

# **Final Environmental Impact Report (Final EIR)**

[State Clearinghouse No. 2013021020]

for

## **Los Angeles International Airport (LAX) Midfield Satellite Concourse**

### **Volume 4**

#### **Responses to Comments and Corrections and Additions to the Draft EIR**

##### **Final Environmental Impact Report**

This document (Volume 4) comprises the second and final part of the Environmental Impact Report for the Midfield Satellite Concourse and supplements the Draft EIR for the Midfield Satellite Concourse (consisting of Volumes 1 through 3), previously circulated for public review and comment. The Midfield Satellite Concourse EIR is available for review at Los Angeles World Airports (LAWA) Administrative Offices, One World Way, Suite 218, Los Angeles, California 90045.

City of Los Angeles  
Los Angeles World Airports

**June 2014**



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**June 2014**

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## Appendices

Appendix A	Original Comment Letters on the Midfield Satellite Concourse Draft EIR
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## PREFACE

This document, in conjunction with the previously prepared documents described below, constitutes the Final Environmental Impact Report (Final EIR) for the Midfield Satellite Concourse (MSC) North Project (MSC North Project) and future phase(s) of the MSC Program at Los Angeles International Airport (LAX). As further described in the Introduction of this document, the MSC North Project includes: construction of a new 11-gate concourse and associated facilities (e.g., apron areas) west of the Tom Bradley International Terminal (TBIT); construction of new Taxiway C12 and Taxiway C14; a ramp tower or Federal Aviation Administration (FAA) supplemental airport traffic control tower to control aircraft movement around the concourse facility and associated airfield; utilities to support the MSC North Project; and enabling projects including the demolition and relocation of existing structures. The future phase(s) of the MSC Program have only been conceptually planned; thus, the components of this phase are only included at a program-level. Components associated with the future phase(s) of the MSC Program include: a southerly extension of the MSC Program building and associated facilities; an extension of Taxiway C12; utilities that support the future phase(s) of the MSC Program; and a Central Terminal Processor (CTP). The MSC North Project and future phase(s) of the MSC Program would not increase passenger or gate capacity, and would not increase flights and/or aircraft operations at LAX, but would allow LAWA to modernize their existing facilities more effectively by providing gate flexibility.

In accordance with the California Environmental Quality Act (CEQA), Los Angeles World Airports (LAWA), as Lead Agency, completed an EIR to address and disclose the potential environmental impacts associated with the MSC North Project and future phase(s) of the MSC Program. LAWA circulated a Draft EIR regarding the Project, received public and agency comments on the Draft EIR, and prepared written responses to those comments – all of which provides the basis for this Final EIR.

Pursuant to CEQA Guidelines §15132, a Final EIR consists of:

- (a) The Draft EIR or a revision of the draft.
- (b) Comments and recommendations received on the Draft EIR either verbatim or in summary.
- (c) A list of persons, organizations, and public agencies commenting on the Draft EIR.
- (d) The responses of the Lead Agency to significant environmental points raised in the review and consultation process.
- (e) Any other information added by the Lead Agency

Accordingly, the Final EIR for the MSC North Project and future phase(s) of the MSC Program consists of two components, as follows:

### **Component 1: Draft EIR and Technical Appendices**

**Volume 1 – Draft EIR:** Volume 1 of the Final EIR includes the Draft EIR-Main Document, Chapters 1 through 7, which was distributed for public review and comment from March 6, 2014 through April 21, 2014.

## ***Preface***

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**Volume 2 – Draft EIR Technical Appendices:** Volume 2 of the Final EIR includes Appendix A and technical Appendix B. Appendix A compiles input received associated with the Notice of Preparation (NOP) that was distributed for public review and comment from February 8, 2013 through March 11, 2013, including: Initial Study, Notice of Preparation (NOP), NOP Comments, Scoping Meeting Materials, and Scoping Meeting Comments. Appendix B is comprised of the supporting data and analyses for the Air Quality and Greenhouse Gas analyses.

**Volume 3 – Draft EIR Technical Appendices:** Volume 3 of the Final EIR includes technical Appendices C through G. These appendices contain the supporting data and analyses that were developed in conjunction with the Draft EIR for the Human Health Risk Assessment, Noise, On-Airport Traffic, Construction Traffic, and Aircraft Gate Closures at LAX, respectively.

### **Component 2: Responses to Comments and Corrections and Additions to the Draft EIR**

**Volume 4 – Responses to Comments and Corrections and Additions to the Draft EIR:** The second part of the Final EIR consists of a compilation of the comments received on the Draft EIR, and the written responses prepared by LAWA to those comments. This document includes indices (i.e., lists) of agencies, organizations, and individuals that commented on the Draft EIR, and provides a copy of the comment letters in their original form (i.e., photocopies of comment letters). This document also describes other information, such as a delineation of corrections and additions to information presented in the Draft EIR, which have been added by LAWA as part of the Final EIR.

All of the documents described above, comprising the Final EIR for the MSC North Project and future phase(s) of the MSC Program, are available for public review at:

- LAWA Administration Offices, One World Way, Suite 218, Los Angeles, CA 90045
- Westchester-Loyola Villa Branch Library, 7114 West Manchester Avenue, Los Angeles, CA 90045
- El Segundo Library, 111 West Mariposa Avenue, El Segundo, CA 90245
- Inglewood Library, 101 West Manchester Boulevard, Inglewood, CA 90301
- Culver City Library, 4975 Overland Avenue, Culver City, CA 90230
- Hawthorne Library, 12700 Grevillea Avenue, Hawthorne, CA 90250
- Dr. Mary McLeod Bethune Regional Branch Library, 3900 S. Western Avenue, Los Angeles, CA 90062

The Final EIR is also available online at [www.ourlax.org](http://www.ourlax.org).

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# 1.0 INTRODUCTION AND INDICES

## 1.1 Introduction

In compliance with the California Environmental Quality Act (CEQA), Los Angeles World Airports (LAWA) has completed this Final Environmental Impact Report (Final EIR) for the Midfield Satellite Concourse (MSC) North Project (MSC North Project) and future phase(s) of the MSC Program at Los Angeles International Airport (LAX). As described in the preface of this document, the Final EIR for the MSC North Project and future phase(s) of the MSC Program consists of two components, with the first component consisting of Volumes 1 through 3 – Draft EIR and associated Technical Appendices, and the second component being Volume 4 – Responses to Comments and Corrections and Additions to the Draft EIR. This document, Volume 4, constitutes the second component of the Final EIR.

### ***Draft EIR***

A detailed description of the MSC North Project and future phase(s) of the MSC Program is provided in Volume 1 of the EIR (see Chapter 2 in the Draft EIR-Main Document). On March 6, 2014, LAWA published a Draft EIR for the MSC North Project and future phase(s) of the MSC Program. In accordance with CEQA, the Draft EIR was circulated for public review for 45 days, with the review period closing on April 21, 2014. A public workshop was held on March 18, 2014, during the comment period.

As explained in more detail in Volume 1 of the EIR, the MSC North Project includes: construction of a new concourse and associated facilities, construction of new Taxiway C12 and Taxiway C14, a ramp tower or Federal Aviation Administration (FAA) supplemental airport traffic control tower to control aircraft movement around the concourse facility and associated airfield, utilities to support the MSC North Project; and enabling projects including the demolition and relocation of existing structures. The MSC North Project concourse would have the ability to serve both international and domestic flights and could accommodate up to 11 gates for (airplane design group) ADG III to ADG VI aircraft. The future phase(s) of the MSC Program have only been conceptually planned; thus, the components of this phase are only assessed at a program-level. Components associated with the future phase(s) of the MSC Program include: a southerly extension of the MSC Program building and associated facilities; an extension of Taxiway C12; utilities that support the future phase(s) of the MSC Program; and a Central Terminal Processor (CTP). As the intent of the MSC North Project is to allow LAWA to modernize their existing facilities more effectively by providing gate flexibility, the Project would not increase passenger or gate capacity, and would not increase flights and/or aircraft operations at LAX. The new gates would also reduce LAWA's reliance on the West Remote Gates/Pads and provide more modern facilities to accommodate new, larger aircraft equipment such as the Boeing 747-800 and Airbus A380 while maintaining flexibility to accommodate current fleet mixes and evolving air service and passenger characteristics.

### ***Final EIR***

In accordance with CEQA Guidelines §15088, LAWA prepared responses to all comments received on the Draft EIR. As required by the CEQA Guidelines, the focus of the responses to comments is on “the disposition of significant environmental issues raised.” Detailed responses are not provided to comments on the merits of the MSC North Project and future phase(s) of the MSC Program or on other topics that do not relate to environmental issues.

## 1.0 Introduction and Indices

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This document, which is the second component of the Final EIR, presents the comments received during the public review period for the Draft EIR and provides written responses to those comments. A total of 8 comment letters were received during the public review period; no written comments were submitted at the public workshop on March 18, 2014. The indices presented at the end of this chapter list the agencies, organizations, and individuals that submitted comments on the Draft EIR. Copies of all comment letters received are included in Appendix A of this document. Chapter 2 of this document presents, on a letter-by-letter basis, each comment which is then followed immediately by a response for all comments received during the review period for the Draft EIR (March 6, 2014 through April 21, 2014). The comments and responses are organized and grouped together into categories based on the affiliation of the commenter. The comments are presented in the following order: state agencies, local agencies, and public comments (i.e., letters from private citizens, organizations, etc.). Chapter 3 of this document provides corrections and additions to information presented in the Draft EIR.

