA Advisory Circular 150/5300-13 defines separation standards for Group VI runways and taxiways.

Page: 57, Sequence #3

- ◆ **WOW another runway change potentially done NOT in the present budget estimate! Will it be 50' north or south?**

Response: Life cycle runway reconstruction would be considered airport maintenance costs and are planned for by LAWA. Repaving north or south, as the commenter suggests, would alter the location of the runway centerline, and therefore separations. If a given runway were widened by 50 feet, 25 feet of pavement would likely be added to each side thereby maintaining the existing runway centerline and separations.

Page: 58, Sequence #1

- ◆ **This graphic doesn't show taxiway E17. Where is this?**

Response: It is unclear which graphic the commenter is referring to. Taxiway E17 is located at the westernmost end of Runways 6R/24L and 6L/24R and is perpendicular to the aforementioned runways.

Page: 58, Sequence #2

- ◆ **Where is taxilane D? Only 100' Group V? Why not make it Grp VI modified at least so it doesn't have to be done twice?**

Response: Taxilane D is adjacent to the proposed north linear concourse between the CTA and the east end of Taxiway E. As described in the Draft LAX Master Plan Addendum on Page 2-10, Taxilane D would provide modified Group VI separation for taxiing aircraft approaching the departure ends of Runway 6R/24L.

Page: 58, Sequence #3

- ◆ **Would removal of this service road complex make parking VIP aircraft on the north impractical?**

Response: No.

Page: 59, Sequence #2

- ◆ **This statement differs from verbal briefings in that we were told all NLA operations are on the north side.**

Response: Comment noted.

Page: 59, Sequence #4

- ◆ **They may be installing an end around taxiway on the south complex!**

Response: Comment noted. An end around taxiway on the south airfield is not proposed as part of LAX Master Plan Alternative D. However, this does not preclude the potential for future construction of an end around taxiway on the south airfield.

Page: 62, Sequence #1

- ◆ **What is RVR 06 and RVR 18 visibility?**

Response: RVR is an acronym for Runway Visual Range. 06 and 18 are aviation speak for 600 feet and 1,800 feet. RVR 06 would mean a Runway Visual Range of 600 feet or a pilot could theoretically see 600 feet down the runway.

Page: 62, Sequence #2

- ◆ **What are the "declared distances" to be used to make use of the constrained site? Highlighted below are the four values. Is this used to define how near buildings may be placed? If so, what are the values?**

Response: See Section 2.1.4 of the Draft LAX Master Plan Addendum for a description of Declared Distances and their purpose. No, Declared Distances are not related to buildings.

Page: 63, Sequence #3

- ◆ **Does this "clearway " define the area for 25L where the cargo buildings are along Aviation and Century? What values are acceptable?**

Response: No.

Page: 64, Sequence #1

- ◆ **Does the TODA of 500' on west and 1000' on east make 24L adequate for NLA? The "apparent" runway would be equivalent to 12,000'**

Response: TODA, with implementation of the Alternative D Master Plan, could potentially be 12,000 feet for Runway 24L. TODA of 12,000 feet for Runway 24L would only be available if a 300 foot clearway is present off of the west end of the runway.

Page: 64, Sequence #2

- ◆ **The statement is that there is a 1000' clearway on the west end for 25L but isn't that blocked by the new employee parking structure?**

Response: No, the parking structure would not be located adjacent to the west ends of the south runways.

2.2 Terminal/Passenger Processing Facilities - Alternative D

Page: 66, Sequence #1

- ◆ **Passenger convenience seems to be enabling the passenger to exercise by toting all luggage from the GTC to the CTA.**

Response: Curbside check-in facilities would be available at the GTC for those passengers wishing to check-in at that location. In addition baggage carts would be allowed onto the APM system.

Page: 67, Sequence #1

- ◆ **What is an FIS facility?**

Response: A Federal Inspection Services (FIS) facility is located at all terminals, which accommodate international passengers. They include Customs, Immigration, Public Health, and Agricultural inspections facilities as well as necessary office and support services.

Page: 67, Sequence #4

- ◆ **What are the new baggage functions in the new terminal facilities?**

Response: New baggage systems in the main terminals would include 100 percent EDS baggage screening facilities, including a baggage sortation and distribution system for each individual airline or airline alliance. In addition new baggage claim devices would be provided for the passengers to claim their luggage.

5. Responses to Comments from Dennis J. Schneider

Page: 67, Sequence #6

- ◆ **A baggage tunnel is to be built despite statements to the contrary! Will luggage check in be at the GTC or not?**

Response: Curbside check-in facilities would be included in the GTC. A tunnel was investigated for the delivery of baggage from the GTC to the CTA. Another option investigated, included the dedication of one car of the APM system to transport baggage. The advanced planning process will examine this issue in greater detail.

Page: 67, Sequence #8

- ◆ **How is compartmentalization accomplished? The illustrations show open areas. Where is the evacuation plan showing where passengers will be evacuated will be evacuated to the central terminal area?**

Response: The open areas shown on Figures 2.2-2 and 2.2-3 were illustrations of the APM station, ticketing and baggage claim areas of the CTA. These areas are prior to the security screening that takes place before ticketed passengers go out to the concourse and holdroom area. For security breaches, the airside secure area would have security doors placed in locations, which would allow concourses to be isolated and searched, so that operations could continue in other areas of the terminal. The evacuation of the terminal areas would be out onto the existing roadway system. For passengers on the concourses in the event of an emergency they would be evacuated onto the apron area. Complete evacuation plans would be developed as a part of the advanced planning process.

Page: 73, Sequence #1

- ◆ **Explain why the number of gate types handling larger aircraft does not increase capacity to handle passengers and cargo. Since airline space is being increased about 60% explain how it will limit to existing capacity. What are the present gate configurations? This is based upon 1996 data what about all of the upgrades implemented since?**

Response: Larger aircraft can accommodate additional passengers and cargo however Table 2.2-1 provided a breakdown of the number of existing gates by aircraft type and the proposed number of gates. There is a reduction in the number of large gates, widebody and larger from 76 in 1996 to 58 in 2015. The amount of terminal area is projected to increase from 3,997,000 to 6,555,000 to provide additional amenities for the passengers and to improve deficiencies within the existing terminal buildings. The existing buildings are currently inadequate to handle the existing passenger activity with an acceptable level of service. Any changes between the 1996 configuration and the year 2000 were discussed in Appendix A, Existing Baseline Comparison Issues 1996 to 2000.

Page: 75, Sequence #1

- ◆ **Despite the call for removal of the west pad gates, please explain why these gates cannot be reestablished. If these west pad gates are used to segregate VIP aircraft where will these aircraft be parked in the new alignment?**

Response: The Master Plan proposes a limit of 153 contact gates. The area formally used for scheduled commercial operations would be used for remote aircraft parking only. No busing operation would occur for scheduled or charter operations. VIP and operations that may be required for security reasons may continue to operate at the west pad location.

Page: 75, Sequence #2

- ◆ **Why did gate position mix change between 1996 and 2002 to reduce the group V and increase the Group III narrow body aircraft if the industry is going toward larger aircraft? What area of the airport was downgraded?**

Response: Table 2.2-2 was revised to reflect the corrected data. There were minor adjustments to the fleet mix at the airport due to the addition of the International Arrivals Facilities constructed at Terminals 4 and 7. No area of the airport was downgraded.

Page: 77, Sequence #1

- ◆ **If most of the commuter gates are added on the back of the western terminals will Southwest be moved there? If commuter flights are more frequent, won't moving these gates to the far end of the runways make them less accessible?**

Response: No, Southwest would probably be relocated to the south side of the existing CTA where the current taxiway infrastructure between concourses is more compatible with narrowbody aircraft fleets. The commuter aircraft fleet is typically affiliated with a major carrier to provide a certain amount of feeder passengers for connections to other cities. The average distance from the west satellite to the end of the runway is substantially less than the distance from the existing United commuter facility to the north airfield complex

Page: 78, Sequence #2

- ◆ **The statement is made that the GTC will be designated for "second level" screening. How will this be accomplished since there is presently no way to ensure fully controlled delivery of either passengers OR baggage from the GTC and the CTA. Similarly, explain how the ITC will be modified to provide the same level 2 screening. If this capability is "designed in," why isn't it utilized?**

Response: If second level screening were to occur at the GTC it would also be required to occur at the ITC and the consolidated rental car center. The facilities could be designed in a manner, which would allow that to occur. This would require that all bags be screened or checked -in prior to accessing the APM system. If second level screening were to occur in these facilities a policy decision would need to be made regarding meeters and greeters at the airport. They could either be prohibited to ride the people mover to the CTA or they would be required to pass through security along with passengers which would increase the demand, size and cost of the security screening station.

Page: 78, Sequence #3

- ◆ **If re-checked bags are made available at the GTC how will they be controlled? How will they be transported in a fully controlled manner along with non-contiguous site?**

Response: The bags would be controlled in a positive claim area where the passenger would be required to provide a claim ticket prior to exiting the claim area. The same transport system that brings the baggage from the GTC to the CTA would be utilized to move baggage from the CTA back to the GTC.

Page: 78, Sequence #4

- ◆ **Why is the CNG station being placed in an area near all of the passengers?**

Response: The CNG facility is being placed in the northwest corner of the GTC site on the opposite side of the parking garage from the APM platform. This facility must be placed in a location where it can be accessed from public streets. By placing it in close proximity to the GTC it will reduce the vehicle miles traveled (VMT) for commercial vehicles reducing the overall environmental and traffic impacts.

Page: 79, Sequence #1

- ◆ **Apart from moving the potential for a car bomb impacting checkin gates, how will a similar multi-level structure at Manchester Square protect all of the people who are checking in?**

Response: It is envisioned that the GTC would be a transitional place for passengers and meeters and greeters to move from their ground transportation mode to the APM system in a minimum of time. This would significantly reduce the occupancy of the GTC piers and the number of people in close proximity to the roadway system than what currently exists in the CTA. In addition the new facilities can be built utilizing newer technologies in materials and building configurations to minimize the impacts of blast.

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Page: 79, Sequence #3

- ◆ **How will this transport be done without baggage tunnels that are very questionable in cost and safety?**

Response: Please see the response to page 67, sequence #6.

Page: 79, Sequence #4

- ◆ **If baggage is being checked for explosives in the CTA but is being checked by skycaps in the GTC, how will bag matching be accomplished? Why do two checks of baggage instead of one?**

Response: Bag matching would be accomplished prior to going through second level screening in the CTA. The skycaps only check the baggage in and place a baggage tag on it, they do not perform the security checks.

Page: 80, Sequence #2

- ◆ **Will a tunnel be used or will passengers be given carts to carry their luggage on the automated people mover? How much help would be available to people with their luggage? What about people with children, elderly, or disabled?**

Response: The Master Plan investigated various options for the movement of baggage from the GTC to the CTA. The baggage tunnel was one of those options. In all cases passengers would be allowed to take baggage carts on the APM system. All facilities will be designed and constructed in accordance with the requirements of the Americans with Disabilities Act (ADA). The Draft LAX Master Plan and Draft LAX Master Plan Addendum are program level documents. It is acknowledged that certain facility improvements and/or issues may require further definition during the advanced planning stage in a more specific manner, as necessary and appropriate.

Page: 80, Sequence #3

- ◆ **Does this mean that people will retrieve their luggage in the CTA and then recheck their bags to the GTC? How will this massive exercise be accomplished?**

Response: People who wish to recheck the luggage for retrieval at the GTC would be able to do so. Passengers would be permitted to carry their baggage or utilize baggage carts on the APM. Please see response for sequence #3, page 78.

Page: 81, Sequence #1

- ◆ **One of the arguments for the GTC was that there would be rapid movement of people out of the area. If seating and reception areas are created for meeters and greeters where is this rapid movement going to be facilitated?**

Response: The primary meeters greeter area for the airport would be in the main terminal areas of the CTA. The CTA would provide full passenger and meeters/greeter amenities and services. The meeters greeter area of the GTC would be a very limited space to provide some seating areas and restroom facilities. It is anticipated there would be no concessions amenities located in the GTC.

Page: 82, Sequence #1

- ◆ **How many languages will the kiosks be capable of handling? Will there be anyone in this area or will it be fully automated?**

Response: There would be third party personnel who would provide curbside check-in facilities for all carriers at the airport. It is up to the individual airlines to decide whether to staff the GTC with support personnel. It is envisioned that the kiosks would be capable of providing information in several languages. With the rapidly changing array of technological information sources, it is anticipated that self-check kiosks would continue to evolve and provide a greater range of capabilities than they possess today.

Page: 83, Sequence #1

- ◆ **How will entrance from the North or West be accomplished? Will all traffic be moved to the 405 Freeway and if so, will the direction signs stating, "LAX next 5 Exits" be removed?**

Response: Please see Section 2.3, Ground Access and Parking Alternative D for a description of the access points for the GTC. The extent of signage and any required modifications to it have not yet been addressed.

Page: 85, Sequence #1

- ◆ **If charter bus access is set up in this facility, will public transportation buses also be in this facility? If they are, what holding facilities will there be to aid travellers? How will baggage be handled? What provisions for people traveling with children, elderly, or disabled?**

Response: Please see the response to page 87 sequence # 1.

Page: 85, Sequence #2

- ◆ **What levels of traffic increase are anticipated on Aviation Blvd., the eastern boundary? How will directions to access to this area be facilitated since it is not near the freeway? Will the traffic be increased along La Tijera, how much? or via Manchester Blvd, how much?**

Response: See Section 4.3.2 of the Supplement to the Draft EIS/EIR, Off-Airport Surface Transportation, for traffic volumes.

Page: 86, Sequence #1

- ◆ **How close to the runway clear zone area will this 4 story rental facility be placed?**

Response: The Master Plan would locate the Consolidated Rental Car Facility outside of the runway protection zone. This location and height would have no effect on the operation of the existing or future runway location.

Page: 86, Sequence #3

- ◆ **This facility will be for the "on-site" rental agencies, how will it integrate with the "off-site" ones? What % of agencies will be on vs off site? What % of rental cars will be on vs off site?**

Response: Off-site airport car rental companies would need to provide shuttle buses to pick up their customers at the consolidated rental car center. Until the Consolidated Rental Car Facility is closer to completion it is unknown how many rental car companies would choose to remain off-site and by extension how many cars.

Page: 87, Sequence #1

- ◆ **If the Bus Plaza is being left at Lot C how will bus riders move from the bus to the trains?**

Response: The bus plaza in Lot C would be relocated. LAWA will work with the MTA to determine the best location and level of facilities provided.

Page: 87, Sequence #2

- ◆ **As Lot C is in the Westchester-Playa del Rey Community Plan area, will the 15% landscaping meet it's requirement for this application? Will any of the area require rezoning? What are they and how much?**

Response: The Lot C area would need to meet the requirements and codes for the area which has jurisdiction over its use and development. No required zoning changes would be needed since the area currently is occupied by airport-operated parking lots and retail car rental agencies.

Page: 89, Sequence #1

- ◆ **The views of the ITC show very large open spaces and long, open areas. Will there be any moving sidewalks or other support for people who can't walk long distances? The illustration is populated will a small number of people. What numbers are anticipated to arrive at one**

5. Responses to Comments from Dennis J. Schneider

time? If, for instance 5 buses and a train arrive at the same time will people be able to drive carts holding luggage? I note that there are no carts for luggage visible. Where and how will they be disbursed and controlled?

Response: Figure 2.2-8 is an artist rendering of the conceptual facility. The advanced planning process will investigate in further detail the size and configuration of the ITC. Generally accepted planning standards will be followed in terms of determining the need for moving walkways. Luggage carts would be allowed on the trains and there would be multiple points in the ITC to access and acquire a cart for use. The ridership numbers and capacity numbers for the APM system were published in the Draft EIR/EIS. The anticipated headway time between trains is approximately two minutes, in the event that a train was full, another train would be available within two minutes.