Together with the Draft EIR, the responses to comments, along with corrections and additions to the Draft EIR, and list of commenters, constitute the Final EIR. Pursuant to CEQA, the Final EIR is not circulated for another round of comments and responses. The Final EIR is presented to the decision-makers for their use in considering the MSC North Project and future phase(s) of the MSC Program. Interested persons may comment on the Final EIR, including these responses, in the course of the decision-making process related to the Project; however, LAWA is not required to provide responses to such comments.

## 1.2 Indices of Comment Letters

An alphanumeric index system is used to identify each comment and response, and is keyed to each letter and the individual comments therein. For example, the first letter within the group of state agencies submitting comments on the Draft EIR is from the State of California, Department of Transportation, and the text of the letter is considered to have 9 individual comments. The subject of the letter was assigned the alphanumeric label “MSC-AS00001,” representing “Midfield Satellite Concourse-Agency-State-Letter No. 1.” The same basic format and approach is used for the comment letters from local agencies (“AL”), and public comments (“PC”).

The following are the prefix codes used for categorizing the comment letter types:

<u>Letter ID Prefix</u>	<u>Description</u>
AS	State Agency
AL	Local Agency
PC	Public Comment

To assist the reader’s review and use of the responses to comments, three indices are provided. These indices provide the alphanumeric label number, commenter name, affiliation (i.e., name of agency or organization that the author represents), and date (if provided) of each comment letter. The first index lists all the comment letters by alphanumeric label number, the second index lists all of the comment letters by the commenter’s last name, and the third index lists all of the comment letters by the affiliation if any, of the commenter.

## ***1.0 Introduction and Indices***

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Chapter 2 provides individual comments and responses, presented on a letter-by-letter basis. Each comment is typed exactly as it appears in the original comment letter. No corrections to typographical errors or other edits to the original comments were made. A copy of each original comment letter is provided in Appendix A of this document.

Immediately following each typed comment is a written response. In many instances, the response to a particular comment may refer to the response(s) to another comment(s) that expressed the same concern or is otherwise related. Cross-referencing of responses uses the alphanumeric index system as described above. For example, a response may indicate “Please see response to comment MSC-AL00001-2” if that response addresses the same concern expressed in a different comment.

Following are the three indices that organize comment letters by letter indication number, commenter and affiliation.

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### Index by Letter Identification (ID) Number

Letter ID	Commenter	Affiliation/Agency	Department	Date
MSC-AS00001	Watson, Dianna	Caltrans, District 7	IGR/CEQA Branch	04/17/2014
MSC-AL00001	Patonia, Michael	City of Los Angeles	Bureau of Engineering	03/27/2014
MSC-AL00002	Guerrero, Eddie	City of Los Angeles	Department of Transportation	04/15/2014
MSC-AL00003	Lichman, Barbara E.	Buchalter Nemer (Cities of Inglewood, Culver City, Ontario, and County of San Bernardino)		04/16/2014
MSC-AL00004	Petta, Joseph "Seph"	Shute, Mihaly & Weinberger, LLP (City of El Segundo)		04/18/2014
MSC-PC00001	Peters, Lori	LAX Airline Airport Affairs Committee		04/21/2014
MSC-PC00002	Acherman, Robert and Schneider, Denny	ARSAC		04/21/2014
MSC-PC00003	Evans, Kathy			04/21/2014



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### Index by Commenter

Commenter	Affiliation/Agency	Department	Date	Letter ID
Acherman, Robert and Schneider, Denny	ARSAC		04/21/2014	MSC-PC00002
Evans, Kathy			04/21/2014	MSC-PC00003
Guerrero, Eddie	City of Los Angeles	Department of Transportation	04/15/2014	MSC-AL00002
Lichman, Barbara E.	Buchalter Nemer (Cities of Inglewood, Culver City, Ontario, and County of San Bernardino)		04/16/2014	MSC-AL00003
Patonia, Michael	City of Los Angeles	Bureau of Engineering	03/27/2014	MSC-AL00001
Peters, Lori	LAX Airline Airport Affairs Committee		04/21/2014	MSC-PC00001
Petta, Joseph "Seph"	Shute, Mihaly & Weinberger, LLP (City of El Segundo)		04/18/2014	MSC-AL00004
Watson, Dianna	Caltrans, District 7	IGR/CEQA Branch	04/17/2014	MSC-AS00001

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### Index by Affiliation

Affiliation/Agency	Department	Commenter	Date	Letter ID
ARSAC		Acherman, Robert and Schneider, Denny	04/21/2014	MSC-PC00002
Buchalter Nemer (Cities of Inglewood, Culver City, Ontario, and County of San Bernardino)		Lichman, Barbara E.	04/16/2014	MSC-AL00003
Caltrans, District 7	IGR/CEQA Branch	Watson, Dianna	04/17/2014	MSC-AS00001
City of Los Angeles	Bureau of Engineering	Patonia, Michael	03/27/2014	MSC-AL00001
City of Los Angeles	Department of Transportation	Guerrero, Eddie	04/15/2014	MSC-AL00002
LAX Airline Airport Affairs Committee		Peters, Lori	04/21/2014	MSC-PC00001
Shute, Mihaly & Weinberger, LLP (City of El Segundo)		Petta, Joseph "Seph"	04/18/2014	MSC-AL00004
		Evans, Kathy	04/21/2014	MSC-PC00003

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## 2.0 COMMENTS AND RESPONSES

Refer to Appendix A of the Final EIR for a copy of the comment letters received on the Midfield Satellite Concourse Draft EIR. The following provides the comments and individual responses to said comments:

<b>MSC-AS00001</b>	<b>Watson, Diana</b>	<b>State of California, Department of Transportation, District 7, Office of Transportation Planning, IGR/CEQA Branch</b>	<b>4/17/2014</b>
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### **MSC-AS00001-1**

**Comment:** The California Department of Transportation (Caltrans) hereby acknowledges receipt of the Draft Environmental Impact Report (DEIR) prepared for the proposed Midfield Satellite Concourse North Project (MSC North Project) at LAX. The MSC North project is phase I of the overall MSC Program which consists of a new multi-level concourse located within the western portion of the airfield west of the Tom Bradley's International Terminal and a passenger processing space or Central Terminal Processor (CTP). The MSC North project would involve the construction of a concourse of up to 11 gates, improvements to taxiways and taxi lanes, a supplemental airport traffic control tower, and utilities.

Caltrans has reviewed the transportation sections included in the DEIR with especial interest on potential impacts to State highway facilities nearby which are Sepulveda Boulevard (SR-1), Interstate 405 (I-405) and Interstate 105 (I-105) and has the following comments.

**Response:** Comment noted. Please see responses to comments MSC-AS00001-2 through MSC-AS00001-9 below.

### **MSC-AS00001-2**

**Comment:** • The traffic impact analysis in the DEIR analyzes impacts related to construction of the proposed MSC North project. The analysis provides an estimate of construction-related traffic impacts within the off-airport roadway system. The MSC North project would not increase the number of employees or airline passengers traveling through LAX. In addition, the expected AM and PM peak construction activity is expected to occur outside the normal daily peak periods. Therefore, potential transportation impacts to the Los Angeles County Congestion Management Program (CMP) roadway network which includes freeways were determined to be less than significant. Please explain why the additional 11 aircraft gates would not generate additional passenger traffic on the surrounding roadway network including on freeways.

**Response:** Comment noted. As described in Chapter 2, *Description of the Proposed Project*, the MSC North Project is planned to operate as an “empty chair,”

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providing LAWA with the flexibility to accommodate existing demand for aircraft gates while modernizing other terminals at LAX and reducing reliance on the West Remote Gates/Pads. Appendix G of the Draft EIR discusses gate closures that have occurred over the last 4 years at LAX, as well as upcoming projects that will also necessitate gate closures. The proposed Project would not result in changes to air traffic patterns, runway operational characteristics, or an increase in airport operations beyond those approved in the 2004 LAX Master Plan; the proposed Project would only shift operations from other gates that will be closed for renovation or from the West Remote Gates/Pads. Therefore, the Project will not generate any additional passenger traffic through the Central Terminal Area (CTA) or on surrounding roadways.

Although airport operations are expected to increase by the time the MSC North Project is completed, this growth will occur independently of the proposed Project. Passenger operations are expected to increase with or without the MSC North Project. The effects of this growth were accounted for at a programmatic level under Alternative D in the previously approved LAX Master Plan EIS/EIR.

### MSC-AS00001-3

**Comment:** • We note LAX has established a Ground Transportation Office which purpose is to monitor traffic conditions, advise about detours and congested areas, and to enforce delivery times and routes. The Ground Transportation Office will monitor closely construction deliveries and employee arrival and departures to maintain the peak construction traffic off peak commuting periods. Please require the Ground Transportation Office, or CALM team, to coordinate and obtain Caltrans' approval for any detour plans and lanes closures on Sepulveda Boulevard (SR-1).

**Response:** Comment noted. As described on page 4-319 in Chapter 4, *Construction Surface Transportation*, of the Draft EIR, in accordance with LAX Master Plan Commitment C-1, it is anticipated that a ground transportation/construction coordination office will be established for the MSC North Project. Furthermore, the LAWA Construction Coordination and Logistics Management (CALM) team, discussed in detail in Section 4.7.3.8 of the Draft EIR, provides for the implementation of LAX Master Plan Commitment C-1. Short-term lane closures may be required on Sepulveda to allow for re-striping of lanes, as discussed in response to comment MSC-AL00002-4. LAWA will coordinate with Caltrans related to approval of any detour plans or lane closures on Sepulveda Boulevard prior to implementation.

### MSC-AS00001-4

**Comment:** • Section 4.7.5.2 states that the Bradley West Project EIR identifies improvements to the intersections at Sepulveda Boulevard and Imperial Highway and at I-405 southbound ramps to La Cienega Boulevard north of Century Boulevard. Please provide a description of the planned improvements at these locations. Caltrans requests early coordination of planned improvements on or

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affecting state highway facilities. Depending on the type of improvements, they may follow the encroachment process or the Project Initiation Process (PID) which is somewhat more involved as it includes analysis of different alternatives.

**Response:** Comment noted. As stated in Section 4.7.5.2, intersections that were anticipated to be significantly impacted by the Bradley West Project would be improved when traffic activity levels reach certain activity thresholds at which an impact would be triggered.

The improvement at Sepulveda Boulevard and Imperial Highway (Intersection #12) would involve a restriping of the northbound approach to the intersection to provide one left-turn lane, three through lanes, and two right-turn lanes.

The improvement at I-405 ramps and La Cienega Boulevard north of Century Boulevard (Intersection #18) would involve widening the southbound approach to the intersection to provide two left-turn lanes and two through lanes.

All necessary procedures and coordination regarding future improvements to state highway facilities shall be followed prior to implementation of the planned improvements. Caltrans previously made comments on these improvements and LAWA provided responses in the Final EIR for the Bradley West Project in 2009 (Response to Comment BWP-AS00001-1 through BWP-AS00001-6; State Clearinghouse No. 2008121080).

### MSC-AS00001-5

**Comment:** • We note that traffic impacts to the intersection of I-405 northbound off-ramp and Century Boulevard would constitute a cumulative impact but those impacts are not cumulative considerable. The Final EIR for the Hollywood Park Redevelopment project in the City of Inglewood determined that this intersection is expected to operate at Level of Service "F" and plans to add ITS (signal synchronization) as a mitigation measure. Please coordinate with the City of Inglewood and Caltrans to mitigate future cumulative traffic impacts at this intersection.

**Response:** Comment noted. It is likely that the intersection LOS reported in the Hollywood Park Redevelopment project Final EIR would be worse than the LOS reported in the Midfield Satellite Concourse Draft EIR given that the construction-traffic peak hour conditions analyzed for the MSC North Project occur outside of the AM and PM commuter peak hours (6:00 AM to 7:00 AM and 3:30 PM to 4:30 PM), as discussed on Draft EIR page 4-282 and 4-284. As described in Table 4.7-8, the Project would not result in a significant impact (i.e. a cumulatively considerable contribution) to the ramp referenced in the comment ("Intersection 6"). However, it is anticipated that any ITS improvements identified as a mitigation measure in the Hollywood Park Redevelopment Project EIR would improve the LOS at the subject intersection as compared with the conditions reported in the Midfield Satellite Concourse Draft EIR which are based on existing operating conditions. As discussed in Section 4.7.3.7 of the Draft EIR, reducing the future volume/capacity ratio at this intersection by 0.07 to account for the improved operation and increased efficiency from the Automated Traffic Surveillance and

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Control (ATSAC) system would eliminate the cumulative impact at this location during the AM construction peak hour.<sup>1</sup> This ITS improvement is specifically called out in the approved Development Agreement as an improvement paid for by the applicant. (Development Agreement, Section “Recitals” subsection (K), and Exhibit C (Phase 3).<sup>2</sup>

As such, it is anticipated that the future year analysis presented in the Draft EIR for this location may be conservatively high. In addition, LAWA will coordinate with the City of Inglewood and Caltrans as necessary to incorporate the benefits of any future ITS improvements that have been identified for this location and reflect this condition in future traffic analyses prepared for subsequent EIR’s.

### MSC-AS00001-6

**Comment:** • Please be aware that the City of Inglewood is planning modifications to Century Boulevard which include reducing the number through lanes east I-405 to Van Ness Avenue. This project may occur during the next 5 years, please include it in the list of related construction project is the vicinity of LAX.

**Response:** Comment noted. The potential related construction project has been added to Section 4.7.5.2 of the Midfield Satellite Concourse Final EIR. Construction traffic for the MSC would not utilize Century Boulevard; therefore, inclusion of this potential related construction project does not change the conclusions of the Draft EIR.

### MSC-AS00001-7

**Comment:** • Please be reminded that oversized construction truck deliveries expected to utilize State highways will need a transportation permit and possibly a California Highway Patrol (CHP) escort.

**Response:** Comment noted. All contractors are expected to abide by State regulations pertaining to the operation of oversized vehicles.

### MSC-AS00001-8

**Comment:** • Due to recurrent traffic congestion on I-405 and I-105 during peak commuting periods, please schedule heavy-duty construction-related trucks away from these periods as much as possible.

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<sup>1</sup> In accordance with LADOT analysis procedures, the volume/capacity (v/c) ratio calculated using the Critical Movement Analysis (CMA) methodology is further reduced by 0.07 for those intersections included within the ATSAC system to account for the improved operation and increased efficiency from the ATSAC system that is not captured as part of the CMA methodology.

<sup>2</sup> Development Agreement Case No. (DA-09-01), available: [www.cityofinglewood.org/pdfs/commdev/hollywoodpark/Ord09-14DevelopmentAgreement.PDF](http://www.cityofinglewood.org/pdfs/commdev/hollywoodpark/Ord09-14DevelopmentAgreement.PDF).

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**Response:** Comment noted. As described on pages 4-297 and 4-320 in Chapter 7, *Construction Surface Transportation*, of the Draft EIR, in accordance with LAX Master Plan Commitments ST-12 and ST-14, and as a way of controlling the arrival and departure times of construction-related truck and construction employee traffic associated with the Project, truck delivery and construction employee shift hours would be scheduled to avoid the peak hours of 7:00 AM to 9:00 AM and 4:30 PM to 6:30 PM.

### MSC-AS00001-9

**Comment:** If you have any questions regarding these comments, please contact project coordinator Elmer Alvarez at (213) 897-6696 and electronically at [elmer.alvarez@dot.ca.gov](mailto:elmer.alvarez@dot.ca.gov). You may also contact me at (213) 897-9140 or [dianna.watson@dot.ca.gov](mailto:dianna.watson@dot.ca.gov)

**Response:** Comment noted.

**MSC-AL00001      Patonia, Michael      City of Los Angeles, Department of      3/27/2014**  
**Public Works, Bureau of Engineering**  
**West Los Angeles District**

### MSC-AL00001-1

**Comment:** Your letter of March 6, 2014 sent to the Bureau of Engineering for review of the Midfield Satellite Concourse Project was referred to my office for response.

As duly noted in your project description, the Midfield Satellite Project is located entirely within the City of Los Angeles LAX Plan area and would, therefore, not appear to affect any non-airport roadways nor cause changes to storm water runoff or the storm drain system.

**Response:** Comment noted. Thank you for confirming that the proposed Project would not cause any changes to off-airport roadways, storm water runoff, or the storm drain system.

### MSC-AL00001-2

**Comment:** A review of the DEIR for this project does indicate that it spans the North Outfall Replacement Sewer (NORS) and anticipates a direct connection to NORS. There was no mention of the volume of wastewater to be generated nor whether there is a risk of sewer gases backing up into the connecting sewer, resulting in sewer odor problems in the new concourse. There was also no mention of physically protecting NORS from the overlying concourse structure.

**Response:** Comment noted. The MSC North Concourse will be constructed above the existing NORS, which crosses the footprint of the future MSC North at depths of

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approximately 65 to 85 feet below grade. Structural provisions will be required in this area to protect the sewer, as approved by the Bureau of Engineering (BOE). While the MSC North has not yet been designed, a new sewer-connection to the NORS is unlikely due to its depth and size. As discussed in Chapter 2, *Description of the Proposed Project*, the current planning assumption is that a new sewer-lateral will be constructed leading south to one of the existing connections (or making a new connection) to the Central Outfall Sewer (COS). Estimated wastewater generation from passenger-related facilities for the MSC North Project and the future phase(s) of the MSC Program were discussed in the Initial Study, which is included in Appendix A.1 of the Draft EIR. As discussed on Draft EIR page 4-1, a copy of the Notice of Preparation/Initial Study was included with the Draft EIR (Appendix A.1) and no further analysis was required for such issues, consistent with CEQA Guidelines Section 15128 and 15063(c)(3)(A). Impacts associated with wastewater generation were determined to be less than significant in the Notice of Preparation/Initial Study. The MSC structure is anticipated to generate 0.06 mgd as described in Section XVII (Appendix A.1 page 75). There is anticipated to be a substantial amount of remaining capacity at the wastewater facilities. Furthermore, there have been historic trends in decreasing wastewater flows as described in the Initial Study. These trends are also consistent with legislation/regulations requiring water efficient pumping fixtures for new cumulative projects, which will often replace existing inefficient water structures (Title 24, Cal. Code Regs., Part 5, Chapter 4) and installation of water efficient fixtures for existing structures (Senate Bill 407 [2009], Civil Code § 1101.1 et seq). LAWA will consult BOE regarding any connection to sewers to confirm wastewater flow capacity and to prevent sewer gas and odor control issues.