2.3 Ground Access and Parking - Alternative D

Page: 91, Sequence #1

- ◆ **The illustration shows primary access off the 105 freeway; how will this increased traffic be handled? This same 105 freeway stretch is expected to handle the increased truck traffic from an increase of 1M-2M annual tons of cargo. How will this be integrated with the auto traffic?**

Response: The proposed on-airport roadways would be sized to accommodate the estimated traffic volumes exiting the I-105 Freeway to access the ITC and GTC facilities. Few trucks are expected to use the proposed interchange, since it is primarily intended to service passenger facilities. Please also see Topical Response TR-ST-4 regarding airport area surface traffic concerns and Topical Response TR-ST-1 regarding cargo truck traffic.

Page: 93, Sequence #1

- ◆ **Entry points to the APM are not yet defined. What are they and how will the non-LAX owned parking be accommodated? What about hotels and other local business access? Why will the APM not provide interference on its N-S path for the south runway complex as it was the stated reason why the Green Line was not extended. How will employees get to the West Parking garage and then to LAX functions? How will this consolidated lot be used to deliver employees when the Northside Project is implemented?**

Response: The APM would have stations at the ITC, RAC and GTC. All commercial vehicles including off-airport parking providers and hotel/motel shuttles would drop off and pick up passengers at the GTC curbsides.

Please see Response to Comment SPHO00004-6 regarding connecting the Green Line to the CTA. Also, please see Response to Comment SPHL00022-2 regarding the most feasible alignment of the Green Line.

Please see Section 2.3.6 of the Draft LAX Master Plan Addendum regarding employee parking. It is not expected that future employees of LAX Northside facilities would park in the West Employee Parking Garage.

Page: 94, Sequence #1

- ◆ **The orange, dedicated road appears to have an access from Century east of Aviation. There are several other yellow streets (assumed to be the existing ones) that do not show any ramping to the dedicated streets. Will these be underpasses? What is done to preclude these streets being used to interrupt the dedicated ones by a truck bomb?**

Response: 104th Street would be closed east of Aviation Boulevard, and its traffic rerouted to 102nd Street by means of a new north/south roadway just east of the proposed airport roadways. 102nd Street would pass under the proposed on-airport roadway leading to and from the GTC. Also please see Response to Comment SPC00165-10 regarding vehicle access to the GTC. Please see Topical Response TR-SEC-1 regarding security.

Page: 94, Sequence #2

- ◆ **The verbally briefed Lennox Blvd. connections are not shown. Does this mean that they will NOT be used? If they are, how will it be integrated into this. The La Cienega access is shown**

below what is now Lot D. How will the increased levels of traffic in this area be handled since many people will get off at La Tijera, La Cienga, and Manchester to take advantage of the La Cienega entrance? How will traffic from these arrive?

Response: The Lennox Boulevard interchange at the I-405 Freeway is a proposed improvement in the preferred traffic mitigation plan for Alternative D. Please also see Response to Comment SPHF00047-2 regarding Lennox Boulevard and SPHSP00006-4 regarding overall airport access.

Page: 95, Sequence #1

- ◆ **Employees would be required to leave their building and go a block or two to escort each car?!! Has this increased loss of work time been accounted for? How much is this anticipated to cost?**

Response: The Draft LAX Master Plan Addendum states "Employees would be required to escort their visitors." This was not meant to imply that LAWA administration employees would be escorting their visitors beginning at the visitors' parking lot. Visitors to the LAWA administration building would have to travel past a security checkpoint in order to access the parking lot. Visitors would be required to walk to the administration building, under video surveillance, and check in with a security guard in the lobby of the building. Employees would escort their visitor beginning from that point.

Page: 95, Sequence #2

- ◆ **What about VIP Limos, etc for entry to the CTA? How will these be accommodated? Will VIPs be required to access via the GTC whereas Flyaway buses will go into the CTA? Will Flyaway buses be diverted to the ITA so that only the emergency and cleared vehicles will enter the CTA roadway system?**

Response: Limousines would be required to drop off their passengers at the GTC. From there, passengers would travel on the Automated People Mover to the CTA.

FlyAway buses would be able to access the CTA roadways directly to drop-off and pick-up passengers at the terminal curbsides.

Page: 96, Sequence #2

- ◆ **If commercial vehicles will enter via Arbor Vitae and Aviation how will they get to the GTC? Is there a planned off ramp of the 405 at Arbor Vitae or will traffic get off at La Tijera and Manchester? The present holding area is quite large. What is the comparison of present to planned areas?**

Response: Commercial vehicles which are accessing the Commercial Vehicle Holding Area prior to picking up a passenger at the GTC would enter this facility from eastbound Arbor Vitae Street east of Aviation Boulevard. From there, commercial vehicles would use the GTC roadways to access the various GTC curbsides. Commercial vehicles would use the main GTC entrances to drop off a passenger at the GTC.

The Southern California Association of Governments' Regional Transportation Plan includes a planned northbound off-ramp from the I-405 Freeway at Arbor Vitae Street. However, this project is unrelated to the LAX Master Plan. The proposed Lennox Boulevard interchange would be the most convenient exit for drivers on the I-405 Freeway to use to access the GTC or ITC, as the roadways would lead directly to these facilities.

The commercial vehicle holding area for Alternative D is planned to accommodate future demand.

Page: 96, Sequence #4

- ◆ **During "rush hours" this is one of the few N-S roads. It already backs up significantly. How will all of the larger commercial vehicles be accommodated? Aviation is extensively used by cargo trucks at present. How and where will these truck (and the many additional ones) be diverted?**

Response: Alternative D proposes to add an additional lane of traffic in each direction on Aviation Boulevard between Arbor Vitae Street and Imperial Highway. Additional traffic mitigations at

5. Responses to Comments from Dennis J. Schneider

individual intersections along Aviation Boulevard are also proposed. There are no plans to "divert" truck traffic from using this street.

Page: 97, Sequence #1

- ◆ **What direction is the view? If this is west, then I assume the ITA is on the left and GTC on the right. The distances shown on the illustration is much greater. How will the parking be invoked to allow short travel distances? How will baggage be handled to get from the Green Line to the ITC and then, to the APM?**

Response: This view is an artistic illustration of what the facilities would look like. This actual drawing is not to scale. Please see Section 2.3.5, Public Parking, regarding parking. Passengers would handle their own baggage from the Green Line to the APM Station at the ITC.

Page: 98, Sequence #1

- ◆ **All rental car companies will be located here? Which will and which will not? What percentage of cars NOT covered by this facility.**

Response: It is estimated that approximately 8 percent of all rental car patrons would use rental car companies not located at the RAC.

Further coordination with the rental car companies will need to be conducted before the exact number of rental car companies utilizing the facility is determined.

Page: 98, Sequence #3

- ◆ **If the access to this facility is Airport and 98th then is it anticipated that Arbor Vitae will become a main access road? Will most traffic travel from the north along Airport from La Tijera and/or Manchester? Please provide detail flow information.**

Response: Drivers could use a variety of arterial streets to access the RAC facility, including La Tijera Boulevard, Airport Boulevard, Century Boulevard and Westchester Parkway/Arbor Vitae Street. A series of traffic mitigation improvements are proposed in conjunction with the implementation of the RAC facility.

The Draft LAX Master Plan and Draft LAX Master Plan Addendum are program level documents. It is acknowledged that certain facility improvements and/or issues may require further definition during the advanced planning stage in a more specific manner, as necessary and appropriate.

Page: 98, Sequence #4

- ◆ **Westbound 98th would require an exit on Sepulveda. Is it the plan to divert all rental car traffic via La Tijera and Sepulveda? How much traffic is involved and how will it be accommodated?**

Response: Westbound 98th Street would have access to Sepulveda Boulevard northbound. There are no plans to divert all rental car traffic via La Tijera Boulevard and Sepulveda Boulevard. Specific driveway access and egress for the RAC facility would be determined during the advanced planning stage of the project.

Estimated traffic volumes to the RAC facility during the AM, PM, and airport peak hours are presented in Table S18, On-Airport Travel Classification 2015 Alternative D, Mitigated of Technical Report S-2a of the Supplement to the Draft EIS/EIR. The traffic mitigations associated with the RAC facility are presented in Table F4.3.2-30 of the Final EIS/EIR.

Page: 98, Sequence #5

- ◆ **General cargo traffic notation: How will this cargo traffic get out of the area? Will it all be directed to the 105 Fwy? What about N-S destinations?**

Response: Cargo is expected to primarily use the I-105 Freeway, Imperial Highway and Century Boulevard. North and south points may be accessed via the I-405 Freeway.

Page: 99, Sequence #2

- ◆ **Transit users access the CTA from the ITC via APM. What accommodations for baggage?**

Response: Presently no baggage handling systems are proposed between the ITC and CTA. Passengers would be required to carry their baggage with them to the CTA.

Page: 99, Sequence #4

- ◆ **If the Green Line is the Rapid Bus from Downtown, why not send it to the Bus Terminals, or better yet, put all of them in one place!**

Response: It is unclear as to exactly which Bus Terminals the commentor is referring. The MTA does have plans to use their right-of-way along the west side of Aviation Boulevard for a potential rapid bus line. It is likely that the MTA would strive to achieve a connection between the rapid bus line and the Green Line. As with the Green Line, LAWA will work with the MTA to achieve an appropriate interface between the rapid bus and the airport facilities to easily accommodate patrons. Consequently, the sentence the commentor is referring to in the Draft LAX Master Plan Addendum is to be revised and submitted as errata in the Final EIS/EIR. The sentence will read as follows:

"The Green Line station adjacent to the ITC would also serve as the destination for airport bound passengers who would be using the future MTA proposed transit improvements from downtown Los Angeles."

Page: 100, Sequence #1

- ◆ **This drawing of the RAC shows the center line of the runways. How far off center must the area be clear since the RAC is to be several stories high?**

Response: The Draft LAX Master Plan and the Draft LAX Master Plan Addendum are program level documents. It is acknowledged that certain facility improvements and/or issues may require further definition during the advanced planning stage in a more specific manner, as necessary and appropriate.

Appropriate airspace analyses will be conducted to ensure that the facility meets FAA guidelines before the final location and height is determined.

The traffic impact study and the traffic mitigation plan for Alternative D are presented in Chapter 4.3.2, Off-Airport Surface Transportation, of the Final EIS/EIR.

Page: 101, Sequence #1

- ◆ **This map, Figure 2.3-5 shows parking stalls owned by LAWA. What about all of the private, commercial parking? How will it be supported to reorient to the new accesses and how will it be accommodated?**

Response: LAWA has no control over the number of parking stalls which private, off-airport operators provide. Shuttles from private parking facilities will be required to pick-up and drop-off their patrons at the GTC curbsides. These shuttles are included in the on-airport and off-airport traffic analyses.

- ◆ **How does this compare with existing parking?**

Response: A comparison of the existing number of parking spaces versus the number of parking spaces provided in Alternative D was shown in Table 2.3-1 of the Draft LAX Master Plan Addendum.

Page: 102, Sequence #1

- ◆ **According to these gross numbers the statement that no new parking is being added is FALSE. How do these numbers associate with the map on 2.3-5? Where do all the non-LAWA owned parking come into the equation? Is the mix of long and short term parking about the same or is it being changed? What are the new comparison numbers?**

Response: Figure 2.3-5 of the Draft LAX Master Plan Addendum depicted the proposed public parking areas and their respective number of spaces based on duration, i.e., short-term and long-term. Table 2.3-1 of the Draft LAX Master Plan Addendum listed the existing and future number of

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spaces based on the facility. The total number of existing off-airport parking spaces was provided in Figure 2.3-5 and Table 2.3-1 of the Draft LAX Master Plan Addendum. Please see Response to Comment SPC00165-16 regarding the split between short-term and long-term spaces.

Page: 102, Sequence #2

- ◆ **The East Surface lot appears to be an expanded Lot B. Where do the extra spots come from? Is this to include the spaces from the present Proud Bird? Is the Proud Bird being removed or will it be staying? If so, what parking will be for the Proud Bird? Is it double used -- LAX & Proud Bird?**

Response: Please see Section 2.3.5, Public Parking, of the Draft LAX Master Plan Addendum regarding an expanded Lot B. This does not include the parking spaces from the Proud Bird. It is anticipated that the Proud Bird would remain. Airport passengers would not use the restaurant's parking lot.

Page: 102, Sequence #3

- ◆ **In addition to the two employee lots isn't there employee parking in the NW corner of Lot C?**

Response: Some airline employees currently park in the northeast corner of Lot C. Under Alternative D, this employee parking would be eliminated.

Page: 102, Sequence #4

- ◆ **How will the employee entrance be screened at the CTA? Why would employees be shuttled away from LAX to take a people mover back?**

Response: Any employee needing access to secure areas would go through the same security screening process that exists today. Employees would not be shuttled "away" from LAX but rather travel a short distance from the parking garage at Century Boulevard and Avion Drive north to the RAC APM station.

2.4 Automated People Mover - Alternative D

Page: 104, Sequence #1

- ◆ **On the second, extensive APM route from the ITC & RAC how long will it take? What additional stops are contemplated to accommodate the hotels, businesses, and rental car activities.**

Response: A trip time from the ITC to the RAC was not provided. However, a typical trip time between the ITC and western CTA station, including headway, would be less than 9 minutes. No additional APM stops are contemplated beyond those mentioned in the LAX Master Plan Addendum. A potential collector APM serving the hotels and the RAC might be part of the future development in the Century Boulevard corridor. However, this is not a component of Alternative D.

Page: 104, Sequence #3

- ◆ **Since the train is going on one side of the CTA and then to the GTC and completing the circle, if you got on the "A" train instead of the "B" it could take an enormous time to get to a particular terminal without a major walk. What is to be done to preclude this?**

Response: Adequate signage would be provided to ensure passengers get on their desired train.

Page: 105, Sequence #1

- ◆ **Taking a bus from the parking to an APM station means that luggage must be dragged by the traveller at each point. What accommodations are established to reduce this burden? Any "future" mention in this plan must be done as part of this proposal AND IS NOT PART OF THE \$9billion estimate. Is this a way to run a railroad by allowing the inconveniences of having to change conveyances?**

Response: Portable luggage carts would be provided to assist passengers in moving their baggage from a parking garage to the APM station. A driver of a vehicle arriving at the GTC could also drop

off passengers and baggage curbside near the APM station, park their car in a garage, and rejoin their party. This is very similar to what occurs today.

Page: 105, Sequence #3

- ◆ **The routes established require purchase of the lands behind all of the hotels. This is in conflict with the proposed W-PdR Community Plan which calls for use of this area as a walkable support area for travel related businesses and local retail business.**

Response: Any conflicts with the APM corridor would be addressed by a General Plan Amendment and Zone Change. Although acquisition is proposed along 98th Street, the APM has the potential to be supportive of hotel and retail businesses along 98th Street and LAWA is working with the Gateway to LA Business Improvement District to address their concerns. These areas are designated subareas 1620 and 1640 on the Westchester-Playa del Rey Community Plan Update Change Map and area 1640 is noted as "pedestrian bridge symbol."

Page: 105, Sequence #4

- ◆ **How many stops between the ITC and CTA? If none, how fast will this have to travel to go the approximately 3+ miles in 7.5 minutes?**

Response: There is one APM stop between the ITC and CTA, at the RAC facility.

A vehicle would have to travel at a rate of 24 miles per hour to travel 3 miles in 7.5 minutes.

Page: 106, Sequence #1

- ◆ **There are no stops noted. Verbal statements have been made about stops not yet assigned. What are the stops to be implemented and why? Signage, etc.**

Response: Figure 2.4-3 of the Draft LAX Master Plan Addendum depicted all the proposed APM stations.