**MSC-AL00002**      **Guerrero, Eddie**      **City of Los Angeles, Department of Transportation**      **4/15/2014**

### **MSC-AL00002-1**

**Comment:** The Los Angeles Department of Transportation (LADOT) has completed its review of the traffic impact analysis completed for the Los Angeles International Airport (LAX) Midfield Satellite Concourse (MSC) - Draft Environmental Impact Report (DEIR) and have determined that the traffic analysis adequately describes the potential impacts related to the project.

**Response:** Comment noted.

### **MSC-AL00002-2**

**Comment:** RECOMMENDATION

Based on the information presented in the MSC – DEIR, LADOT is requesting the following action:

1. That consideration be given to directing construction traffic away from the Sepulveda corridor to the Imperial Highway corridor if possible and,



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2. Should it not be possible to remove the identified impact at Manchester Avenue and Sepulveda Boulevard, the mitigation proposal cited under Section 4.7.9.2 can be implemented within the existing street right-of-way and thus would be feasible without requiring street widening and,
3. That the Applicable LAX Master Plan Commitments, as identified under Section 4.7.7, be adhered to fully.

**Response:** Comment noted. As described in Section 4.7.4.2 of the Midfield Satellite Concourse Draft EIR, construction truck traffic is limited to accessing the MSC North Project site via Imperial Highway and Pershing (i.e., avoiding the Sepulveda corridor), as described in Section 4.7.7 of the DEIR. The impacts at Manchester Avenue and Sepulveda Boulevard are a result of construction employee traffic entering/exiting the employee parking/work site. For purposes of distributing construction employee traffic on the study area roadway network, it was assumed that employees would originate from geographic locations in proportion to the distribution of regional population and utilize specific street routing assumptions obtained from the LAX Master Plan EIS/EIR and the 2011 LAX Air Passenger Survey. Because construction employees typically utilize private vehicles to commute to their worksites, there is no feasible way LAWA can enforce the routes that construction employees use to commute to their worksite. Thus, the analysis conservatively assumes that construction workers would utilize the surrounding roadway network in proportion to the regional population distribution. Thus, LAWA does not believe that they have the means to remove the impact at Manchester Avenue and Sepulveda Boulevard.

All Applicable LAX Master Plan Commitments shall be adhered to fully.

### MSC-AL00002-3

**Comment:** DISCUSSION

As discussed in the Midfield Satellite Concourse Draft EIR, implementation of the MSC Program will be pursued across multiple phases beginning with the MSC North Project. However, because the future operation of the MSC North Project would not result in long-term operational changes to traffic activity and traffic flows within the Airport area, because it would not change the number of aircraft operations or where aircraft passengers are dropped off or picked up at LAX, the EIR project level analysis for this phase was limited to potential construction traffic impacts only. As further discussed in the Draft EIR, the future phases of the MSC program that are not part of the MSC North project have only been conceptually planned and therefore only analyzed at the program level and as such, LADOT has chosen to reserve comment until such time that the future phases are more fully defined and are analyzed at the project level.

**Response:** Comment noted.

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### MSC-AL00002-4

**Comment:** With respect to the construction traffic analysis, the DIER has identified potential construction traffic impacts at the following three locations:

- 1) Imperial Highway and Main Street
- 2) Manchester Avenue and Sepulveda Boulevard
- 3) Sepulveda Boulevard and Westchester Parkway

Per Section 4.7.9.1 of the DIER, there is no feasible mitigation for the potential impacts at locations 1 and 3 listed above and the mitigation suggested for location 2, per Section 4.7.9.2, is to widen the westbound approach to allow for implementation of an additional left-turn lane and an exclusive right turn lane. However, upon further review it has been determined that implementation of the proposed mitigation can be accomplished within the existing available right-of-way and thus, should this mitigation be needed, it could be implemented without widening the roadway.

**Response:** Comment noted. The description of the proposed mitigation for the Sepulveda Boulevard and Manchester Avenue intersection has been modified in the Midfield Satellite Concourse Final EIR to reflect a restriping, rather than a widening, of the westbound approach. See Section 3 of the Final EIR, *Corrections and Additions to the Draft EIR Text*, for further details.

### MSC-AL00002-5

**Comment:** It is also worth noting that per Table 4.7-8, the corresponding “With Project” level of service (LOS) condition for each of the three locations listed above is LOS C, LOS D, and LOS F, respectively. Therefore, with respect to this condition, it is LADOT’s opinion that the construction traffic plan should be revised, if possible, in order to direct the distribution of construction traffic from the Sepulveda corridor and shift it to the Imperial Highway corridor or, at the very least, minimize the Sepulveda corridor distribution to the greatest extent possible.

**Response:** Comment noted. This comment is similar to MSC-AL00002-2. Please see response to comment MSC-AL00002-2 for discussion pertaining to the distribution of construction traffic.

### MSC-AL00002-6

**Comment:** Excerpts for the project EIR, pertaining to section 4.7.7, section 4.7.9.1, section 4.7.9.2 and Table 4.7-8 discussed above, are attached for reference. If you have any questions, I can be reached at (213) 485-1062.

**Response:** Comment noted.

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**MSC-AL00003**      **Lichman, Barbara**      **Buchalter Neme for Cities of Inglewood, Culver City, and Ontario (“Cities”) and County of San Bernardino (“County”)**      **4/16/2014**

### **MSC-AL00003-1**

**Comment:** The following constitute the comments of the above-mentioned Cities and County (collectively "Commentors") concerning the Draft Environmental Impact Report ("DEIR") for the Los Angeles International Airport ("LAX") Midfield Satellite Concourse ("Project"), pursuant to the requirements of the California Environmental Quality Act, Cal. Pub. Res. Code § 21000, et seq. ("CEQA"), and its implementing guidelines, 14 Cal. Code Regs. § 15000, et seq. ("CEQA Guidelines").

**Response:** Comment noted. Please see responses to comments MSC-AL00003-2 through MSC-AL00003-9 below.

### **MSC-AL00003-2**

**Comment:** The issues raised by these comments fall into three general categories:

(1) To the extent the DEIR is "tiered" from the LAX Master Plan Environmental Impact Report ("Master Plan EIR"), originally certified in 2004, the same flaws that characterize the Master Plan EIR still remain and pervade the DEIR here, including the designation of a base year which is inconsistent as between the Master Plan EIR and the project it is purporting to evaluate; and inflation of the baseline for, among other impacts, noise, thereby minimizing the apparent impacts of the Project;

**Response:** Comment noted. The commenter suggests that the LAX Master Plan EIR is flawed. Commenters the City of Inglewood and Culver City are signatories to the Stipulated Settlement Agreement. As discussed therein "Except as otherwise specifically set forth in this Settlement, Petitioners waive any and all rights they have or may have under the California Civil Code Section 1542 and/or any successor section to it with respect to the Released Claims. In connection with this waiver, Petitioners acknowledge that they are aware that they may hereafter discover claims presently unknown or unsuspected or facts in addition to or different from those that they now know or believe to be true with respect to the subject matter of this Settlement, Nevertheless, petitioners intend by this Settlement and with and upon the advice of their own independently selected counsel, to release fully, finally and forever all Released Claims." (Stipulated Settlement, subsection II.B.)

"Released Claims" means any and all state and/or federal law based suits, petitions, claims or causes of action challenging the sufficiency or legal validity of the LAX Master Plan Program...For purposes of clarification, the Released Claims include, but are not limited to, any and all claims challenging the South Airfield Improvement Project and *the West Satellite Concourse*." (Emphasis added; Stipulated Settlement, page 4.) As acknowledged by the commenter in

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comment MSC-AL00003-6, the West Satellite Concourse and the proposed MSC are the same project.

The Settlement also states, “Petitioners will not directly or indirectly file, prosecute, bring, encourage, participate in, facilitate or advance any suit, claim or legal action of any kind against Respondents or the FAA based upon any Released Claims.” Additionally, comments from the County of San Bernardino and the City of Ontario related to the contents of the LAX Master Plan EIR are untimely and cannot be raised nine years after certification of that EIS/EIR. (*Citizens for Responsible Equitable Environmental Development v. City of San Diego* (2011) 196 Cal.App.4<sup>th</sup> 515 523-525.)

The LAX Master Plan EIS/EIR is adequate and fulfills the requirements of CEQA. The Midfield Satellite Concourse Draft EIR is properly tiered from the certified LAX Master Plan EIS/EIR as discussed in Section 1.2 and Chapter 4 of the Draft EIR.

The commenter also appears to suggest that the MSC EIR should have used a 2004 baseline. Contrary to the commenters’ assertion, the purpose of tiering is to determine whether there are any new significant impacts that have not been previously analyzed. (CEQA Guidelines Section 15168(c).) In such a situation, the appropriate basis for determining whether subsequent environmental review is required is not based upon a comparison to the original baseline in 2004, but rather a comparison to the previous impact conclusions in the prior CEQA document. (*Sierra Club v. City of Orange* (2008) 163 Cal.App.4<sup>th</sup> 523, 542-543; CEQA Guidelines § 15063(b)(1)(C).) This EIR however, took the more conservative approach of making a comparison to existing conditions for project level impacts, such as construction surface transportation.

Furthermore, using a 2004 or earlier baseline (such as the LAX Master Plan) would not provide an accurate depiction of impacts of the proposed Project nor would it appropriately analyze impacts which are caused by the proposed MSC project. (See *Walmart Stores, Inc v. City of Turlock* (2006) 138 Cal.App.4<sup>th</sup> 273 [“...courts...would have to review the administrative record for evidence establishing both the requisite causal link as well as the requisite physical change in the environment”], overruled on other grounds in *Hernandez v. City of Hanford* (2007) 41 Cal.4<sup>th</sup> 279]; see also CEQA Guidelines Section 15130(a)(1) [“An EIR should not discuss impacts which do not result in part from the project evaluated in the EIR.”]) Please also see response to comment MSC-AL00003-5 below.

### MSC-AL00003-3

**Comment:** (2) Improper segmentation of the north and south portions of the Project, and failure to analyze the Project as a unit, even where the south portion of the Project is described in detail in the DEIR and is, therefore, a reasonably foreseeable consequence of the development of the northern portion which must be addressed in the DEIR, see, e.g., *Laurel Heights Improvement Ass’n v. Regents of Univ. of Cal.*, 47 Ca1.3d 376, 396 (1988); the development of the

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south portion will clearly change the scope and nature of the initial project and, more importantly, its environmental impacts, Id.; and the south portion of the project which is analyzed at a program level in the DEIR would have little or no independent utility absent the construction of the northern portion of the Midfield Satellite Concourse; and

**Response:** Comment noted. The commenter provides an incorrect summary of the project description and the environmental analysis. The commenter incorrectly states that the southern portion of the MSC has been “segmented,” which implies that it was not analyzed in this EIR and was not analyzed in the LAX Master Plan Program EIS/EIR.

The Draft EIR correctly analyzes the full MSC Program and discloses its full impacts; the proposed north half of the building is analyzed at a project level and the proposed future southern half at a program level (as described in Section 2.5.6). The LAX Master Plan EIS/EIR included the full MSC Program at a program level, (e.g. LAX Master Plan EIS/EIR Alternatives Chapter, Alternative D).<sup>3</sup> LAWA has decided to move forward with construction of the MSC North Project, but is deferring construction of the remainder of the MSC Program until a future date. The future phase(s) of the MSC Program are not contemplated in the near future; these phases are long-term goals and have only been conceptually planned and therefore, a project-level analysis is not possible. The MSC North Project can independently function and operate without any future southern extension, thus it is an independent project. Section 2.4 of the Draft EIR discusses the reasons for proceeding with the northern portion of the MSC as Phase 1 of the MSC Program. Notwithstanding, the Draft EIR complies with CEQA by analyzing the future phase(s) of the MSC Program at a program level in the Draft EIR. Please also see response to comment MSC-AL00003-6 below.

### MSC-AL00003-4

**Comment:** (3) A surface traffic analysis that relies on an improperly restrictive study area; anecdotal rather than analytic choice of intersections to which to assign traffic flow; and which improperly relies on the analysis of the vehicles used by construction workers in the Master Plan EIR, even though that analysis was demonstrably flawed.

**Response:** Comment noted. The traffic analysis prepared for the Midfield Satellite Concourse Draft EIR was prepared using current (2012) data and analyses prepared specifically to analyze the trip-making characteristics and potential impacts associated with the MSC North Project. Furthermore, the associated trip distribution is not based on “anecdotal” choice, but rather is based on a review of the specific travel paths associated with the construction traffic accessing the MSC North Project site. As described in greater detail in Section

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<sup>3</sup> City of Los Angeles, Final Environmental Impact Report for Los Angeles International Airport (LAX) Proposed Master Plan Improvements, April 2004, Available at: <http://www.lawa.org/ourLAX/Pastprojects.aspx?id=8844>.

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4.7.4.2 and Appendix F.4, these travel paths are based upon the regional distribution of population, the LAX Air Passenger Survey, construction vehicle limits imposed by the LAX Master Plan Commitments, as well as LAWA's staff and consultants' expert opinions.<sup>4</sup> The construction trip distribution is also consistent with that used for construction traffic studies prepared for the South Airfield Improvement Project EIR, the Crossfield Taxiway Project EIR, Bradley West Project EIR, Central Utility Plant Replacement Project EIR, Runway 7L/25R Runway Safety Area and Associated Improvements Project Draft EIR, and the West Aircraft Maintenance Area Project Draft EIR, and consistent with actual travel patterns for construction workers associated with other LAWA projects.

The study area and associated intersections analyzed for the construction traffic analysis documented within the Midfield Satellite Concourse Draft EIR was developed based on a review of the anticipated travel paths that would be used by construction workers and construction-related vehicles accessing the parking areas and staging facilities to be used for the Project and the amount of construction-related activity using those paths.

As further described in Section 4.7.4.2 of the Draft EIR and Appendix F.4, it is anticipated that construction employee and delivery vehicle trips would originate from geographic locations in proportion to the regional population such that 76 percent of the construction traffic would access the site via the freeway system. The remaining 24 percent would be distributed among the local surface streets. As shown in Figure 4.7-2 of the Draft EIR, the intersections analyzed for the construction traffic analysis are generally located within the boundary created by the freeway system surrounding the Airport given that most of the construction worker traffic will be accessing the study area from the freeway system. As shown in Figure 4.7-3 of the Draft EIR, the surface roadways outside of the freeway boundary would typically carry less than 5 percent of the construction employee traffic associated with the MSC North Project. Furthermore, given that there were not any project-related impacts anticipated within the study area east of Sepulveda Boulevard, it is not anticipated that there would be project-related impacts further from the project site, east of the I-405 freeway where project-related traffic volumes would be significantly lower than anticipated within the study area.

Based on the information described above, the construction trip distribution assumptions and the study area are supported by substantial evidence and were appropriate for the MSC North Project impact analysis.. The commenter provides no information on what specific aspects of the analysis they believe are incorrect, therefore no further response is possible. Please also see response to comment MSC-AL00003-7 below.

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<sup>4</sup> This is based upon the opinion and expertise of LAWA's Senior Transportation Engineer, Patrick Tomcheck, and LAWA's outside transportation consultant, Allen Hoffman, Vice President from Ricondo & Associates, Inc.

### MSC-AL00003-5

**Comment:** I. THE DEIR'S ANALYSIS IS TAINTED BY ITS "TIERING" ON THE MASTER PLAN EIR

The DEIR's reliance on the Master Plan EIR as a platform for analysis would normally be pro forma. In this case, however, it is a fatal flaw in the analysis, because the relevant analyses in the Master Plan EIR were, as commented upon in their November 4, 2003 letter and attachment, manifestly deficient. (A true and correct copy of Inglewood's November 4, 2003 letter and its attachment are attached to these comments as Exhibit 1, and incorporated by reference.)

As may be remembered, the Master Plan EIR was challenged by the Cities of Inglewood and Culver City and County of Los Angeles as well as El Segundo and the environmental group Alliance for a Regional Solution to Airport Congestion ("ARSAC"), for, among other defects: (1) the use of multiple inconsistent base years such that it was impossible for the public to accurately discern which base year was applicable to a given purpose; (2) improper limitation on the Project Definition; and (3) inadequate noise, air quality and surface traffic analyses. These issues were not permanently resolved because the parties entered into a settlement of the lawsuit which addressed some, but not all of these issues.

Many of these lingering flaws are reflected in the DEIR. These include: (1) improper segmentation of the whole Midfield Satellite Concourse project into two parts, the north and the south, even though the southern, unanalyzed, portion of the Project would seem to have no utility at all without the construction of the concourse, the first 11 gates, the utilities, and the improved taxiways which are components of the "north" project being analyzed in the DEIR at the project level; and (2) inadequate discussion of surface traffic impacts.

The settlement did, however, materially change the parameters of the Project. It substituted for five components of the Master Plan, including the relocation of the North Runway Complex to the south, and the demolition and relocation of Terminals 1 through 3, other projects that meet the purposes that the original project would have served. The newly designated project components are very different in location and attributes from those evaluated in the Master Plan EIR (e.g., movement of the North Runway Complex to the south instead of the north, and change in the location of the terminals). Therefore, analysis of surface traffic patterns, for example, may differ materially between the two plans due to a difference in the location of the construction. In short, the DEIR sits on a crumbling base in the Master Plan EIR and the DEIR's conclusions are, therefore, suspect for the same reasons.

**Response:** Comment noted. Please see Response to Comment MSC-AL00003-2 above which addresses the commenters assertions related to the contents of the LAX Master Plan EIR.