Page: 109, Sequence #1

- ◆ **What is the peak number of passengers in an hour? How does this relate to 78 MAP? What about if there's 100 MAP? $78\text{MAP}/365=213,700$ peo. per day with 50% over nominal in an hour it is 11,870 per day**

Response: Please see Section 2.4.1.2, Landside System Capacity, of the Draft LAX Master Plan Addendum regarding the peak hour number of passengers. Million Annual Passengers (MAP) includes both connecting (those passengers which do not use landside facilities) and origin & destination (O&D) passengers. The APM analysis was based on an O&D forecast and therefore would not relate to the MAP figures listed above.

Page: 110, Sequence #1

- ◆ **How many cycles per hour are assumed? How many stations are in the assumption? How many people does a car handle? If each 40' car carries about 50 people standing (the illustration has 6-7 shown) filled then one 6 car train is about 300 people. If I assume 11 trains X 2 cycles per hour plus 7 trains X 1.5 cycles per hour the max hourly capacity would be about 99000 people?! $189\text{ cars} \times 300= 56,700$ people.**

Response: Please see Sections 2.4.1.1.1, CTA-GTC Route, and Section 2.4.1.1.2, CTA-RAC-ITC Route of the Draft LAX Master Plan Addendum regarding operating headways. Figure 2.4-3 of the Draft LAX Master Plan Addendum depicted all the proposed APM stations. Please see Section 2.4.1.2, Landside System Capacity, of the Draft LAX Master Plan Addendum regarding APM capacity.

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Page: 111, Sequence #1

- ◆ **How high would these APM stations be? Handicap access? Where will the screening be accomplished in this station? How will luggage be handled? How will the carts be accommodated? If an elevator is present, how many people with luggage will it handle for full evacuation? Where will the luggage and people screening be done to detect bombs, etc?**

Response: Please see Section 2.4.1.3, Landside System Stations, of the Draft LAX Master Plan Addendum regarding station layout. The people mover would fully comply with Americans with Disability Act (ADA) requirements as part of the design. Please see Section 2.2.8, Ground Transportation Center (GTC), of the Draft LAX Master Plan Addendum regarding security screening. Presently no baggage handling systems are proposed between the CTA, RAC and ITC. Please see Section 2.2.8, Ground Transportation Center (GTC), of the Draft LAX Master Plan Addendum regarding accommodations for baggage between the GTC and the CTA. The APM cars would accommodate portable luggage carts.

The Draft LAX Master Plan and Draft LAX Master Plan Addendum are program level documents. It is acknowledged that facility improvements such as elevator capacity will be determined during the advanced planning stage in a more specific manner, as necessary and appropriate. Please see Section 2.2.8, Ground Transportation Center (GTC), of the Draft LAX Master Plan Addendum regarding security screening.

Page: 111, Sequence #2

- ◆ **Are the platforms may be wider than large buildings? Where will they be placed?**

Response: The Draft LAX Master Plan and Draft LAX Master Plan Addendum are program level documents. It is acknowledged that certain facility improvements such as platform design may require further definition during the advanced planning stage in a more specific manner, as necessary and appropriate.

Page: 112, Sequence #1

- ◆ **Does this picture imply that the APM is moving buildings to accommodate the APM? If so, which ones and how many?**

Response: Figure 2.4-5 depicted potential APM views and does not reflect the relocation of existing buildings.

Page: 113, Sequence #1

- ◆ **If a single set of APM lines are going to the West Satellite Concourse, what kind of internal transportation will facilitate movement from one end of the terminal to the other? Since it is to be at different level, how will people be moved from one level to another? Since people may need carts to carry luggage (not everything is always checked), how with this be done?**

Response: The Draft LAX Master Plan and Draft LAX Master Plan Addendum are program level documents. It is acknowledged that certain facility improvements and/or issues may require further definition during the advanced planning stage in a more specific manner, as necessary and appropriate.

Page: 113, Sequence #2

- ◆ **Will these APM cars be the same as the other system? How will they be maintained? If the western end maintenance facility is insufficient how will more cars be brought in?**

Response: The Draft LAX Master Plan and Draft LAX Master Plan Addendum are program level documents. It is acknowledged that certain facility improvements and/or issues may require further definition during the advanced planning stage in a more specific manner, as necessary and appropriate.

Page: 115, Sequence #1

- ◆ **If most of the commuter gates are consolidated all in the way back, isn't this causing more people to ride this airside APM and making it less convenient?**

Response: The location of the commuter gates would not be an inconvenience to passengers. Please see Section 2.4 Automated People Mover - Alternative D of the Draft LAX Master Plan Addendum and in particular Section 2.4.2, Airside Automated People Mover System, regarding APM routes and capacity.

2.5 Cargo Facilities - Alternative D

Page: 116, Sequence #2

- ◆ **This assumes almost a 4% growth per year! How will the facilities be upgraded to accommodate this? Where will these facilities be placed? How will the increased truck traffic be accommodated, and where will it go?**

Response: The growth rate in annual tonnage forecast for Alternative D would be approximately 2.5 percent per year from the baseline year to 2015. The growth rate in cargo building square footage (assuming an equal amount of building were to be constructed on an annual basis which is unlikely) would be approximately 1 percent per year between the baseline year and 2015.

Please see Section 2.5, Cargo Facilities - Alternative D, of the Draft LAX Master Plan Addendum for a description of the proposed cargo developments associated with Alternative D.

Please see Section 4.3, Surface Transportation, of the Supplement to the Draft EIS/EIR, regarding increased truck traffic.

Page: 116, Sequence #4

- ◆ **If the subject buildings are there by FAA height requirement waiver now, will these new building also be waived? What is the basis of the waivers? If new TSA/FAA standards are added to require additional building space where does LAWA intend to put them? Will an EIR be done or another incremental improvement be used?**

Response: It is unclear what the commentor is referencing with regard to the phrase FAA height waiver. The existing cargo facilities do not require waivers to be in their existing locations. There are no TSA or FAA standards that would require additional building space and if there were, the locations would be determined at a later date and be subject to environmental review.

Page: 117, Sequence #1

- ◆ **Table 2.5-1 shows allocation of cargo space. This paragraph in 2.5 says 6% more will be built while the table totals amount to 7% and it is not clear about mail cargo. Why to these figures differ? Which is correct?**

Response: 154,000 square feet of 2,342,000 square feet is 6.575 percent. However, as described in the Draft LAX Master Plan Addendum, the numbers quoted are approximate. Table 2.5-1 of the Draft LAX Master Plan Addendum, under the Cargo Totals heading, stated, in parentheses, that the total excluded mail.

Page: 117, Sequence #2

- ◆ **Earlier in 2.5 the 2.3 M sq ft cargo space was used. This says that the mail cargo is not included in this number so the actual number is greater. What is the total cargo space to be created and maintained? 2.5 also speaks of 3.39 M sq ft of apron space. What about access roads and control areas? How swill this be integrated into the airport and external roadways? Who will pay for it and how?**

Response: If one were to add the two figures in the summary section of Table 2.5-1 in the Draft LAX Master Plan Addendum it would calculate a combined total of 2,515,000. This is calculated by adding 2,342,000 square feet and 173,000 square feet.

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Please see Section 4.3, Surface Transportation, of the Supplement to the Draft EIS/EIR regarding access roads.

It is unclear what the commentor is referring to by the phrase "control areas."

Please see Response to Comment SPC00090-2 regarding who pays for Alternative D.

Page: 119, Sequence #1

- ◆ **Table 2.5-2 lists many items without a sf number. Why? What should be listed?**

Response: The table has two headings: New Cargo Facilities and Existing Cargo Facilities to Remain. The total number of buildings in a given cargo area was listed but no square footage was given unless a change to a facility is proposed. There is nothing that should be listed that was not already presented in the table.

Page: 120, Sequence #1

- ◆ **What proportion of cargo is handled in each complex presently and what is anticipated for Alt D? Is some more accessible than other? Is there adequate truck access to each area for the anticipated amount of MAT handled? How will the trucks be routed away from LAX and where are they going?**

Response: Please see Section 4, Cargo Facilities, of the Draft LAX Master Plan for a detailed description of each existing cargo facility. The proportions are not anticipated to dramatically change other than the South Cargo Complex West where the total square footage would increase by approximately 100 percent. Please see Sections 6 and 7 of Chapter II of the Draft LAX Master Plan regarding On- and Off-Airport Ground Transportation.

Ancillary Facilities - Alternative D

Page: 121, Sequence #1

- ◆ **Is all of the maintenance area presently utilized? When maintenance space is vacated will it be used for cargo? If so, how will access be coordinated and controlled?**

Response: Yes, all of the maintenance area is presently utilized. Vacated maintenance space would not necessarily be used for cargo. Access would be determined along with a decision to change the use of a given facility.

Page: 121, Sequence #2

- ◆ **How would aircraft be moved to the GRE? Is it convenient to ALL of the maintenance areas? How do the enclosures impact low frequency noise dissemination in addition to "standard noise signature?" 18 dBA from 90 dBA still leaves a major amount of noise. What are the specific angles and locations of these units. Has a noise projection for single event noise been made? What areas are impacted?**

Response: Comment noted. The operational requirements to get the aircraft to and from the GRE is a policy decision that would be made by LAWA when the GRE is constructed.

Alternative D would include two new 90,000-square foot Ground Run-up Enclosures (GRE) at the airport. One GRE would be located on the west side of the airport, south of World Way West and east of the airline maintenance complex. An additional GRE would be located on the east side of the airport, south of the existing Delta airlines maintenance facility.

The noise analysis was done in complete compliance with appropriate FAA and scientific principles including FAA Order 1050.10 and Order 5050.4A. There are no state or federal requirements for low frequency measurements and mitigation, nor are there any standards in use to define the significance of low frequency noise in evaluations of land use compatibility. Consequently, low frequency noise was not addressed in the Supplement to the Draft EIS/EIR.

The Draft LAX Master Plan and Draft LAX Master Plan Addendum are program level documents. It is acknowledged that certain facility improvements and/or issues may require further definition during the advanced planning stage in a more specific manner, as necessary and appropriate.

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The Supplement to the Draft EIS/EIR addressed single event 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.

Because the locations have not changed and the mix of aircraft types are, on the whole, quieter than those present during the 1996 baseline condition presented in Figure 3, Current Ground Noise Pattern, of Appendix D, Aircraft Noise Technical Report, of the Draft EIS/EIR, the noise exposure pattern for 2000 run-up conditions will not be greater than that of the baseline condition, and does not affect the location of CNEL contours beyond the airport boundary.

Page: 121, Sequence #4

- ◆ **If the fuel farm remains the same capacity, how will it handle the expanded requirements for fuel?**

Response: It is projected that the capacity of the existing fuel farm would be sufficient to meet the requirements for fuel under both the No Action/No Project Alternative and Alternative D.

Page: 122, Sequence #1

- ◆ **Why are the administrative offices remaining in the same? WHEN LAWA moves these facilities, what will be put in their place? These were supposed to be moved to the Northside Development some time ago?**

Response:

There are no plans for LAWA to move their administrative offices under Alternative D.

Page: 122, Sequence #2

- ◆ **What about the maintenance facilities east of LAX off La Cienega off Lot B? Are these facilities being replaced or moved? What will be put in place of these buildings?**

Response: There are two facilities adjacent to Lot B and La Cienega Blvd. The City Freight Lines Building would be removed and replaced by surface parking. The existing Customs Service building would remain in its existing location. Figure 2.0-3, 2015 Alternative D Enhanced Safety and Security Plan, in the Draft LAX Master Plan Addendum, depicted the proposed uses for this area of the airport under Alternative D.

Page: 122, Sequence #5

- ◆ **We've heard verbally that this check facility will also be used for walk in traffic. How will baggage and screening be handled?**

Response: The security screening checkpoint located at the Park One site would be for the screening of vehicles which would be allowed to access the CTA, this includes FlyAway buses, delivery vehicles, and employees such as the FAA and airport administration. Passengers would not be allowed to walk into the CTA, and would not be accommodated at this checkpoint.

Page: 123, Sequence #1

- ◆ **This drawing shows that the Proud Bird remains. Is this true? If not, what will be located here?**

Response: It is anticipated that the Proud Bird would remain in its existing location under Alternative D.

Page: 124, Sequence #1

- ◆ **At what angle will these enclosures be placed?**

Response: The Draft LAX Master Plan and Draft LAX Master Plan Addendum are program level documents. It is acknowledged that certain facility improvements and/or issues may require further definition during the advanced planning stage in a more specific manner, as necessary and appropriate.

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Page: 125, Sequence #1

- ◆ **How would these fire stations have easy access to Manchester Square, the RAC, or ITC? How will these fire stations coordinate with the new City FD in the Northside Development shown in figure 2.6-1? How will disaster victims be transported and to where?**

Response: Fire Station 95 at the southeast corner of Century Boulevard and International Road between Airport and Aviation Boulevards is located close to Manchester Square, the RTC, and the ITC. Emergency response teams may use the public space and surface streets in the airport vicinity just as they would today. The public space between the GTC, ITC and other parts of LAX would not differ much from public space adjacent to LAX today.

Fire Station No. 5 was not shown on Figure 2.6-1 because it is not part of the Master Plan. The Los Angeles Fire Department is responsible for coordination of all its resources, including on- and off-airport fire stations. Proposition F, approved in November 2000 provides funding to support the relocation and expansion of LAFD Fire Station 5. Station 5 will be relocated to 8900 Emerson Avenue, which is within the LAX Northside project area and the station's existing service area.

The Draft LAX Master Plan and Draft LAX Master Plan Addendum are program level documents. It is acknowledged that certain facility improvements and/or issues such as evacuation procedures may require further definition during the advanced planning stage in a more specific manner.

Page: 126, Sequence #1

- ◆ **An LNG electrical generating facility was approved for the American Terminal. Where is this identified in the plan?**

Response: Improvements made to Terminal 4 were not part of the Master Plan. Any improvements made to Terminal 4 were made under separate environmental analysis.

Page: 126, Sequence #3

- ◆ **What amount of CNG will be stored there? This is located at the NW corner of Manchester Square. Will access be only from Arbor Vitae/Aviation or from within the GTC entrances? How will security be maintained? What level of traffic is this expected to generate and of what type?**

Response: Space would be provided at the southeast corner of Arbor Vitae Street and Aviation Boulevard in the GTC to replicate the existing CNG facility. Access to the CNG facility would be from the GTC roadway system. Please see Topical Response TR-SEC-1 regarding security issues. Similar to the existing CNG facility, it is anticipated that LAWA-owned CNG-powered vehicles would use the CNG facility at the GTC.

2.7 Land Acquisition - Alternative D

Page: 129, Sequence #2

- ◆ **Who will decide what to condemn and when?**

Response: LAWA is responsible for implementing the existing Manchester Square/Belford ANMP Relocation Plan, and would be the lead agency should any condemnation actions be necessary.

Page: 130, Sequence # 1

- ◆ **Does this include lands north of Arbor Vitae? Are all of the other 36 businesses within Manchester Square? If 3676 private parking spaces are removed, are they being replaced? The 9 acres of rental car space is also west of Manchester Square. What is it's use? Does the easements of the MTA line along Aviation and 4 property owners preclude future extension of the Green Line? If not, why not. How will the future Green Line extension be protected? What is planned for these properties that are not inside Manchester Square?**

Response: Land acquisition under Alternative D would not include properties located north of Arbor Vitae.

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Ten businesses would be relocated from Manchester Square (Master Plan Area D). Table 2.7-2, Alternative D - Parcel Detail of Acquisition Areas, in the Draft Master Addendum, provided the proposed list of properties and locations that would be acquired under Alternative D. The Master Plan Acquisition Areas and Map Reference numbers listed in Table 2.7-2 are keyed to Figure 2.7-1, Alternative D, Proposed Property Acquisition Areas, which depicted the locations of each parcel in their respective Master Plan acquisition areas.

Please see Section 2.3.5, Public Parking, of the Draft LAX Master Plan Addendum regarding future on- and off-airport parking.