The LAX Master Plan EIS/EIR was approved and entitled in 2004/2005 consistent with the requirements of CEQA. The Midfield Satellite Concourse Draft EIR is properly tiered from the certified LAX Master Plan EIS/EIR as discussed in

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Section 1.2 and Chapter 4 of the Draft EIR. The CEQA Guidelines state that “Where an EIR has been prepared and certified for a program, plan, policy, or ordinance consistent with the requirements of this section, any lead agency for a later project pursuant to or consistent with the program, plan, policy, or ordinance should limit the EIR or negative declaration on a later project to effects which: (1) Were not examined as significant effects on the environment in prior EIR; or (2) Are susceptible to substantial reduction or avoidance by the choice of specific revisions in the project, by the imposition of conditions, or other means.” (§15152 (d)). As discussed therein, the tiering methodology used for this EIR is appropriate. As identified in the February 8, 2013 Notice of Preparation (NOP) for this EIR, LAWA initially determined, based on a preliminary review of the MSC North Project and future phase(s) of the MSC Program, that seven categories of environmental resources could potentially be affected by construction and/or operations of the MSC and required additional review that was not otherwise provided in or should be updated from the LAX Master Plan EIS/EIR. As a result, this EIR for the MSC focuses primarily on impacts related to air quality, greenhouse gas emissions, human health risks, noise, public services, construction surface transportation, and on-airport transportation. Environmental disciplines where no new significant impacts were identified are discussed in the Initial Study, included in Appendix A of the Draft EIR.

The commenter is incorrect in stating that the reevaluation of certain elements of the LAX Master Plan constitutes substantial changes in the project, or the circumstances, under which the MSC is being undertaken. Those elements, specifically, the “Yellow Light Projects” including the Ground Transportation Center and associated improvements, a portion of the Automated People Mover, the demolition of Terminals 1, 2, and 3, and the reconfiguration of the north airfield as contemplated in the LAX Master Plan, were recently evaluated at a programmatic level in the LAX Specific Plan Amendment Study (SPAS) and its associated environmental impact report, pursuant to the requirement of the LAX Master Plan Stipulated Settlement, to which the Cities of Inglewood and Culver City (“Cities”) are party to. In 2013, the City Council selected a SPAS alternative to advance further planning, engineering and project-level environmental review, including the future evaluation and approval processes of the Federal Aviation Administration (FAA). However, the basic function and purpose of each Yellow Light Project as addressed in the LAX Master Plan EIS/EIR remain generally unchanged. The basic intent of the SPAS process was to require additional evaluation of the Yellow Light Projects of the LAX Master Plan, while the other elements, including the MSC, of the LAX Master Plan can proceed to implementation. That fundamental concept is clearly recognized in the Stipulated Settlement; specifically, in Subsection IV.F, which states: “While the LAX Specific Plan Amendment Study is being processed, LAWA may continue to process and develop projects that are not Yellow Light Projects, consistent with the LAX Specific Plan Compliance Review procedures.”

Furthermore, the MSC North Project and future phase(s) of the MSC Program respect the airfield configuration in the approved LAX Master Plan and are not, as incorrectly suggested by the commenter, very different in location and



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attributes from those evaluated in the Master Plan EIR. As noted in Section 2.5.2.1 of the Draft EIR, the north limit of the proposed MSC would be south of the Alt D line defined by Alternative D of the 2004 LAX Master Plan. Alternative D includes the relocation of Runway 6R-24L by 340 feet to the south. It also includes the provision of a new centerfield taxiway (between Runway 6L-24R and Runway 6R-24L) and relocation and improvements to Taxiway E and Taxilane D. The Alt D line was established by the FAA-required object free area limit line south of Taxilane D. The centerfield taxiway would meet ADG VI standards; the realigned Taxiway E and Taxilane D would meet ADG V standards. The MSC North Project would not impact the Alt D line or any of the improvements associated with Alternative D.

The future phase(s) of the MSC Program are not contemplated in the near future; these phases are long-term goals and have only been conceptually planned and therefore, a project-level analysis is not possible. In accordance with CEQA, the MSC is being analyzed at a project-level for the MSC North Project and at a program-level for the future phase(s) of the MSC Program. Therefore, the project is not improperly segmented. The MSC North Project can independently function and operate without any future southern extension, thus it is an independent project. Notwithstanding, the Draft EIR complies with CEQA by analyzing the future phase(s) of the MSC Program at a program level in the Draft EIR. Any future phase of the MSC Program would not operate independently of the MSC North Project; it is being designed to allow for future phase(s), in compliance with the approved LAX Master Plan, if and when LAWA determines the need for those future phase(s).

Also, please refer to responses to comments MSC-AL00003-3 and MSC-AL00003-6. Surface traffic impacts are discussed in response to comment MSC-AL00003-4. Responses to comments as part of the City of Inglewood's November 4, 2003 letter (Exhibit 1) were provided in the LAX Master Plan Final EIS/EIR, available at [www.ourlax.org](http://www.ourlax.org).<sup>5</sup>

### MSC-AL00003-6

**Comment:** II. THE DEIR IMPROPERLY SEGMENTS THE NORTH AND SOUTH PORTIONS OF THE PROJECT

The DEIR proposes to address the impacts of the Project in two stages: the first including a concourse of up to 11 gates; improvements to taxiways and taxilanes; a supplemental Federal Aviation Administration ("FAA") Air Traffic Control Tower; and utilities to support the north segment. DEIR, § 1.0, p. 1-2. The DEIR then asserts that the "program serves a unique and independent function, and it can occur if there are no future phases of the MSC program," DEIR, § 1.2, p. 1-3. The

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<sup>5</sup> City of Los Angeles, *Final Environmental Impact Report for Los Angeles International Airport (LAX) Proposed Master Plan Improvements*, April 2004, Available at: [www.lawa.org/uploadedFiles/OurLAX/Past\\_Projects\\_and\\_Studies/Past\\_Publications/FEIS\\_EIR\\_Part2-15\\_Volume10.pdf](http://www.lawa.org/uploadedFiles/OurLAX/Past_Projects_and_Studies/Past_Publications/FEIS_EIR_Part2-15_Volume10.pdf).

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"independence" of the "northern" project being evaluated in the DEIR is not the issue, however. The real issue is the independent utility of the southern component of the Project not being evaluated. See, e.g., *Communities for a Better Environment v. City of Richmond*, 184 Cal.App.4th 70 (2010). As the approved LAX Master Plan and its associated EIR evaluated the development of the "West Satellite Concourse" (ultimately renamed the "Midfield Satellite Concourse"), in its entirety, DEIR, § 1.2, p. 1-3, the two portions of the Project were clearly "linked" and, thus, the southern portion is a "reasonably foreseeable consequence of the project." See *Berkeley Keep Jets Over The Bay Comm. v. Board of Port Comm'rs*, 91 Cal.App.4th 1344, 1362 (2001). In short, postponing evaluation of a connected piece of the Project, the southern half, is a quintessential "segmentation" or "piecemealing" that CEQA prohibits.

**Response:** Comment noted. The Draft EIR correctly analyzes the full MSC Program and discloses its full impacts in accordance with CEQA. To facilitate the implementation of the MSC, the full MSC Program has been divided into multiple phases. At the current time, only the components of the MSC North Project have been determined. The components of the future phase(s) of the MSC Program have only been conceptually planned at this point; therefore, the MSC Draft EIR continues to examine the full MSC Program on a programmatic level, focusing on any updates to the MSC Program from that assessed in the LAX Master Plan EIS/EIR. When LAWA proposes to construct the future phase(s) of the MSC, a project-level CEQA environmental analysis on that phase or phase(s) will be completed at that time.

Please see responses to comments MSC-AL00003-3 and MSC-AL00003-5 regarding the tiering methodology used in the Draft EIR.

### MSC-AL00003-7

**Comment:** III. THE DEIR'S ANALYSIS OF SURFACE TRAFFIC IMPACTS OF CONSTRUCTION IS PATENTLY DEFICIENT

The DEIR's surface traffic analysis of construction traffic is inadequate where it impermissibly attenuates the area studied; arbitrarily allocates the flow of construction vehicle traffic to a limited number of intersections within that area, while ignoring the potential flow to equally accessible and convenient nearby intersections; and entirely declines to evaluate surface traffic impacts from construction of the second (south) phase of the Project.

First, the DEIR defines the traffic study area to include "those roads and intersections that would most likely be used by employee and truck traffic ...," DEIR, § 4.7.2, subsection 4.7.2.1, see also, § 4.7.33, based on data collected on two days in April and May, 2013. The DEIR does not fully explain how the parameters of the study area were determined, or why, for example, the intersections of Pershing and Manchester, Pershing and Culver Boulevard, and Culver Boulevard and Jefferson were omitted, even though those intersections are often used by traffic from the north and east.

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**Response:** Comment noted. This comment is similar to MSC-AL00003-4. Please see response to comment MSC-AL00003-4 for comments pertaining to the definition of the study area. As described therein, additional more detailed information was provided in Section 4.7.4.2 and Appendix F.4. The data collected in April and May 2013 were used to define the existing Baseline traffic conditions at the study area intersections. The traffic counts do not have a bearing on the determination of the study area.

The commenter asks why the intersections of (1) Pershing and Manchester, (2) Pershing and Culver Boulevard, and (3) Culver Boulevard and Jefferson were omitted from the MSC construction surface transportation analysis.

As shown in Figure 4.7-5, these intersections are located northwest of Westchester Parkway and Lincoln Blvd. As discussed under CEQA Guidelines Section 15204(a), "reviewers should be aware that the adequacy of an EIR is determined in terms of what is reasonably feasible, in light of factors such as the magnitude of the project at issue, the severity of its likely environmental impacts and the geographic scope of the project. CEQA does not require a lead agency to conduct every test or perform all research, study, and experimentation recommended or demanded by commenters." (See also CEQA Guidelines Section 15151.) These intersections were not analyzed because it is anticipated that the amount of traffic associated with MSC construction employees using this route would be negligible (less than 1 percent which equates to approximately 12 peak daily trips) and mathematically would not generate a significant impact.

Construction surface traffic impacts of the MSC Program were analyzed at a program level in the LAX Master Plan EIS/EIR (Section 4.20) and, at a program level, would not be substantially different; thus, construction traffic associated with the future phase(s) of the MSC Program were not studied in greater detail in the MSC EIR. Furthermore, the components of the future phase(s) of the MSC Program have only been conceptually planned, and therefore cannot be analyzed at a project level. When LAWA proposes to construct the future phase(s) of the MSC, a project level CEQA environmental analysis on that phase or phase(s) will be completed at that time, which will include an analysis of construction traffic for those phase(s).

### MSC-AL00003-8

**Comment:** The DEIR similarly provides an unsupported explanation of the reason the surface traffic impacts of the construction of the purported second phase of the Project, the South Concourse, remains unanalyzed. The only explanation offered is that those impacts were analyzed in the Master Plan EIR and would not be "substantively" different. DEIR, § 4.7.1. However, as noted in Exhibit 1 hereto, the discussion of surface traffic impacts of construction in the Master Plan EIR is notably inadequate. Therefore, any reliance on that analysis is misplaced, and should give way to a full adequately analyzed and documented analysis of the surface traffic impacts of construction of the whole Midfield Satellite Concourse, not just selected pieces of it.

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**Response:** Comment noted. As stated in Section 4.7.5, and shown in Table 4.7-5, development projects anticipated to be under construction concurrent with the proposed MSC North Project construction were included in the analysis. The future phase(s) of the MSC Program are assumed to be in place by the year 2025; however, it is not anticipated that construction of these phase(s) would occur during the MSC North Project construction period (i.e., prior to 2018); therefore it is not included in the analysis. LAWA intends to perform a construction traffic analysis at a project level when LAWA determines the need for the future phase(s) of the MSC Program. Also, please see response to MSC-AL00003-5 regarding tiering.

### MSC-AL00003-9

**Comment:** For all those reasons, Commentors urge LAWA to revisit its analysis with emphasis on correcting those flaws that have traveled through time from the Master Plan EIR to the current DEIR. Commentors thank LAWA for this opportunity to comment.

**Response:** As discussed in response to comment MSC-AL00003-5, the LAX Master Plan EIS/EIR adequately fulfills the requirements of CEQA. The Midfield Satellite Concourse Draft EIR is properly tiered from the LAX Master Plan and complies with all applicable CEQA requirements; therefore, the Draft EIR for the MSC North Project and the future phase(s) of the MSC Program does not require revision.

MSC-AL00004	Petta, Joseph	Shute, Mihaly & Weinberger LLP For the City of El Segundo	4/18/2014
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### MSC-AL00004-1

**Comment:** We submit this letter on behalf of our client, the City of El Segundo, to comment on the Draft Environmental Impact Report ("DEIR") recently released by Los Angeles World Airports ("LAWA") for the Midfield Satellite Concourse ("MSC," or "Project") at Los Angeles International Airport ("LAX"). As LAWA is aware, the City of El Segundo ("City") has been an active participant in the planning process for this Project and other construction at the airport. In the spirit of continued cooperation, we submit this comment letter on behalf of the City.

**Response:** Comment noted. Please see responses to comments MSC-AL00004-2 through MSC-AL00004-8 below for responses to all comments submitted by the commenter for the Draft EIR.

### MSC-AL00004-2

**Comment:** The City is, on the whole, pleased with LAWA's response to the City's concerns in its March 11, 2013 comment letter on the Notice of Preparation ("NOP"). See March 11, 2013 letter, attached. For instance, the City expressed concern over the NOP's statement that construction staging may occur on the southwest side

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of the airport along the east side of Pershing Drive, just north of Imperial. See id. at 3. The DEIR states that construction staging will no longer occur at this location. See DEIR at 4-315.

**Response:** Comment noted. Responses to the City's NOP comments are provided in response to comments MSC-AL00004-9 through MSC-AL00004-15. As discussed in Chapter 2, *Description of the Proposed Project*, construction staging is anticipated to occur at the Project site and within LAWA Construction Staging Area A. Construction Staging Area A is located within the Airport boundary in the northwestern portion of the Airport, immediately south of Westchester Parkway between Pershing Drive and Lincoln Boulevard.

### MSC-AL00004-3

**Comment:** The NOP also described structures and land uses that would be decommissioned or relocated for the construction of the Project ("enabling components"), but did not fully explain where the relocated components would be moved. See March 11, 2013 letter at 2. The DEIR provides this information for most of the enabling components. See DEIR at 2-41 to 2-43. However, the DEIR is still unclear about the disposition of the eight remain overnight ("RON") spots that will be "eliminated" for the Project. See id. Because the DEIR does not indicate a new location, the City assumes that the "other spaces on-Airport" that would compensate for the eight RON spots are either existing spots or spots for which LAWA has already approved construction with appropriate associated CEQA analysis. The Final EIR for the Project should make this clear.

**Response:** Comment noted. Some of the RON spaces that would be eliminated by the MSC North Project will remain in the midfield area for a period of time during construction of the MSC North Project, until all Project elements are constructed. Some aircraft that currently utilize these RON spaces may use the RON spaces that will be constructed at the West Aircraft Maintenance Area (WAMA) site. Other aircraft may utilize the West Remote Pads/Gates for RON parking, since the proposed MSC North Project will reduce reliance on the West Remote Pads/Gates for aircraft boarding and de-boarding of passengers. Because the MSC North Project will provide 11 aircraft gates at the MSC building and will reduce reliance on the West Remote Gates/Pads, sufficient space will be available at the West Remote Gates/Pads for RON parking, if needed. Assignment of RON spaces is a dynamic process that changes daily based on availability, airline agreements, and airline preference.

### MSC-AL00004-4

**Comment:** The City is particularly encouraged by LAWA's commitment in the DEIR to continue operating beyond 2020 under the cap of 153 gates. See id. at 4-16, fn. 10; see also "MSC North FAQs," available at <http://www.lawa.org/MSCNorthfaq.aspx> (LAX to comply with 2006 Stipulated Settlement at all times during buildout of MSC North and MSC Program). The City is similarly encouraged by LAWA's clear commitment to decommission all 18

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Western Remote Gates before the MSC is fully built out in 2025. See DEIR at 4-16, fn. 10. These commitments serve to reassure the City that the net effect of the Project and other terminal construction will be a "reduction in the total airside gate frontage available for aircraft gates and in the number of available aircraft gates ...." LAX Master Plan Final EIS/EIR at 3-75.

**Response:** Comment noted. As discussed on page 4-16 of the Draft EIR, LAWA will decommission the West Remote Gates/Pads once the future phase(s) of the MSC Program is completed, consistent with the approved 2004 LAX Master Plan.

### MSC-AL00004-5

**Comment:** As part of LAWA's compliance with the gate cap beyond 2020, the City looks forward to continued authority to periodically tour the airport and count passenger gates. These counts have proved exceedingly helpful to the City and have required only a limited amount of effort by LAWA (i.e., provision of a vehicle and driver for approximately an hour for each visit). Additionally, during buildout of the Project, decommissioning of the Western Remote Gates, and construction of terminal projects described in Appendix G to the DEIR, the City strongly encourages LAWA to document the airport's gate inventory and configuration in quarterly reports published to LAWA's website. Ensuring that the gate count complies with the cap and LAWA's commitments in the DEIR is particularly important given the description of MSC North as a "modular" terminal that could accommodate an unspecified number of narrow-body aircraft. See DEIR at 2-10; id. at 2-15.

**Response:** Comment noted. The commenter's requested items are beyond the scope of the MSC Program and what is required by CEQA. The comments do not pertain to any environmental impacts of the MSC Program or any related mitigation measures. As LAWA proceeds to implement the LAX Master Plan, it would do so in compliance with all approvals issued, including FAA approvals.

### MSC-AL00004-6

**Comment:** As always, the City asks that truck trips for the Project avoid El Segundo when possible. The DEIR acknowledges there will be a significant cumulatively considerable peak construction traffic impact at Imperial Highway and Main Street, on El Segundo's northern border. See id. at 4-329. The DEIR states this impact will be unavoidable because "[t]o mitigate the anticipated impact[], the westbound direction of Imperial Highway would need to be widened to provide one additional through lane ... [which is] infeasible due to right-of-way constraints along Imperial Highway ...." Id. The City recommends the following mitigation alternatives, which would not require widening Imperial and thus would not interfere with rights-of-way:

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- extend the westbound double left-turn pocket (for vehicles turning south onto Main) by approximately 150 feet to obtain stacking distance for 14 vehicles;
- extend the eastbound merge lane (for vehicles turning right onto Imperial) by approximately 250 feet to ease transition into traffic before reaching the hill on the south side of Imperial;
- extend the eastbound right-turn pocket west of the bus stop on the south side of Imperial to facilitate turning onto Main.

Each mitigation alternative may require minor signal phasing and bike lane improvements.