Figure 2.3-4, Alternative D RAC Facility, in the Draft LAX Master Plan Addendum, depicted the proposed uses for the 9-acre rental car area west of Manchester Square.

The easements do not preclude future extension of the Green Line. The right-of-way goes along the railway line. Please see Topical Response TR-SEC-1 regarding Security.

Table 2.7-2, Alternative D - Parcel Detail of Acquisition Areas, in the Draft LAX Master Addendum, provided the target relocation areas for the properties proposed for acquisition under Alternative D. Please see Section 2.8, Relocation - Alternative D of the Draft LAX Master Plan Addendum which addressed the relocation of properties under Alternative D in more detail.

Page: 130, Sequence #2

- ◆ **This table assumes all of residential areas of Manchester Square and Belford Area are already procured. Since they are not included in this table, what is the anticipated cost for procurement of these housing units?**

Response: Please see Topical Response TR-MP-3 regarding the use of Manchester Square in Alternative D, and how property acquisition within Manchester Square was initiated, and will continue to occur, separate from the LAX Master Plan.

2.8 Relocation - Alternative D

Page: 134, Sequence #1

- ◆ **When will business be relocated into the Northside Development? Is there a building schedule for this? What is it?**

Response: Figure F3-20, 2015 Alternative D, Conceptual Summary Schedule, in the Final EIS/EIR depicts when the acquisition of Manchester Square is scheduled to occur. There are not yet specific development plans for LAX Northside. The businesses that are eligible to relocate to LAX Northside also would have the option of relocating within existing LAWA property or the local market. Please see Mitigation Measure MM-RBR-1 regarding phasing to maximize relocation opportunities.

Page: 136, Sequence #1

- ◆ **There are additional businesses along Aviation between 102nd and 104th. Is this land already owned by LAWA? When was it procured? How will these businesses be relocated (or will they)?**

Response: The businesses along Aviation between 102nd and 104th are identified as Map Reference numbers 47, 48 and 49 in Master Plan Acquisition Area E. These properties are not owned by LAWA. Only a small portion of these properties would be acquired for road widening and none of these businesses would be relocated. Please see Table 2.7-2, Alternative D - Parcel Detail of Acquisition Areas, in the Draft LAX Master Plan Addendum for more information on these three properties.

Page: 136, Sequence #2

- ◆ **These area E businesses are located adjacent to the cargo area off Aviation. If they are moved to Northside Development how will they interface with their cargo areas? What security be implemented in the Northside Development area?**

Response: Under Alternative D, none of the area E businesses would be relocated to the LAX Northside.

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A new 110,000-square foot airport police headquarters facility would be built at the northwest corner of Westchester Parkway and Emerson Avenue to accommodate the increased staffing levels due to enhanced safety and security requirements. The new facility would be located across the street from the newly relocated City of Los Angeles Fire Station No. 5 to facilitate easy communication between members of the emergency response team. Please also see Topical Response TR-SEC-1 regarding security issues.

Page: 136, Sequence #4

- ◆ **What are the results of the Relocation Plan survey? In order to state that no residences are to be purchased implies that there is a 100% expected sales.**

Response: Please see Topical Response TR-MP-3 regarding the use of Manchester Square in Alternative D. In particular Subtopical Response TR-MP-3.1.2 discusses the results of the Relocation Plan survey and Subtopical Response TR-MP-3.3 addresses the status of acquisition in Manchester Square and Belford.

Page: 137, Sequence #1

- ◆ **Phase one of the Master Plan implementation as presented at the LAX Working Group was far less than the 5 years indicated to be used for procurements. How is this reconciled?**

Response: All Master Plan property acquisitions are scheduled to occur during Phase 1 of the Master Plan implementation process. No negotiations with Master Plan acquisition property owners can occur prior to approval of the Master Plan by the Los Angeles City Council. Therefore, the specific timeframe for acquisitions would not be identified until after the Los Angeles City Council approves the project, and the Record of Decision is issued by the FAA. The proposed acquisition schedule timeline (without individual property acquisition dates) will be published in the Draft LAX Master Plan Relocation Plan, a copy of which will accompany the Master Plan/Final EIS/EIR to the Los Angeles City Council for approval.

The intent of the Master Plan property acquisition process is to have all property required for construction of the individual Master Plan projects under the ownership of LAWA in sufficient time to allow for permitting and construction of each project in sequence. Once begun, the acquisition process would move forward until all required properties are purchased.

2.9 Collateral Development - Alternative D

Page 140, Sequence #1

- ◆ **Why is the 1983 EIR and Plan for the Northside development acceptable to use to go forward whereas the Palmdale and Ontario airport plans from the same time frame are being redone before any progress is to be made? Explain how the densities of the Northside Plan is compatible with the Westchester-Playa del Rey Community Plan.**

Response: LAWA is not required to update any of these plans. The LAX Northside plan is still very applicable to the operations of LAX. Further, its impacts do not extend far beyond the LAX area. However, Ontario and Palmdale are two of the nine commercial service airports in the Los Angeles region and their operations are fundamental to the roles of each of the region's other airports. How these two airports operate has a potentially large impact on the entire Los Angeles regional airport system. The aviation industry has experienced major changes since the old Ontario and Palmdale master plans were conducted. Not only has the industry in general changed, but the role of each airport in the Los Angeles region and how they each participate in accommodating the regional demand has also greatly evolved during that time. As a result, LAWA wants to make sure that the data that they are using to perform the LAX Master Plan - which incorporates the roles of all of the region's other airports - is as current as possible and reflects the region's overall view of each airport's role in meeting the demand. Therefore, it was important that those two master plans be updated.

The LAX Northside plan was approved in 1983 and, as stated above, is still applicable to the operations of LAX. LAWA is not proposing to make any changes to the densities.

Page 140, Sequence #2

- ◆ **Explain why this large number of trip generations is still acceptable given the numerous added area projects since reviewed in 1983. This plan was predicated on expanding several arteries. How and when will this be accomplished?**

Response: Please see Response to Comment SAL00015-17 regarding trip generation. Also please see Topical Response TR-ST-4 regarding airport area surface traffic concerns.

Page 141, Sequence #1

- ◆ **Where is the fire station recently approved to be built in this development area? Is it considered part of the ¾ million sq feet of airport related? If not, what is to be moved into this area - especially since other areas note that the airport administration is to remain in its present locale.**

Response: As discussed in Section 4.26.1, Fire Protection (CEQA) of the Supplement to the Draft EIS/EIR, the LAFD will be relocating Fire Station No. 5 in 2006 to the southeast corner of 88th Place and Emerson Avenue. This fire station is being developed independent of the Master Plan. Figure 2.6-1, 2015 Alternative D Ancillary Facilities, of the Draft LAX Master Plan Addendum, depicted the proposed locations of the fire stations under Alternative D.

Fire Station No. 5 is not part of the Master Plan. Section 4.2, Land Use, of the Draft EIS/EIR and the Supplement to the Draft EIS/EIR addressed the land use for LAX Northside and Westchester Southside.

2.10 Construction Sequencing Plan - Alternative D

Page 143, Sequence #1

- ◆ **General question about construction costs: Since many of the stated items for work are still nebulous how has this been priced? What is the range of pricing?**

Response: The cost estimates are based upon the current price conditions for this type of work in the construction industry. The cost estimates are based upon the facility requirements as delineated in the Draft LAX Master Plan Addendum and by conducting physical area takeoffs from the plan. For example, the amount of apron paving was measured from the drawings and multiplied by the current price for constructing this type of project. The costs are based upon full project costs including typical soft costs such as design work, contingencies and program management costs in addition to the actual construction costs.

Page 143, Sequence #2

- ◆ **Based upon the number of parking places for short term outside the GTC (9127+5470) vrs (GTC (7515), explain how the plan is to push for more foreign O&D in preference to commuter will be accommodated.**

Response: The parking facility referenced in bullet point 3 on page 2-121 of the Draft LAX Master Plan Addendum would be reconfigured to make physical improvements and improve ease of use. The facility would be used as a long-term parking lot as illustrated on Figure 2.3-5 of the document and not to be used as short-term parking as suggested by the commentator.

Page 143, Sequence #3

- ◆ **If this is not a "concrete" item was it priced into the \$9 billion or is added on if done? IS the expense of this item justified? How will this be done before land is purchased? Are all of the geological studies finished? How long will it take? Safety of tunnel?**

Response: The cost of the tunnel was a part of the cost estimate. The feasibility, justification, geological studies, and construction schedule would be done as a part of the advanced planning process. There would be a curbside baggage check-in function at the GTC; the manner in which the bags will be transported would also be investigated within the advanced planning process.

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Page 143, Sequence #4

- ◆ **Similar to other Phase 1 projects items, how will this be done before land is purchase? Is this project a joint project with CalTrans and the MTA as well as LAWA and the DOT? What Project level EIR's will be done? What are and when will the details of this project become available?**

Response: The project cannot commence construction prior to the land being purchased. As a part of the permitting process ownership of the property or the establishment of a right of way or easement must be verified prior to permits being issued. A project level EIR would be done on this project for the roadway systems, ITC, GTC and connection to the MTA Green Line station. Coordination with LADOT, MTA, and the DOT will be necessary to implement this project.

Page 143, Sequence #5

- ◆ **As with other Phase 1, how will the RAC be done before lands are purchased? The RAC facility appears to need some additional area between 98th and 96th streets.**

Response: There is some land acquisition required to implement this project. This would need to occur prior to the implementation of the project.

Page 144, Sequence #1

- ◆ **During construction how will access to LOT C be maintained? If access will be moved, what evaluations of traffic patterns have been made? What mitigation for these changes has been proposed?**

Response: The reconfiguration of Lot C would not occur until after the completion of the GTC and the APM system. Please see the Conceptual Construction Schedule Figure 2.10-2 of the Draft LAX Master Plan Addendum. Mitigation measures are addressed in Chapter 5, Environmental Action Plan, of the Final EIS/EIR.

Page 144, Sequence #2

- ◆ **How will the APM be fully operational from the GTC before the CTA structure parking is demolished? Aren't drop off points in the CTA needed for the APM use? If this is**

Response: The CTA parking structures would be demolished, and the redeveloped CTA terminals constructed prior to the APM becoming operational. Passengers would need to take an airport operated shuttled bus from the ITC or the Southeast surface parking lot to the CTA, for the period of time after the demolition of the CTA parking structures and prior to the APM becoming operational. The CTA roadway system would remain operational and for use by the public until the completion of the APM system.

3. Alternative D Constrained Activity

3.1 Activity Forecast and Facility Constraints

Page: 151, Sequence #1

- ◆ **This section describes what a constraint is, but not what they are. How were market forces taken into consideration with regard to development of a real regional solution? The assumptions should be enumerated in a concise, direct way. Page 3-4 says that they are in Chapter 3 of the 2001 document. This is another level of action for the document that we are told is self-contained.**

Response: The Alternative D facility constrain is described in the second sentence of the first paragraph of Chapter 3.

Please see Section 3.3.3, Air Service Changes, in the Draft LAX Master Plan Addendum, which enumerates each of the eight air service changes assumptions in a concise manner.

As described in Section 3.2 of the Draft LAX Master Plan Addendum, an extensive historical record and forecasting effort was undertaken as a part of the LAX Master Plan. Please see Chapter 3 of the Draft LAX Master Plan.

3.2 Annual Passengers/Tons as a Common Performance Metric

Page: 153, Sequence #2

- ◆ The constraint value is stated as 78.7 MAP. The reported value in other areas is 78 whereas in others 78.9. Why are these different and what is the significance of how they were determined to justify the values. In the cases of the other alternatives the numbers differ from the widely reported values on the LAWA website.

Response: 78.7 MAP is the approximate constrained capacity of the No Action/No Project Alternative. 78.9 MAP is the approximate constrained capacity of Alternative D. 78 MAP is occasionally used for simplification or avoiding the use of decimals.

We cannot respond to the comment regarding the LAWA website without a specific citation of a particular reference.

Page: 153, Sequence #4

- ◆ Not sure if this is a reference to the 2001 document. If it is, this other document has been demonstrated to be questionable in the past.

Response: Comment noted.

Page: 153, Sequence #5

- ◆ The statement is made that Alt D was designed to accommodate approximately No Action/No Project, but which version of Alt D? There are numerous alternative facts (SIC) discussed in this plan. Which one is the one that limits to NANP? Is this a common constraint that is the limiting factor? What is it and how is it justified?

Response: There is only one version of Alternative D. It is described in detail in the Draft LAX Master Plan Addendum. Please see Chapter 3 of the Draft LAX Master Plan Addendum regarding Facility Constraints.

3.3 2015 Alternative D Activity

Page: 153, Sequence #6

- ◆ What does the statement "developed to provide gate facilities that would promote a regional solution to air travel" really mean?

Response: It means that LAX Master Plan Alternative D would provide a limited number of aircraft gates at LAX thus constraining the capacity of LAX below the level of regional demand thereby increasing the likelihood that airlines would respond by increasing air service at other airports in the Los Angeles region to serve the demand left unmet at LAX.

Page: 154, Sequence #1

- ◆ If peak activity of runway operations was based on visual operating conditions, how much capacity is added by IFR and/or the new GPS controlled flight path maintenance? What if the technology improves even more? Is capacity that much greater?

Response: Airport capacity is greatest during VFR (visual) conditions. Therefore, regardless of the technological advances in IFR technology, it will never improve VFR capacity.

Page: 154, Sequence #3

- ◆ An assumption was made that the airport operated with high peak hour delays and significant number of cancelled flights during poor weather. Why is this appropriate for LAX? What are the peak hours and how many are there? How many hours of peak activity/capacity can be sustained at LAX?

Response: The subject statement simply reflects the fact that aircraft activity at LAX during peak hours is now limited, and would continue to be limited under Alternative D, by having only four runways, and would also be limited by poor weather conditions (which may not necessarily be just

5. Responses to Comments from Dennis J. Schneider

locally, as poor weather conditions in other parts of the country will result in cancelled flights). It is simply a statement of fact, and is not a matter of whether or not it is appropriate for LAX.

Page: 154, Sequence #4

- ◆ **Why is the assumption of total daily aircraft operations remaining the same valid? Alt D is presumed to be less cargo than C. Why assume that cargo capacity will increase at all? Any increase in facilities need to be added to a new plan since it is fixed as is from the 1982 one. What is the basis of the statement that "the design day cargo aircraft operations levels would be below the unconstrained forecast?" Cargo is projected to go from present levels of 2 MAT to 3.5 MAT. This can't happen without increased cargo handling facilities being built.**

Response: Because it is assumed that the airlines would maximize the level of service they provide passengers given the facility constraints.

Both the No Action/No Project Alternative and Alternative D would include an increase in cargo handling facility square footage to approximately 2,342,000 square feet.

The basis is that Alternative D would not provide sufficient facilities to meet the unconstrained cargo demand thus the anticipated cargo operations would be less than if there were sufficient facilities to process the unconstrained demand.

Please see Section 2.5, Cargo Facilities - Alternative D, of the Draft LAX Master Plan Addendum for a description of the proposed improvements to the LAX cargo handling facilities.

Page: 154, Sequence #5

- ◆ **Explain how the aircraft mix combination remains comparable relating to ratios of commuter vs other air operations since the gate mix is being changed significantly toward larger aircraft.**

Response: Though Alternative D would include more gates capable of accommodating NLA, it would also include more gates capable of accommodating commuter aircraft. Therefore the overall enplanements per departure ratio would remain approximately equal under Alternative D or the No Action/No Project Alternative.

Page: 155, Sequence #1

- ◆ **How is the projected percentage of O&D passengers remaining the same whether capacity is increased by alt C, alt D, or no action since the push by this upgrade plan is to change the mix?**

Response: The No Action/No Project Alternative, Alternative C and Alternative D are all incapable of meeting the unconstrained demand. Regardless of the varying constraints, the proportion of O&D traffic is assumed to remain relatively constant.

Page: 156, Sequence #1

- ◆ **If the statement "average aircraft size would increase from existing levels without significantly exceeding the unconstrained forecast seats..." were true why is the gate mix changing dramatically toward greater utilization of wide body aircraft?**

Response: As described in Section 3.3.3, Air Service Changes, of the Draft LAX Master Plan Addendum, this is reflective of the already large fleet size serving LAX.

Page: 156, Sequence #2

- ◆ **Explain how the cargo operations would be equivalent to No Action. We are told that cargo is currently highly utilized. Without an unauthorized increase of facilities the magnitude of cargo increase forecast by Alt D can't occur.**

Response: As described in Section 2.5, Cargo Facilities, of the Draft LAX Master Plan Addendum, Alternative D would provide for the construction of approximately 154,000 square feet of additional cargo facilities which is approximately equal to the square footage of cargo facilities reasonably expected to be constructed under the No Action/No Project Alternative.

Page: 157, Sequence #1

- ◆ **Explain how cargo space growth will occur in the No Action scenario. Is there anything done differently by Alt D to change the split of 32/68 domestic/international cargo?**

Response: As described in Chapter 3, Alternatives, on page 3-26 of the Draft EIS/EIR, "existing older and functionally obsolete cargo facilities will be rebuilt and expanded such that there will be a net gain of 431,300 square feet of building space beyond the 1997 inventory."

Alternative D is not designed to favor domestic or international cargo therefore the ratio is not expected to change though nothing precludes it from changing.

Page: 158, Sequence #1

- ◆ **Explain the derivation of the unconstrained totals for operations. Why is there more capacity at the peak hour of 11A? How does this differ from FAA defined operations that includes aircraft movements impact on calculated totals?**

Response: The unconstrained demand forecast was described in detail in the Draft LAX Master Plan. Airport capacity does not change from hour to hour.

FAA defined operations would be the Terminal Area Forecast (TAF). It is unclear what the commentor means by the movements impact on calculated totals.

Page: 158, Sequence #2

- ◆ **If we accept the number of operations in this chart and note that the passengers/cargo per op will increase in the Alt D option mix, then it is not likely that we will have equal capacity. Explain how the assumptions justify the conclusions that D and the No Action result in the same passenger and cargo totals.**

Response: Enplanements per departure and annual cargo operations are approximately equal under Alternative D and the No Action/No Project Alternative.

Please see Table 3.3-1 in Chapter 3 of the Draft LAX Master Plan Addendum. 2015 annual enplanements per departure are 110.48 under the No Action/No Project Alternative and 110.59 under Alternative D. Both Alternatives forecast approximately 36,000 annual cargo operations in 2015.

Page: 159, Sequence #1

- ◆ **The totals on this domestic operations chart separated by time zone origination appears to be equal to the totals shown on the other charts which also presume to include foreign carriers. How is this possible and why?**

Response: There is no reason that would preclude the totals from being equal. It is entirely possible that an equal number of European (foreign) operations and domestic Eastern Time zone operations could occur during the same hour. It would happen if an equal number of flights from each of these two particular regions were scheduled during the same hour of the day. This occurs because airlines typically design schedules to meet demand. However, there are several other factors and variables that are accounted for.

Appendix A

Existing Baseline Comparison Issues - 1996 to 2000

Page: 171, Sequence #1 and #2

- ◆ **What are the off-airport land use and regional traffic development that was anticipated?**

Response: Please see Section 3.2.3, Adjusted Environmental Baseline, of the Draft EIS/EIR, regarding off-airport land use and regional traffic development that was anticipated. As stated in the section, the regional traffic and land use development assumed to occur in the Adjusted Environmental Baseline during the planning years as forecast by appropriate planning agencies are listed in the Appendix L to Chapter V of the Draft LAX Master Plan.

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Page: 172, Sequence #1

- ◆ **Why were national trends used instead of actual data for LAX?**

Response: Actual LAX data was shown in Table A-1 of Appendix A of the Draft LAX Master Plan Addendum. It is important to examine national trends as well as regional trends in order to better understand the role of LAX in national aviation system. The observation of such trends provides insight into the future, thereby resulting in more accurate forecast. Changes in activities at LAX affect other airports in the nation, and vice versa.

Page: 172, Sequence #2

- ◆ **The use of the economic data for this period appears to be selective comparisons to result in reduced impacts. Economic conditions in the 1990's appears to be far more positive than presently seen; therefore the growth seen is very optimistic, not the opposite as justified by xxxxxxxxxxxx.**

Response: The purpose of Appendix A of the Draft LAX Master Plan Addendum is to discuss any relevant changes between the 1996 base year for the LAX Master Plan's aviation forecast and the year 2000, a more recent, but still "normal" year that was unaffected by the events of September 11, 2001. Accordingly, the data cited on page A-3 included 1995 national economic Gross Domestic Product (GDP), to match the corresponding year closest to 1996 for which FAA aviation activity data were available, and 2000 data, because that is the comparison year for the "baseline" comparisons discussion. The GDP data are included because there is a close correlation between economic growth (as commonly measured by GDP) and growth in aviation activity levels. Historically, including the 1995 to 2000 period, year-to-year national aviation activity levels change by about the same percentage as the change in the GDP.

Page: 173, Sequence #1

- ◆ **The airlines ticket price reduction is identified as an altruistic action, but the realistic cause is that the demand is down with each airline bidding for the remaining passengers.**

Response: Comment noted.

Page: 173, Sequence #2

- ◆ **As regional jets gain more of the market, why are the gate types moving away from this aircraft type? Could it be that LAWA is making a bid to replace most commuter traffic with NLA's?**

Response: Regional jets are gaining market share across the nation, but not at airports such as LAX. The constrained airspace capacity combined with future market demand will increase the average fleet size away from commuter aircraft. LAWA has no plan to shift commuter traffic to NLA's. NLA's are not efficient aircraft to fly on short and medium haul flights. NLA's are intended for only long haul international service.

Page: 173, Sequence #3

- ◆ **Whereas cargo continues to grow does it make sense to concentrate it in only one location? Much of the cargo is not for use in the Westside of LA, but throughout greater LA and the rest of the U.S. Disbursement of cargo to the areas of goods use would improve the system; Ontario is near the rail lines that cross all of the USA.**

Response: Comment noted. 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 Ontario Master Plan will recommend the needed improvements to meet the projected demand for both passengers and cargo. For additional information, please see Topical Response TR-RC-1 regarding the LAX Master Plan role in the regional approach to meeting demand.

Page: 173, Sequence #4

- ◆ **To use the Mayor Hahn analogy, trend impacts changed since Sept. 11. Economy of scale was the dominant reason give for concentration. Now the opposite is true. The risks need to be spread and the cargo destinations are becoming more disbursed.**

Response: 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. 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 while limiting future (2015) airport activity to a 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 demands at airports other than 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-RC-1 regarding the LAX Master Plan role in the regional approach to meeting demand.

Page: 174, Sequence #1

- ◆ **Since 1996 several military base closures have facilitated conversion of military airports to commercial use. These are not even shown in the commercial airports.**

Response: There are currently no commercial operations at either one of the former military bases (San Bernardino International Airport and Southern California Logistics Airport). Please see Topical Response TR-RC-1 that discusses the existing conditions and published plans for airports in the Los Angeles region.

Page: 175, Sequence #1

- ◆ **Why didn't LAWA do more to disburse regional operations since it owns Ontario and Palmdale where the two areas WANT MORE SERVICE?**

Response: LAWA has tried subsidies to encourage airlines to serve outlying Palmdale, with only limited, temporary success. Please see Topical Response TR-RC-5 regarding LAWA's efforts to encourage airline service at Palmdale. LAWA is also 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. Master plan updates are currently underway for both Ontario and Palmdale airports. The master plans will recommend improvements to meet the projected demand. In addition, Alternative D, Enhanced Safety and Security Plan, has been designed to serve a level of future (2015) airport activity comparable to that of the No Action/No Project Alternative, and will make the airport safer and more secure, convenient and efficient. 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.

Page: 175, Sequence #2

- ◆ **The statement is made that no scheduled service regional jets were at LAX in 2000. In the past two years, however, at LAX-Community Noise Roundtable meetings it is reported that many, if not most, of the turboprops have been replaced by regional jets.**

Response: There was no scheduled regional jet service at LAX in 2000. As indicated on page A-12 of Appendix A of the Draft LAX Master Plan Addendum, in October of 2001, the airlines introduced regional jet service at LAX.

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Page: 175, Sequence #3

- ◆ **What data calls for changing the mix from the single aisle jets? There is a substantial shift of gates capable of handling wide body jets in Alt. D.**

Response: The constrained airspace capacity combined with future market demand will increase the average fleet size toward larger aircraft fleets. Narrow body jets can use gates sized for wide body aircraft, but the reverse is not true.

Page: 176, Sequence #1

- ◆ **This delineation of passenger miles after 9-11-01 indicates a significant drop in all but Southwest Airlines. Southwest Airlines flies mainly narrow body aircraft. Explain why these are the aircraft gates in Alt D that are being removed/quantity reduced.**

Response: The Master Plan projections look at the long-range trends in passenger demand and airline activity. The effects of the events of September 11, 2001 are seen as a short-term effect upon the traffic patterns at LAX. It is anticipated the passenger demand will continue to evolve into the forecast scenario.

Page: 177, Sequence #1

- ◆ **Where in this document does it draw any inferences of cause of aircraft seat reduction? Since CA is continuing to experience a serious economic downturn and has not yet turned around, explain what future will look like for various economic conditions.**

Response: As addressed in Section A.2.3, Comparison of 2000 to 2001 and Beyond, of Appendix A of the Draft LAX Master Plan Addendum, air travel decline after the September 11, 2001 terrorist attacks and economic recession were attributed to aircraft seat reduction. Please refer to the following sources regarding economic conditions related to California as a whole:

- UCLA quarterly economic forecast
- The Center for the Continuing Study of the California Economy
- The California Legislative Analyst's Office

Page: 180, Sequence #1

- ◆ **The assumption of major rebound is possibly right, but not supported. The proportion of business travel is changing with the advent of the internet, teleconferencing, etc. What proportion of the passenger travel demand does this represent? It has been 3 years since 2000 and the increases are not being seen at LAX-except for cargo. More definitive explanation of the future needs should be provided.**

Response: Comment noted. Figure A-3, 40-Year United States Historical Aviation Traffic, of Appendix A of the Draft LAX Master Plan Addendum depicted a series of negative events that influenced aviation industry over the past 40 years which have led to an initial decline, and subsequent recovery. As addressed on page A-11 of the Appendix, the purpose of evaluating such nationwide aviation activity was to put the terrorist attacks of September 11, 2001 and the economic recession into perspective in terms of their impact on U.S. The overall trends observed from those occurrences can provide general insight into the future. Please see Section 3, Factors Influencing Aviation Demand, and Appendix A of Chapter III, Forecasts of Aviation Demand, of the Draft LAX Master Plan regarding passenger travel demand and changes in business travel.

Page: 180, Sequence #2

- ◆ **One explanation for the sharp decline at LAX might be the high profile concentration of air traffic for all of Southern California and the fear of terrorist attack. Explain how expanding the capacity at LAX will alleviate this reduction.**

Response: Alternative D, Enhanced Safety and Security Plan, has been designed to serve a level of future (2015) airport activity comparable to that of the No Action/No Project Alternative, and will make the airport safer and more secure, convenient and efficient. 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.

Page: 180, Sequence #3

- ◆ **This paragraph notes that Jan-Feb of 2002 was ONLY down 17.5% compared to the same period in 2001. A reduction of less magnitude is still in the wrong direction. This is far from a rebound. Explain why this continued decrease is a positive sign that a rebound is occurring.**

Response: Compared to the 33 percent traffic decline in September 2001, the 17.5 percent traffic decline during January and February 2002, which is less than a six-month period, should be considered as a notable improvement.

Page: 180, Sequence #4

- ◆ **This observation that regional jet service was introduced in 2001 is not addressed several pages earlier which noted that no scheduled regional jet service exists at LAX. How is this justified?**

Response: On page A-6 in Section A.2.2, Regional Trends, of Appendix A of the Draft LAX Master Plan Addendum, it was indicated, "there was no scheduled service on regional jets from LAX in 2000." Section A.2.2, Regional Trends, addressed only activities during 1996 and 2000. The introduction of regional jets in 2001 was addressed in the subsequent section, Section A.2.3, Comparison of 2000 to 2001 and Beyond, which addressed activities during 2001.

Page: 182 (Fig. A-3), Sequence #1

- ◆ **Since this was being prepared in 2003, why not include more recent data?**

Response: Comment noted. As addressed on page A-11 of Appendix A of the Draft LAX Master Plan Addendum, the purpose of evaluating nationwide aviation activity over the past 40 years up to 2000 was to put the terrorist attacks of September 11, 2001 and the economic recession into perspective in terms of their impact on U.S.

Page: 186, Sequence #1

- ◆ **Is the number of "operations" FAA or LAX counts? FAA includes all aircraft movements-ground or t/o and landings whereas LAWA is only take offs and landings. How does this value of 2277 compare with the theoretical max? If I assume 1.5X average hourly rate this is about 140+ during peak time.**

Response: As addressed on page A-21 of Appendix A of the Draft LAX Master Plan Addendum, The ATCT (Air Traffic Control Tower) daily activity counts from January through December 2000 were used to define the volume of annual operations that correspond to the design day. The daily counts were reviewed to identify the peak activity month and to compare fluctuations in activity volumes by day of the week. August was identified as the peak month with 68,871 total operations. Operations for the Peak Month Average Weekday (PMAWD) in August were calculated to be 2,277.

Page: 186, Sequence #2

- ◆ **If the development of a typical day was to be in August, why wasn't August 2001 also calculated? This was the highest values prior to Sept. 11. Then a Peak Month Aver Weekday could be more appropriately compared for 2002 trending as well.**

Response: As addressed in Section A.1.2, Baseline Update, of Appendix A of the Draft LAX Master Plan Addendum, in considering an updated comparison of the Draft EIS/EIR baseline year, 2001 constituted an anomalous year due to the September 11, 2001 terrorist attacks. The most recent "normal" year for which a complete dataset was available was 2000.

Page: 187, Sequence #1

- ◆ **Of the 117 cargo operations of the "design day" in 2000 were these pure cargo versus cargo in the cargo hold? The subsequent paragraph implies that these are pure cargo. It would be**

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appropriate to do additional monitoring of cargo flights since this component continues to increase while the others remain decreased.

Response: Comment noted. The 117 design day cargo operations represent pure cargo flights and do not include passenger flights that have cargo in the belly compartment.

Page: 194 (Fig. A-5), Sequence #1

- ◆ **Since there were all of these changes in hourly takeoffs/landings why was the reduction of number of flights not reflected in a change in noise contours? Explain why the shift to evening takeoffs in landings didn't change the noise contours or CNEL calculations.**

Response: Comment noted. The noise analysis in the Draft EIS/EIR and Supplement to the Draft EIS/EIR was done in complete compliance with scientific principles and FAA Order 1050.1D and Order 5050.4A. 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 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.

Page: 198, Sequence #1

- ◆ **What is the current distribution? How would these charts look broken down by types of aircraft and gate requirements?**

Response: Year 2000 was selected as an updated comparison of the Draft EIS/EIR baseline year (1996), and therefore, the document provided the data of that year. In addition, please see Table A-11 of Appendix A of the Draft LAX Master Plan Addendum regarding data broken down by types of aircraft. The terminal facility requirements uses this data as a base for developing the gate requirements.

Page: 203, Sequence #1

- ◆ **It would be appropriate to make these comparisons for several key years to see actual trends. The data for 1996 should be compared with 2000 and also 2002. Do these tables include cargo?**

Response: Year 2000 was selected as an updated comparison of the Draft EIS/EIR baseline year (1996), and therefore, the document provided the data of that year. Yes, they include cargo operations. For more detail, please see Table A-3 of Appendix A of the Draft LAX Master Plan Addendum.

Page: 211, Sequence #1

- ◆ **According to the load factor comparisons the loading is increasing. Based on the new Alt D approach of restricting gates instead of the present traffic constraint then more flights will bring in more people based on an equal number of flights. Explain how the load factor and frequency, as well as size of aircraft will not increase capacity given a fixed number of gates. Note that Alt D already calls for a mix of gates that increases the size of aircraft.**

Response: The higher load factors and aircraft gauge increases were all factored into the design day schedule developed and is consistent with the 78 MAP capacity restriction.

Page: 214, Sequence #1

- ◆ **Off-airport land use data updated in early 2000 was using data from what time period? Any data has some lag time between gathering and actual conditions. There has been substantial**

change since 1996. What changes have been documented? What are they? There were substantial problems with the numbers of impacted residents in the original 2001 study. How has this been improved? Where in this massive document are the details of this upgraded information?

Response: The data purchased from TRW in early 2000 was used to update parcel-level land use information that was presented in the Draft EIS/EIR. This data provided by TRW was also updated in early 2000. Also the consulting team updated the non-residential sensitive receptor database through field verification to confirm location, consolidate parcels that had the same use, and ensure consistency between the GIS analysis and the Grid ID points presented in Section 4.2, Land Use and Appendix D, Aircraft Noise Technical Report, in the Draft EIS/EIR.

In addition, the Supplement to the Draft EIS/EIR also included revisions to land use data included field verification by the consulting team to: identify the correct name and addresses of some private schools, confirm that the parcels were properly listed as private schools, and add any new non-residential noise-sensitive uses. This field survey resulted in the addition of a new school LAUSD public school (Open Magnet Charter Elementary). A summary of changes that have occurred between 1996 baseline and Year 2000 conditions was presented under the heading of Sensitive Receptors on page 4-88 of the Supplement to the Draft EIS/EIR.

It is not clear what "substantial problems" in the 2001 study are being suggested. There are no known problems of any magnitude related to the number of impacted residents that were presented in the Draft EIS/EIR or Supplement to the Draft EIS/EIR. However, the expansion of soundproofing under the ANMP, as stated in mitigation measure MM-LU-1, would require the inclusion of noise-sensitive uses currently outside the ANMP but newly exposed to 65 CNEL noise levels, based on quarterly noise measurements. This process would also require the notification of newly eligible property owners. Therefore, the actual noise-sensitive uses that would become eligible for mitigation would be based on current data.

Page: 214, Sequence #2

- ◆ **Earlier in the document a Wednesday was chosen as a busy, typical day because Fridays were so variable. Why, here, does the analysis use a Friday?**

Response: As indicated in Section A.2.4, Aviation at LAX, of Appendix A of the Draft LAX Master Plan Addendum, Wednesday (August 16, 2000) was selected as the representative day for air carrier and commuter activity for the 2000 design day flight schedule. However, August 3, 2000, which was Thursday, was selected as a representative day for all-cargo as well as general aviation operations. As stated in Section A.2.6, Ground Transportation, of the Appendix, airport-generated vehicle trips are primarily a function of O&D passengers, and they are measured and analyzed during the peak hour of airport activity, which is 11:00 a.m. to noon during the airport's peak month/average weekday, which was Friday in August.

Page: 215, Sequence #1

- ◆ **Into CTA traffic is not the only airport generated traffic. Many people park in the large, private lots and are shuttled into LAX. Also, rental car and hotel parking traffic exists. Also visits to LAX for people going through LAX is another factor. Explain why all data was taken on Fridays where as the argument made earlier in this document was for using a Wednesday as the "design day."**

Response: Please see Section 2.3.2.2, Ground Transportation Center (GTC), of the Draft LAX Master Plan Addendum regarding commercial vehicle access. Please see Response to comment Sequence #2 on page 214 above regarding why Fridays were used instead of Wednesday.

Page: 216, Sequence #1

- ◆ **Off-airport road changes were determined to only be Lincoln @ Venice by LADOT during the period of 1996 to 2000. What about all of the CalTrans, MTA, and LA Bureau of Public Works projects? Freeway off-ramps at Howard Hughes and La Tijera were improved during this time, for instance. Since the traffic count info is assumed to be based on on-airport instead of**

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baseline why wasn't more recent data used as a "sanity check" since many area changes have been in process since 2000.

Response: Please see Section 4.3.2, Off-Airport Surface Transportation, 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.

Page: 217, Sequence #1

- ◆ **If 289 units were acquired before 2001 how many are now acquired? I believe 289 was a quoted number in 2002 by Sound Proofing Bureau in meetings outside of the Master Plan considerations. What are the correct numbers and at what dates?**

Response: Please see Topical Response TR-MP-3 regarding the current status of acquisition in Manchester Square.

Page: 217, Sequence #2 and #3

- ◆ **Manchester Square and Belford areas will not be used for aviation purposes in no action? What do they plan as its purpose. This statement is in conflict with verbal statements made in numerous briefings.**

Response: As addressed in Section 3.2.4, No Action/No Project Alternative, of the Draft EIS/EIR, LAWA would continue its acquisition of the Manchester Square and Belford areas under the Airport Noise Mitigation Program (ANMP). Under the program, Manchester Square and Belford areas would be acquired and demolished. There are no aviation uses planned for the areas under No Action/No Project Alternative.

Page: 217, Sequence #4

- ◆ **As no north airfield changes were identified, when were all of the new gates added subsequent to 1984? Are the added gates west of Bradley considered north side? These gates are noted as 1997 additions in Figure A-9.**

Response: The description of airfield changes presented in Section A.3.2, Airfield, of Appendix A of the Draft LAX Master Plan Addendum referred to the modifications made to the airfield taxiway and taxiway system. The west pad gates delineated in Figure A-9 of the Appendix are not considered north side. Figure A-9 also delineated all additional aircraft parking positions completed between the year 1997 and 2000.

Page: 221, Sequence #1

- ◆ **If a gate renovation was classified as to expedite movement of passengers why was it not concurrently capacity expansion since the gates become available more frequently.**

Response: The existing baseline comparison issues appendix refers to gate renovations as improving the level of service and convenience to passengers. This is not considered a capacity enhancement.

Page: 221, Sequence #2 and #3:

- ◆ **If a commuter aircraft facility was created "in Terminal 3 containing five aircraft parking positions" why is this not classified as adding capacity?**

Response: The commuter aircraft activity at Terminal 3 had previously been accommodated from apron parking positions located immediately north of the ticketing hall on the east side of the concourse. These positions were relocated to the new facility shown on Figure A-9 of Appendix A of the Draft LAX Master Plan Addendum. Due to changes in airline alliances and operating agreements, this facility was never occupied or utilized for passenger traffic.

Page: 222, Sequence #1

- ◆ **Again, why is a project that adds ticket lobby and baggage claim areas; and adding holdroom seating space..." not an improvement? On what basis does an environmental analysis prior**

to the project determine" no capacity increase?" If a gate can be used for more flights then it IS capacity enhancement. In some cases this might not be bad, but it must be acknowledged.

Response: The addition of ticket lobby and baggage claim space and additional holdroom seating is considered an improvement to the level of passenger service and convenience. It is not considered a capacity enhancement. This project was subject to a separate environmental review, which found that it did not create a capacity enhancement.

Page: 222, Sequence #2 and #3

- ◆ **Weren't there also roadway improvements on the south side to accommodate changes to the cargo facilities?**

Response: Please see Topical Response TR-ST-1 regarding cargo truck traffic.

Page: 223, Sequence #1

- ◆ **When the USPS Office was opened in 1999 the old facility was converted to cargo. Why is this cargo expansion not mentioned?**

Response: The retail portion of the USPS facility was relocated in 1999. However, the USPS facility was not converted to a cargo facility. It is still used by the USPS for airmail.

Page: 223, Sequence #2

- ◆ **The First Flight Child Development Center opened at 9320 Lincoln is stated to be part of the Manchester Square and Belford areas. This location is NOT even adjacent to MS or Belford. What other properties were procured by LAWA during this period?**

Response: The First Flight Child Development Center was shown on Figure A-9 of the Draft LAX Master Plan Addendum and is not a part of Manchester Square and Belford. The Neutrogena site was procured by LAWA during that timeframe, and it was shown on Figure A-9 as a quadrangle east of Aviation Boulevard and south of Century Boulevard, to the left of the label Avion Drive Realignment. These properties were both described in the Land Use Technical Report of the Draft EIS/EIR, pages 84 and 85.

Page: 224, Sequence #1

- ◆ **Great story line about noise! This report assumes aircraft are coming straight in not spread around the area. Ground contours of the area are not considered for impact to the movement or amplification of noise.**

Response: Comment noted. The noise analysis in the Draft EIS/EIR and Supplement to the Draft EIS/EIR was done in complete compliance with scientific principles and FAA Order 1050.1D and Order 5050.4A. For information on aircraft ground activity please see Section 2.1.6, of Appendix S-C1, Supplemental Aircraft Noise Technical Report, of the Supplement to the Draft EIS/EIR.

Page: 224, Sequence #2

- ◆ **The lengthening of the contour is accounted for by addition of 200 more jets. The shift to more evening and night hours is also acknowledged. What remains missing from this is the noise frequency range changes. Much more low frequency noise is being generated.**

Response: Comment noted. The noise analysis in the Draft EIS/EIR and Supplement to the Draft EIS/EIR was done in complete compliance with scientific principles and FAA Order 1050.1D and Order 5050.4A. LAWA does not currently monitor, track or mitigate low frequency noise. There is no state or federal requirement that mandates LAWA to record or track low frequency noise, nor is a standard of significance established for low frequency noise because there is no accepted correlation between low frequency noise and community disturbance or classroom disruption/nighttime awakening. However, LAWA has sought to decrease low frequency noise generated by run-ups in the Draft EIS/EIR and Supplement to the Draft EIS/EIR through the development of Ground Run-up Enclosures (GRE). For each development alternative LAWA incorporates the construction of one or more GRE within which all run-up activity would be conducted. These facilities, when properly designed, achieve a reduction of approximately 15-18 decibels over run-ups conducted without

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enclosure. Please see Subtopical Response TR-N-5.3 regarding night run-up activity and Topical Response TR-N-7 regarding noise abatement measures and enforcement. Vibrations created by low-frequency noise from aircraft operations at LAX are not of significant magnitude to cause physical residential damage. Please see Topical Response TR-N-8, regarding noise-based vibration. Please see Response to Comment AL00017-52 regarding that there is no scientific evidence or other basis for determining the nature, extent, or significance of noise-related health effects due to any Master Plan alternative.

Page: 226, Sequence #1 and #2

- ◆ **It has been theorized that run-up activity still has an impact on surrounding communities. When were the record keeping requirements removed?**

Response: Because the locations have not changed and the mix of aircraft types are, on the whole, quieter than those present during the 1996 baseline condition presented in Figure 3, Current Ground Noise Pattern, of Appendix D, Aircraft Noise Technical Report, of the Draft EIS/EIR, the noise exposure pattern for 2000 run-up conditions will not be greater than that of the baseline condition, and does not affect the location of CNEL contours beyond the airport boundary. Please see Topical Response TR-N-5, regarding nighttime operations and in particular Subtopical Response TR-N-5.3, regarding night run-up activity. In addition, LAWA does not maintain daily operational ground run-up logs. Each individual airline maintains its own maintenance records. The only ground run-up records maintained by LAWA are those where potential violators during nighttime hours are logged. This correction is identified in the Errata to Master Plan Addendum.

Page: 226, Sequence #3 and #4

- ◆ **The assumptions that areas are largely built out and static is invalid. The Westchester-Playa del Rey Community Plan Update investigations showed marked increases in population due to increased density from replacement of existing buildings.**

Response: Comment noted.

Page: 227, Sequence #1

- ◆ **There is a statement that the 2000 Census data was not yet available? Since this Addendum was presumably done during 2002-3 why was it not used? How would the Land Use Patterns be modified?**

Response: The document is stating that the United States Census for 2000 was not available for the Draft EIS/EIR, not the Addendum.

Page: 227, Sequence #2

- ◆ **This statement is one of very few acknowledging changes in air traffic routes ever made in writing. What are they and when were they implemented?**

Response: Please see Topical Response TR-N-3, regarding aircraft flight procedures and in particular Subtopical Response TR-N-3.1, regarding flight routes relative to areas of the South Bay and Subtopical Response TR-N-3.2, regarding early turns over areas north and south of LAX.

Page: 227, Sequence #3

- ◆ **An average of 2.9 eastern departures per night? What is the value subsequent to 2000?**

Response: As indicated on page A-68 of Appendix A of the Draft LAX Master Plan Addendum, the number of east departures at night averaged 1.7 per night (614 annually) in 1996, as compared to 2.9 per night (1,069 annually) in 2000.

Page: 228, Sequence #1 and #2

- ◆ **Runway incursions is noted as a significant problem. What types have occurred and are they resolvable by runway change only or are they mainly person error related?**

Response: Please see Topical Response TR-SAF-1 regarding runway incursions.

Appendix B

2000 Base Airside Simulation Assumptions and Results

Page: 233, Sequence #1

- ◆ Operating assumptions are stated to have been the same for 1994, 1996, and 2000 simulations. The assumptions are not in this document, but instead are Chapter II of the Draft LAX Master Plan.

Response: Comment noted.

Page: 236, Sequence #1

- ◆ If the peak hour 10-11 and people arrive about 2 hours early, then traffic is from 8-10 AM - during the AM rush hour traffic...

Response: Please see Topical Response TR-ST-2 and, in particular, Subtopical Response TR-ST-2.11 regarding the selection of peak hours for the ground access analysis.

Appendix C

Los Angeles Region's Secondary Airports

Page: 243, Sequence #1 and #2

- ◆ If the "secondary" airports will reach capacity at approximately the time that Alt D would be completed then there would be no reasonable option to accommodate growth at that time. What in the forecast suggests to start growth improvements at the "secondary" airports NOW?

Response: Please see Response to Comment AL00022-8.

Page: 244, Sequence #2

- ◆ The statement, "LAX today serves a larger percentage of regional demand than the demand generated within its catchment area..." acknowledges that people are being forced to travel beyond the reasonable distance to get to LAX. What is being done to remedy this?

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, is designed to serve a future (2015) airport activity to a 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 demands at airports other than LAX. A description of Alternative D was provided in Chapter 3, Alternatives, of the Supplement to the Draft EIS/EIR. For additional information, Topical Response TR-RC-1 regarding the LAX Master Plan role in the regional approach to meeting demand.

Page: 245, Sequence #1

- ◆ What about cargo for the area? What does the evaluation and constraints say about cargo? Can a significant increase in cargo also occur? If not, why not?

Response: Please see Topical Response TR-RC-4 that discusses constraints at John Wayne Airport. Without the planned capacity of El Toro and with the very limited capacity of John Wayne Airport, Orange County does not have and will not have the facilities to serve its own air cargo needs.

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Page: 245, Sequence #2

- ◆ Does the review of this airport usage reflect policy of the airport, of the airlines serving it, or physical constraints? If policy changes were to be invoked, could Burbank airport serve more medium and long-haul passengers? What can be done to accommodate this? What about cargo at this airport?

Response: As described in Section C.3, Burbank-Glendale-Pasadena Airport, of Appendix C of the Draft LAX Master Plan Addendum, the airport has environmental, physical and policy constraints that will severely limit its ability to fully serve the demand potential of its market area. LAWA is not at liberty to change policy at Burbank Airport. Please see Response to Comment AL00022-8.

Page: 246, Sequence #1

- ◆ Same basic question about Long Beach as the others; must this be constrained and how can it be modified? What about cargo handling and infrastructure to address this?

Response: Please see Response to Comment AL00022-8.

Page: 246, Sequence #2

- ◆ As business expands in the Inland Empire Palm Springs Airport will become a closer alternative for the eastern based businesses. Being near a major rail line, this could also become useful for cargo. What needs to be done to facilitate growth here?

Response: Please see Response to Comment AL00022-8.

Page: 269, Sequence #1

- ◆ How could this be for CY 1995 and the previous chart Table C-19 be for CY 2000 with exactly the same number of O&D passengers?

Response: Tables C-19 and C-20 in Appendix C of the Draft LAX Master Plan Addendum contain inaccurate data. Corrections to the data are included in the Errata to Draft Master Plan Addendum.

Page: 270, Sequence #1

- ◆ A premise is that LA would lose O&D to another international airport if LAX doesn't expand. Only one airport, SFO, is capable of accepting passengers at a west coast destination that could travel semi-conveniently to Southern California. Explain how these other airports could possibly become more convenient in place of another SoCal destination.

Response: Passengers traveling to Southern California from international destinations could, quite conveniently, arrive at several other U.S. international airports (SFO, DEN, DFW, PHX, LAS, SEA) and connect to domestic flights for travel into the Southern California region. Today, the opposite is true. That is, international travelers bound for other parts of the U.S. travel to LAX and connect to domestic flights to other U.S. cities. Please see Section 1.3.6 of the Draft LAX Master Plan Addendum regarding the contribution of LAX as an international gateway.

Page: 271, Sequence #1

- ◆ The percentages on this chart only have nominal significance for a total number of passengers. A different, better percentage to view would be that of percentage from the region.

Response: Comment noted.

Appendix D

Interim Year Activity Analysis

Page: 277, Sequence #1

- ◆ **The 3 cargo values can't be the same if it is assumed that cargo will increase from 2 MAT to 3.5 MAT! If the assumption is larger aircraft, how will LAX handle these aircraft.**

Response: The table is correct and the cargo design day operations are equivalent for 2005, 2008, 2013, and 2015. The increase in tonnage is achieved partially through an increase in aircraft size. The LAX runways and taxiway have been designed to safely accommodate all of the aircraft in the fleet, including the cargo aircraft. The size of the cargo fleet was taken into consideration in the capacity analysis.

In addition to an increase in aircraft size, it is important to note that the majority of cargo transported through LAX is carried by passenger airlines. Sufficient cargo lift is available for Alternative D in the bellies of passenger aircraft, particularly international, to meet the projected demand for belly cargo.

Page: 278, Sequence #1

- ◆ **Where is the backup data for these interim periods? What is the aircraft fleet mix assumed? What changes are assumed to get each interim value? How is the noise analysis used with regard to flight track noise? What assumptions of runway use, alternative routes, etc. are part of the noise analysis? What about topological and weather conditions? Does the increase of aircraft operations add pollutants that make the noise conditions worse?**

Response: The fleet mix data, hourly profile of operations, user group distribution, and fix distribution for Alternative D for the three interim years was presented in Appendix F.

The design day aircraft fleet mix for each interim year that was analyzed was presented in Appendix F of the Draft LAX Master Plan Addendum (Tables F-1 through F-3).

Appendix D of the Draft LAX Master Plan Addendum, Sections D.1 and D.2 outlined the methodology used to determine the resulting passenger and operational numbers associated with the interim years of 2005 and 2008. The 2013 interim year activity was assumed to be equivalent to the 2015 activity level for the reasons outlined in Section D.3 of Appendix D of the Draft LAX Master Plan Addendum.

For information on the noise analysis and the use of flight tracks please see Section 2.1.3, Flight Tracks, and Section 3.1.3, Alternative D Flight Track Usage, of Appendix S-C1, Supplemental Aircraft Noise Technical Report, of the Supplement to the Draft EIS/EIR. Additionally, please see Topical Response TR-N-1, Noise Modeling Approach, and in particular Subtopical Response TR-N-1.4, regarding simplified line drawing flight tracks vs. track dispersion.

For information on runway utilization and flight track usage please see Section 3, Future Aircraft Operating Conditions of Appendix S-C1, Supplemental Aircraft Noise Technical Report, of the Supplement to the Draft EIS/EIR.

For information on the topological and weather conditions used in the noise analysis, please see Section 2.1.4, Aircraft Performance Characteristics, of Appendix S-C1, Supplemental Aircraft Noise Technical Report, of the Supplement to the Draft EIS/EIR.

The Supplement to the Draft EIS/EIR addressed noise and air quality impacts associated with Alternative D in Section 4.1, Noise, Section 4.2, Land Use, and Section 4.6, Air Quality, respectively. Supporting technical data and analyses were provided in Appendices S-C and S-E and Technical Reports S-1 and S-4 of the Supplement to the Draft EIS/EIR.

Page: 278, Sequence #2

- ◆ **The statement that 2005 Alt D conditions are NOT equivalent to NANP. In the earlier portion of this Appendix D it calls for closure of 25L. NANP doesn't have this closure in place. At this point no air-field gates or other runway action is supposed to have occurred. This means that at a minimum the often repeated 78 MAP inherent value for NANP applies, not 71.2. Whenever the north runway work is started then there will be a temporary change to account for the**

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reduced number of runways. Since the current constraint is traffic at Century and Sepulveda not air or gate ops, the theoretical capacity of LAX would actually go up because this constraint would be eliminated.

Response: The No Action/No Project Alternative is projected to accommodate 78.7 MAP by 2015. This alternative would accommodate fewer passengers in 2005 than in 2015 due to projected aircraft size. The No Action/No Project Alternative enplanements/departure ratio is projected to be 115.96 in 2005, increasing to 127.47 in 2015. This accounts for the lower number of passengers served in 2005, as compared to 2015. The 2005 enplanements/departure ratio is lower than in 2015 as a result of the assumption that aircraft size would not increase beyond the unconstrained forecast in any particular air service region. Please see Chapter V, Section 3.3.2.1, 2005 Alternatives, of the Draft LAX Master Plan for further detail.

The Century and Sepulveda intersection was not the limiting factor in determining the capacity constraints at LAX. The Master Plan analysis determined that the ability of the existing airport to serve additional passengers is limited by the capacity of the Central Terminal Area curbside and access roadway system. Until the Alternative D Central Terminal Area improvements are implemented and in place, the capacity of LAX will be limited by these roadway constraints. Please see the response to Comment AF00001-58 for more information regarding the Central Terminal Area capacity limitations.

Page: 279, Sequence #1

- ◆ **Why was the 2008 scenario assumption that 1996 levels would not be exceeded for peak hour ops? What is the basis of this?**

Response: This assumption was applied for all alternatives with four-runway systems. Peak hour aircraft operations activity was defined based on the capacity of the existing four-runway system at LAX in visual operating conditions. Given that in 1996 the airport was already operating at a less than desirable level of service, peak hour operations in all alternatives with four runways were assumed not to exceed the levels observed in 1996. Please see Chapter V, Concept Development November 7, 2000, of the Draft LAX Master Plan, Section 3.3.2, Final Iteration Constrained Activity, for further information on this assumption.

Page: 279, Sequence #2

- ◆ **What is the theoretical capacity of NANP at this point since it is indicated that Alt D in 2008 will use the remote west pads.**

Response: The capacity of the No Action/No Project Alternative in 2008 is not required by NEPA for the EIS/EIR and therefore was not calculated.

Page: 279, Sequence #3

- ◆ **Alt D talked about upgrading and adding cargo facilities in the south and west areas. How is the capacity equivalent at the intermittent times?**

Response: All cargo facility improvements would be in place by 2008 with Alternative D. Therefore, the Alternative D 2008 cargo capacity would be equivalent to that available in 2015.

Page: 280, Sequence #1

- ◆ **How is the commuter ops going to be limited?**

Response: It is assumed that the airlines would limit commuter operations in response to the capacity constraints at LAX. Please see Comment Response SPC00308 - 27 regarding constraints on activity levels.

Page: 280, Sequence #2

- ◆ **Isn't there a difference between peaks of domestic and international? If the peaks differ, then they're not mutually exclusive and there is no expectation that airlines will reduce operations.**

Response: Yes, there is a difference between the international peak hour and the domestic peak hour. In addition, the peak hour for each region of the world will differ. For example, the peak hour

for flights to Canada differs from the peak hour for flights to Europe or Asia. The operations for each individual air service region were evaluated for each hour of the day, taking into consideration the overall capacity of the airfield and airline scheduling needs (time zones, when passengers prefer to fly, etc). The domestic air carrier schedules were flattened throughout the day (including both the domestic peak hours and the international peak hours) in order to allow more international operations to be scheduled.

Appendix E

Alternative D Airside Analysis

Page: 291, Sequence #1

- ◆ **Why are the general aviation facilities being built? If the objective is to push towards larger aircraft why is another GA being built?**

Response: Please see Response to Comment PC01496-1 regarding general aviation activity and facilities at LAX and Response to Comment PC01391-9 for a discussion on accessibility of the airport.

Page: 292, Sequence #1

- ◆ **This assumes that the movement of 25L will be done with/without Alt D. Where is this written? What documentation authorizes and approves this construction? Similarly in the next paragraph of E.1.2 where is the authorization for the expansion of cargo facilities?**

Response: It is not assumed that Runway 25L would be relocated without Alternative D. The text in question is pointing out that if Runway 25L were open in 2005 under Alternative D, then the activity used to evaluate the 2005 Alternative D conditions would be the same as the No Action/No Project Alternative activity level.

It is not assumed that the new cargo facilities would be developed without Alternative D. The paragraph in question is discussing the level of activity used to assess Alternative D in 2005. As discussed in the Draft LAX Master Plan Addendum, Appendix E, Section E.1.1.3, the Alternative D cargo facilities would not be constructed by 2005. Therefore, the cargo activity level used to assess Alternative D in 2005 is equivalent to the 2005 No Action/No Project Alternative, which does not include new cargo facilities.

Page: 293, Sequence #1

- ◆ **If the gate layout will be according to type of aircraft, how many of the airlines will have to move their operations to be in multiple terminals based on the layout of the gate capacity types?**

Response: As discussed in Section E.1.3 of Appendix E of the Draft LAX Master Plan Addendum, the airlines were classified into airline groups for the purpose of assigning gates to each flight in the design day schedules. Therefore, it is not possible to state the number of airlines that would be required to move their operations to multiple terminals. The airline-gate allocations were devised based on type of aircraft and airline groups. One of the key considerations in developing the gate layout was to ensure that the airlines' operations would be convenient to passengers and efficient for the airlines. Every effort was made to consolidate each airline group into a specific area, within the constraints of the gate facilities provided by Alternative D.

Page: 301, Sequence #1

- ◆ **If there is a substantial difference (388' movement south) between NANP and Alt D runways on the north side why is it assumed that the patterns to approach will be the same? Also, if cargo will be increased and moved along with a different mix of aircraft for various airlines how will the "efficient" runway be used to assure landing nearest the gates**

Response: The airspace route assumptions from the outer fixes for Alternative D would be the same as in the No Action/No Project Alternative for capacity simulation purposes. The actual routes would be shifted south as a result of the runway relocation, however, all relevant assumptions would remain the same.

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The simulation analysis found that it would be most efficient for arrivals to be allocated to the runways based on aircraft size and the origin of the flight, not based on gate location. This results in longer taxi times but maximizes the efficiency of the airspace and reduces delays by reducing crossings in the air and reducing in-trail separation requirements.

Page: 302, Sequence #2

- ◆ **How was the noise model completed without this modeling? Was it assumed that the 90% of the flights in the other direction were sufficient? If there are any changes in the flight paths going east and/or west is it not important to note them even if it doesn't push the noise over the 65 CNEL threshold?**

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 Supplement to the Draft EIS/EIR 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. East flow airspace was not modeled for Alternative D because the airspace routes are the same as the No Action/No Project Alternative or Alternative C.

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 Noise Management 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 the Noise Management Bureau 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. Subsequent processing provides take off trip distance assignments based on the scheduled destinations served by each aircraft type/carrier combination, as extracted from the Official Airline Guide for the period under consideration. The data are then compiled into a format that may be processed by the computer noise model to produce patterns of noise exposure. The Noise Management Bureau would continue to use this system in meeting its responsibility to regularly monitor and report on noise conditions in the airport environs. Section 2.1.5 of Appendix D, Aircraft Noise Technical Report, of the Draft EIS/EIR describes this process in greater detail.

During the period 1996 through 2001, the annual data indicates that an average of 4.5 percent of all arrivals were made to the east and 1.3 percent of all departures were made to the east. The noise computations for future years conservatively assume that 5 to 6 percent of all departures will be made to the east, based on long-term wind conditions and the most efficient operating conditions. Air Traffic Control at LAX purposefully keeps aircraft in westerly flow as much as possible to minimize the impact of departure noise on residential areas around the airport.

For information on noise analysis and use of flight tracks please see Section 2.1.3, Flight Tracks and Section 3.1.3, Alternative D Flight Track Usage, of Appendix S-C1, Supplemental Aircraft Noise Technical Report, of the Supplement to the Draft EIS/EIR. Additionally, please see Topical Response TR-N-1, Noise Modeling Approach and in particular Subtopical Response TR-N-1.4, regarding simplified line drawing flight tracks vs. track dispersion.

Page: 304, Sequence #1

- ◆ **One important flow is not shown; night ops which take off and land over the ocean. Why is this not addressed? What impacts will this have on the models and noise or pollution impact predictions?**

Response: An independent analysis was performed to determine the impact of the Over-Ocean operating plan, which is in effect daily from 24:00 to 06:30, on the rest of the day's operations. This

analysis was presented in the Draft LAX Master Plan, Chapter II, Existing Conditions Working Paper, in Section 2.5.4, Over-Ocean Operation Impact.

The Supplement to the Draft EIS/EIR addressed noise and air quality impacts associated with Alternative D in Section 4.1, Noise, Section 4.2, Land Use, and Section 4.6, Air Quality, respectively. Supporting technical data and analyses are provided in Appendices S-C and S-E and Technical Reports S-1 and S-4 of the Supplement to the Draft EIS/EIR.

Page: 304, Sequence #2

- ◆ **In eastern ops the north takeoffs make a hard left to the north which is not shown. The south side turns slightly to the south for spacing. These generalized flows doesn't help with the analysis of impact on local communities or areas as much as 10-15 miles out where aircraft are already descending approaches at 3000' and less. Where are these analyses in the report document? How are the impacts taken into consideration and at all mitigated? This is especially true for eastern ops when takeoffs are done exclusively over highly populated areas instead of an ocean.**

Response: Comment noted. The generalized airspace routes shown in Figures E-9 and E-10 were developed to illustrate airside capacity simulation assumptions only. The noise analysis was done in complete compliance with appropriate FAA and scientific principles, including FAA Order 1050.1D and Order 5050.4A. For information on noise analysis and use of flight tracks please see Section 2.1.3, Flight Tracks and Section 3.1.3, Alternative D Flight Track Usage, of Appendix S-C1, Supplemental Aircraft Noise Technical Report, of the Supplement to the Draft EIS/EIR.

Please see Topical Response TR-N-1, regarding the noise modeling approach and TR-N-4, regarding noise mitigation.

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 the LAWA's Noise Management 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 the Noise Management Bureau 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. Subsequent processing provides take off trip distance assignments based on the scheduled destinations served by each aircraft type/carrier combination, as extracted from the Official Airline Guide for the period under consideration. The data are then compiled into a format that may be processed by the computer noise model to produce patterns of noise exposure. The Noise Management Bureau would continue to use this system in meeting its responsibility to regularly monitor and report on noise conditions in the airport environs. Section 2.1.5 of Appendix D, Aircraft Noise Technical Report, of the Draft EIS/EIR described this process in greater detail.

During the period 1996 through 2001, the annual data indicates that an average of 4.5 percent of all arrivals were made to the east and 1.3 percent of all departures were made to the east. The noise computations for future years conservatively assume that 5 to 6 percent of all departures will be made to the east, based on long-term wind conditions and the most efficient operating conditions. Air Traffic Control at LAX purposefully keeps aircraft in westerly flow as much as possible to minimize the impact of departure noise on residential areas around the airport.

Page: 305, Sequence #1

- ◆ **There are several variations to the routes shown on this diagram. How are they taken into consideration for this analysis?**

Response: The purpose of these figures is to illustrate the primary airspace routes for purposes of the capacity simulations. Actual routes flown may differ, however, the use of the primary routes is

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sufficient for purposes of determining capacity and delay. The noise analysis takes into consideration the actual routes flown by the aircraft at LAX. Please see Section 2.1, Data Sources and Assumptions of Appendix S-C1, Supplemental Aircraft Noise Technical Report, of the Supplement to the Draft EIS/EIR.

Page: 306, Sequence #1

- ◆ **In eastern ops the southern pathway shows straight out to Downey. In actuality more planes turn south to go west after takeoff.**

Response: The initial calibration and baseline simulation analysis prepared for the Master Plan determined that all east flow departures from the same complex are in-trail to the 3 DME (Distance Measuring Equipment) arc from the LAX VOR (approximately one nautical mile from the 24R/24L runway ends). Turboprop departures turn at this point while jet departures continue in-trail for approximately two nautical miles from the north complex and about 10 nautical miles from the south complex. This assumption influences the separation required between successive departures. Please see Chapter II, Existing Conditions Working Paper, of the Draft LAX Master Plan, Section 2.3.4, Airspace Operating Assumptions, for further detail regarding the east flow airspace assumptions. Please see the response to Comment AR00003-7 for more information on how these assumptions were developed and verified with LAWA, FAA, and the LAX carriers. It is important to note that the airspace diagram shows generalized flows only and are sufficient for capacity simulation purposes. Actual flight paths may differ somewhat.

Page: 307, Sequence #1

- ◆ **Do the taxiway directionals change with a change in direction of ops? If safe spacing between the runways requires a taxiway distance, why are the dual direction taxiways on the side of the runways nearest the terminals not an even greater spacing? Will they be dual directional, but not be allowed to be used in both directions at the same time?**

Response: Yes, the taxi flows are different when the airport is operating in west flow versus east flow. Figures E-11 and E-12 show the west flow primary airfield taxi routes and Figures E-13 and E-14 show the east flow primary airfield taxi routes.

The required separation between a runway and a taxiway is greater than the required separation between two parallel taxiways and/or the required separation between a taxiway and a non-movement area. Therefore the separation from a taxiway to an aircraft parked at a terminal gate would typically be less than the separation between a taxiway and a parallel runway. The separation between the parallel taxiways in question is sufficient to accommodate unrestricted movement by all aircraft except the New Large Aircraft.

Page: 307, Sequence #2

- ◆ **What is an uncoordinated runway crossing? With all the rationale used to justify the runway movements to reduce incursions how is it justified that those crossing are not managed?**

Response: The exhibit incorrectly labels uncoordinated runway crossings on the north airfield. There are no uncoordinated runway crossings on the north airfield. However, there is an uncoordinated runway crossing associated with a bypass taxiway around the west end of Runway 25R that is not labeled.

It is important to note that although a bypass taxiway is labeled as an "uncoordinated runway crossing," there would still be some level of coordination by the air traffic controllers. The uncoordinated runway crossing label means that the bypass taxiway is not treated as a runway crossing, however, aircraft using it would still be controlled by an air traffic controller. Bypass taxiways were included in the LAX Master Plan alternatives recognizing that the procedures for their use were still being finalized.

Although an uncoordinated runway crossing is permitted in Alternative D, it is only occasionally used because most of the gates are located in the Central Terminal Area and aircraft would have to taxi out of their way to use it. In fact, during the busiest hours of the day (11:00 to 13:00), the bypass taxiway was not used at all. Also, please see Topical Response TR-SAF-1 regarding safety issues.

Page: 308, Sequence #1

- ◆ **While this is under construction on 25L the taxiways appear to be using a method similar to the end around studied at Ames. If this is found to be effective will it continue to be used? Where are the floating terminal pads going to be utilized? How will busses be routed to avoid the aircraft?**

Response: End around taxiways are not a part of the proposed Master Plan Alternative D. Any future modifications to the airfield that are not proposed in the Master Plan would be studied and proposed at a later date. Any such modifications would be subject to public review and environmental analysis.

The West Pad remote gates would be relocated to the CTA and converted to contact gates.

Page: 310, Sequence #1

- ◆ **This applies to all the figures depicting aircraft ground movements. None take into consideration the night time ops condition of take-offs and landings to the west.**

Response: An independent analysis was performed to determine the impact of the Over-Ocean operating plan, which is in effect daily from 24:00 to 06:30, on the rest of the day's operations. This analysis was presented in the Draft LAX Master Plan, Chapter II, Existing Conditions Working Paper, in Section 2.5.4, Over-Ocean Operation Impact.

Page: 312, Sequence #2

- ◆ **Is the assumption that flights would be cancelled to process arrivals prior to midnight? This doesn't happen now at night or during switchover from westerly ops to eastern ops.**

Response: The assumption was that flights that are scheduled prior to midnight would be cancelled if they could not be processed at LAX prior to midnight. Flights that would normally occur after midnight were still permitted to land and depart. Flight cancellations are assumed only in high delay situations when air traffic control implements a flow control program to reduce demand on the airspace and runways. Chapter IV, Facility Requirements, Section 3.1.1, Arrival Flow Control Delay, of the Draft LAX Master Plan discussed how the LAX flow control program works. The airlines currently do cancel flights during situations of reduced capacity, at LAX and other airports in the U.S. The need to cancel flights would increase in the future as delays increase with Alternative D and with the No Action/No Project Alternative.

Page: 313, Sequence #1

- ◆ **What do the percentages mean? I.E. on 24R and 24L Krauz is listed without % whereas on south complex 25R has no % yet 25L shows 79%?? Explain what these mean and how they were determined. Also how are these factored into the model to determine pollution patterns and noise patterns.**

Response: The percentages indicate the percent of flights from/to a particular fix that are using a particular runway. Percentages were listed if more than 30 percent of flights from/to a fix used a runway. For example, 79 percent of Krauz jet arrivals were assigned to Runway 25L and the remainder were assigned to Runways 24R and 25R in 2015. Runway 24L did not have any Krauz arrivals. The percentages were compiled from the results of the simulation analysis.

The Supplement to the Draft EIS/EIR addressed noise and air quality impacts associated with Alternative D in Section 4.1, Noise, Section 4.2, Land Use, and Section 4.6, Air Quality, respectively. Supporting technical data and analyses are provided in Appendices S-C and S-E and Technical Reports S-1 and S-4 of the Supplement to the Draft EIS/EIR.

Page: 315, Sequence #1

- ◆ **What is assumed in NANP? In several areas NANP included south runway changes despite nothing in writing approving it. What about night time ops impact?**

Response: As shown on Figure E-17 and in Table E-3 of Appendix D to the Draft LAX Master Plan Addendum, the No Action/No Project has average delays of 13.34 minutes per operation and an

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average of 29 daily canceled flights. The No Action/No Project Alternative does not include any runway improvements. Nighttime operations were included in the simulations and the results depicted on Figure E-17 of Appendix D to the Draft LAX Master Plan Addendum reflect this.

Page: 320, Sequence #1

- ◆ **The average peak hour throughput values are close for several alternatives. What is the statistical significance values?**

Response: Alternatives C and D, and the No Action/No Project Alternative have similar peak hour throughput values because they all have four runways with similar airfield capacity. Alternatives A and B, which both have five runways and similar airfield capacity, each have a peak hour throughput of 172 operations. The statistical significance of the differences is not required by NEPA for the EIS/EIR and therefore was not calculated.

Page: 324, Sequence #1

- ◆ **Explain how the capacity in 2008 would only be 73.3 MAP since the south runways would be completed and widened with new taxiways while none of the gates are removed.**

Response: Even though the separation between the runways on the south airfield would be increased and new taxiways provided, LAX would still consist of a four-runway system in Alternative D in 2008. Therefore, the capacity would be limited. In addition, although no gates would be removed in 2008, no new gate or landside facilities would be constructed by 2008. Therefore, the level of passengers that could be expected in 2008 with Alternative D was determined based on the ability of the existing ramp to accommodate larger aircraft and the ability of the existing landside facilities to accommodate a higher level of origin and destination passengers. Appendix D of the Draft LAX Master Plan Addendum, Section D.2, 2008, described the capacity constraints associated with Alternative D in 2008 and the assumptions used to derive the 73.3 MAP capacity number.

Appendix G

Detailed SIMMOD Reports for Air Quality Purposes

Page: 465, Sequence #1

- ◆ **What do these queue length charts mean? Is it the number of aircraft? Is it minutes? What....**

Response: The queue length tables refer to the average number of aircraft waiting to depart at each runway end for each hour of the day.

Page: 467, Sequence #1

- ◆ **Why are the max taxi periods at strange hours (ie 2 AM, 5 AM) for arrivals and more steady, but high all the time for departures?**

Response: The average taxi times shown in this table refer to the amount of time it takes an aircraft to travel unimpeded between its gate and the runway. Runway 6R is not used by arriving aircraft during the day. Therefore, the maximum taxi period will occur during the nighttime hours, when arriving aircraft are using the runway. Runway 6R is used by departures throughout the day. Average departure taxi times are fairly consistent throughout the day because there are a large number of departures using this runway and they are all traveling from the same general gate area. This results in the consistent taxi times in each hour.

Appendix H

Concept Development

Page: 499, Sequence #1

- ◆ **Interesting assumptions that were not of consideration. Also, why were the APM developed to the accept Green Line passengers instead of facilitating Green Line going north to a check in facility?**

Response: As stated in Section 6.6, Automated People Mover Alternative D Concept, of Appendix I of the Draft LAX Master Plan Addendum, each supporting LAX remote transportation facility (GTC, ITC, and RAC) will accomplish Level 1 screening of passengers prior to boarding the APM. As addressed in Section 6.1, Metropolitan Transit Authority (MTA) Green Line Connection, of Appendix I of the Draft LAX Master Plan Addendum, under today's system, there are no known airport security measures other than organic security (deputy sheriffs riding the light rail cars, Closed Circuit Television (CCTV), and other proprietary security systems) inherent to general MTA operations. As such, there are no identified or proposed passenger or airport employee inspection processes in place between the MTA Green Line and the CTA. In addition, please see Topical Response TR-SEC-1 for a more detailed discussion on security under Alternative D, and Responses to Comments SPHL00022-2 and SPHO00004-6.

Page: 500, Sequence #1

- ◆ **So Manchester Square was decided upon in the initial considerations whereas the southern portion was unacceptable for reasons opposite to MS desirability.**

Response: Comment noted.

Page: 507, Sequence #1 and #2

- ◆ **What was the basis for the refinement to move the APM connection south? How much curb space is needed?**

Response: As stated in Appendix H of the Draft LAX Master Plan Addendum, the APM connection was relocated south to be closer to the MTA Green Line connection at the northeast corner of Aviation Boulevard and I-105. Curbfront requirements were addressed in Section 4.3.1, On-Airport Surface Transportation, of the Supplement to the Draft EIS/EIR.

Page: 508, Sequence #1

- ◆ **Why is the 100% EDS screening being done in the CTA instead at the time baggage is first checked resulting in a one-time review. This way people will not have to carry all of their luggage from the GTC to the CTA.**

Response: Section H.4, CTA Security Modification Analysis, of Appendix H of the Draft LAX Master Plan Addendum, was an analysis which investigated the potential modification to the CTA to incorporate 100 percent EDS in the existing terminal buildings. In this analysis the GTC would not be constructed. The APM as described in this option would transport people to and from the long-term parking lots and provide a connection to the Metro Green Line.

Page: 514, Sequence #1

- ◆ **This option talked about replacement gates but the north side is shown intact. Was this an accident in the first option that was just overlooked?**

Response: As depicted in Figure H-12 of Appendix H of the Draft LAX Master Plan Addendum, the West Pad remote gates would be relocated to the CTA and converted to contact gates. This option did not make improvements to the north airfield complex, which would allow the north side gates to remain intact.

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Page: 520, Sequence #1 and #2

- ◆ **What is the meaning of the statement, "It was determined through meetings...any recommended security modifications within the CTA be consistent with the long-term planning for all Master Plan Alternatives." Of the 4 alternatives only D calls for elimination of personal vehicles.**

Response: Comment noted. Inasmuch as Alternatives A, B and C have a West Terminal, which would accommodate much of the passenger activity that would otherwise occur only at the CTA under the No Action/No Project Alternative and Alternative D, the nature of security modifications at the CTA under those other alternatives would respond to the long-term planning differently than Alternative D.

Page: 521, Sequence #1

- ◆ **What are the hard constraints that were given by senior LAWA management as to which facilities were to be considered as hard constraints?**

Response: The bullet points in the first paragraph on page H-40, of Appendix H of the Draft LAX Master Plan Addendum listed hard constraints. Please see Figure H-24 of the document for depiction of these areas.

Page: 521, Sequence #2 and #3

- ◆ **At what point was the lengthening of 24L over Sepulveda abandoned? As we have said regularly, it would be a sad day to have all 4 runways destroyed by a truck bomb on Sepulveda.**

Response: As stated on page H-77 of Appendix H of the Draft LAX Master Plan Addendum, Alternative D8, which did not propose lengthening of 24L over Sepulveda, was carried forward for further analysis. Please see Figure H-33 of the document, which depicted Alternative D8 option.

Page: 541, Sequence #1

- ◆ **What is the separation distance for 24R/L? Several places show 340' but another says 388'? How was this value determined?**

Response: As part of the refinement of Alternative D, multiple concepts were evaluated to determine which elements, and their corresponding configuration, warranted further analysis. As indicated in Figure H-33 of Appendix H of the Draft LAX Master Plan Addendum, Alternative D8, which was the option that was carried forward for further analysis, proposed a 1,040 foot separation between 24R and 24L.

Page: 543, Sequence #1

- ◆ **The Belford area, like Manchester Square, is not LAWA owned-yet.**

Response: Please see Subtopical Response TR-MP-3.1.2 that discusses land acquisition associated with Manchester Square and Belford under the Airport Noise Mitigation Program (ANMP).

Appendix I

Comparative Security Analysis of Alternative D and the No Action/No Project Alternative

Page: 605, Sequence #1

- ◆ The entire theory of security expounded upon by this Appendix I of the Alt D Addendum corresponds to the SAIC study report of concentric levels of security. It also states that LAX is too small to be secure and need the additional land of Manchester Square, Belford Square, and all of the other areas out to the 405 freeway to implement the security strategy. Explain why the present land mass is insufficient and why some of the less used areas can not be secured in place of more land being added. Explain why the lesser used cargo must be further developed to allow for an increase of 1.5 MAT.

Response: Comment noted. Please see Topical Response TR-SEC-1 regarding security-related aspect of the comment. As addressed in Section 3.1, Formulation and Refinement of Alternatives, of the Supplement to the Draft EIS/EIR, Alternative D would be designed to serve approximately 3.1 million annual tons (MAT) of air cargo activity, which is similar to the activity level identified in the scenario adopted by the Southern California Association of Governments' (SCAG's) Regional Council for the 2001 Regional Transportation Plan (RTP). This level of aviation activity is also equivalent to the No Action/No Project activity level.

Page: 611, Sequence #1 and #2

- ◆ LAX accounts for 1 in 20 jobs of Southern California. This makes LAX one very significant target? Explain why LAX has to be so dominant in air commerce instead of being a key in a more regionally dispersed system.

Response: Please see Topical Response TR-SEC-1 regarding security-related aspect of the comment. Alternative D, Enhanced Safety and Security Plan, has been designed to serve a level of future (2015) airport activity comparable to that of the No Action/No Project Alternative, and will make the airport safer and more secure, convenient and efficient. 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.

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