**Response:** Comment noted. Truck trips associated with the construction of the MSC North Project will utilize designated truck routes in accordance with LAX Master Plan Commitment ST-22, which states: For dirt and aggregate and all other materials and equipment, truck deliveries will be on designated routes only (freeways and non-residential streets). Every effort will be made for routes to avoid residential frontages. The designated routes on City of Los Angeles streets are subject to approval by LADOT's Bureau of Traffic Management and may include, but will not necessarily be limited to: Pershing Drive (Westchester Parkway to Imperial Highway); Florence Avenue (Aviation Boulevard to I-405); Manchester Boulevard (Aviation Boulevard to I-405); Aviation Boulevard (Manchester Avenue to Imperial Highway); Westchester Parkway/Arbor Vitae Street (Pershing Drive to I-405); Century Boulevard (Sepulveda Boulevard to I-405); Imperial Highway (Pershing Drive to I-405); La Cienega Boulevard (north of Imperial Highway); Airport Boulevard (Arbor Vitae Street to Century Boulevard); Sepulveda Boulevard (Westchester Parkway to Imperial Highway); I-405; and I-105.

The recommendations of mitigation alternatives are noted; however, the cumulatively considerable significant impact calculated using the Circular 212 Planning Method would not be eliminated or reduced at this location through the lengthening of the turn bays as suggested by the commenter. A traffic model of this intersection, utilizing Synchro 7 and SimTraffic, was developed to determine whether extension of the left-turn lanes, right-turn lanes, and eastbound merge lanes would improve the intersection to a less than significant impact. The modeling indicated that vehicles queuing for the westbound left turn movement have adequate space within the existing left turn lanes for queuing and increasing the turn bays would not affect the traffic flow at this intersection.

The modeling also indicates that the eastbound right-turn lanes are adequate for the average queue lengths at this intersection. However, to provide 95 percent coverage of this movement, the right-turn lane would need to be nearly 700 feet long. However, even with these improvements, the LOS impact identified in the MSC Draft EIR would still remain during the peak cumulative construction period (December 2018). In order to eliminate the impact, it would be necessary to increase the number of lanes on the westbound approach to the intersection in order to reduce the number of vehicles, on a per-lane basis, that are traveling through the intersection in the westbound direction. As described in Section

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4.7.9.1, it was determined that the widening required for implementation of this additional through lane would not be feasible due to right-of-way constraints along Imperial Highway, the cost of acquiring sufficient right-of-way, and, given the short-term nature of the construction-related impact, would not justify the widening.

### MSC-AL00004-7

**Comment:** Finally, the City strongly concurs with LAWA's determination, based on a brief discussion in the DEIR, that the "MSC South" alternative to the Project's first phase is inferior and should not be adopted. See id. at 5-26. Shifting construction of the MSC North terminal to the south would exacerbate existing airport imbalance and could result in significant noise, air quality, and construction-related traffic impacts on the City.

**Response:** Comment noted.

### MSC-AL00004-8

**Comment:** Thank you for the opportunity to comment on the Project and for LAWA's attention to the City's concerns over the NOP. We request that this firm and the City of El Segundo Planning and Building Safety Department receive a copy of any reply to this letter, as well as the Final EIR.

**Response:** Comment noted. A copy of the Final EIR will be sent to the Commenter and the City of El Segundo Planning and Building Safety Department at least 10 days prior to the certification of the Final EIR. The Final EIR will also be available at [www.ourlax.org](http://www.ourlax.org).

### MSC-AL00004-9

**Comment:** On behalf of the City of El Segundo, thank you for the opportunity to review the Notice of Preparation ("NOP") and Initial Study ("IS") for the Midfield Satellite Concourse ("MSC") North Project and comprehensive MSC Program (combined, the "Project"). The City expects to be actively involved in the planning process and looks forward to further follow-up discussions and close coordination as the Project goes forward.

As LAWA is aware, El Segundo has a number of longstanding concerns related to LAX, particularly around noise and traffic impacts that could result from increased operations on the southern airfield. El Segundo appreciates that LAWA appears to have considered the City's concerns in focusing most of the Project away from El Segundo. Nevertheless, the City believes that the remaining potential impacts could be further minimized or avoided if LAWA acts consistently with its prior development proposals and decisions, particularly those encompassed by the Specific Plan Amendment Study (SPAS). This letter explains El Segundo's concerns about the Project and calls on LAWA to evaluate fully the potential significant impacts of the Project on the City's residents.



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**Response:** Comment noted.

### MSC-AL00004-10

**Comment:** Project Setting and Description. El Segundo urges LAWA to describe the Project and its setting completely and accurately in the EIR. "An accurate, stable and finite project description is the sine qua non of an informative and legally sufficient EIR." *San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App.4th 713, 727.

El Segundo is concerned that the EIR could fail to sufficiently analyze the Project's potential impacts due to an incomplete project description. First, the Project's "enabling components" include demolition of several maintenance facilities, utility infrastructure, parking areas, a beacon and antenna array, and a hangar. IS at 26, 33. The NOP does not state where or when these facilities will be rebuilt or relocated. See IS at 1, 33. LAWA must ensure that any plans for these facilities' reconstruction or relocation are included in the EIR. If any of these facilities will be permanently removed, then the EIR must state this and explain how remaining facilities such as parking lots will accommodate capacity from the facilities planned for removal. Failure to analyze the impacts of the removal and relocation of these facilities in the EIR could run afoul of CEQA's prohibition on project segmentation.

**Response:** Comment noted. A complete project setting, including land use setting, environmental setting, and development setting/related projects, for the MSC North Project and future phase(s) of the MSC Program is described in Chapter 3, *Environmental Setting*, of the Draft EIR.

All of the components of the MSC North Project are fully detailed in Section 2.5.2 of the Draft EIR. Details regarding the enabling components of the Project are described in Section 2.5.3 of the Draft EIR. Specifically, Table 2-2 provides the name of each facility to be demolished/relocated, the approximate square footage, current use, and disposition of future facility/use. The components of the future phase(s) of the MSC Program are only conceptually planned and therefore are analyzed at a programmatic level in the MSC EIR. A description of these components is provided in Section 2.5.1 of the Draft EIR.

### MSC-AL00004-11

**Comment:** Second, the NOP states that the Project will cause no net increase in operations at LAX. IS at 63, 65, 66, 71, 72. Given the Project's scale, encompassing the eventual addition of 29 gates, a no-net-increase scenario is conceivable only if LAWA removes or decommissions equivalent gates and other facilities elsewhere. The EIR must explain how a no-net-increase scenario will be achieved.

El Segundo anticipates that LAWA will ensure no net increase in operations by decommissioning the Western Remote Gates. This would potentially enable LAWA to move some or all of the proposed West Aircraft Maintenance Area

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("WAMA") project farther north than the location currently under consideration. Moving the WAMA north would address some of El Segundo's concerns, detailed in the City's October 30, 2012 letter commenting on the WAMA NOP. In that letter, El Segundo recommended that at least some WAMA components, such as a hangar, some Remain Overnight spots, some Remain All-Day parking, and/or a Ground Run-up Enclosure, be built in the Western Remote Gates area. LAWA should consider this opportunity in the pending WAMA EIR and include an alternative in the MSC Project EIR wherein at least some WAMA components replace portions of the Western Remote Gates that should be removed as part of the MSC Project.

**Response:** Comment noted. As described in Chapter 2, *Description of the Proposed Project*, the MSC North Project is planned to operate as an "empty chair", providing LAWA with the flexibility to accommodate existing demand for aircraft gates while modernizing other terminals at LAX and reducing reliance on the West Remote Gates/Pads. The proposed Project would not result in changes to air traffic patterns, runway operational characteristics, or an increase in airport operations beyond those contained in the approved LAX Master Plan; the proposed Project would only shift operations from other gates that will be closed for renovation or from the West Remote Gates/Pads. Upon completion of the future phase(s) of the MSC Program, all of the West Remote Gates/Pads would be decommissioned. None of the West Remote Gates/Pads would be decommissioned until full build-out of the MSC. As such, components of the proposed West Aircraft Maintenance Area (WAMA) would not be able to relocate to the area currently occupied by the West Remote Gates/Pads. The WAMA Project is independent of the MSC and was evaluated in a separate environmental review.

### MSC-AL00004-12

**Comment:** Specific Plan Amendment Study Consistency. El Segundo urges LAWA to ensure consistency between the Project and the plans and commitments reached through the SPAS process.

The City is concerned that the EIR could incorporate project components and characteristics that are irreconcilable with the SPAS. First, the NOP states that the Project will include landside access for employees, services, and deliveries through a secured Air Operations Area post on World Way West. IS at 25. Since a western access point was considered and rejected during the SPAS process, this access point should not be part of the MSC North Project, and thus should not be analyzed in the EIR. Instead, all vehicle and pedestrian traffic should access the MSC from the east via Tom Bradley International Terminal ("TBIT").

**Response:** Comment noted. The proposed MSC North Project and future phases(s) of the MSC Program has been planned and is consistent with both the approved LAX Master Plan and with the Specific Plan Amendment Study (SPAS), should LAWA receive the necessary approvals to implement SPAS. The Commenter incorrectly states that western access was considered during the SPAS process;

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it was not. Western access was considered as part of the 2004 Master Plan for a potential West Terminal (Alternatives A, B, and C) and for a 12,600-stall employee parking garage (approved Alternative D). Landside access from the west for employees, services, and deliveries for the MSC North Project would be included as part of the proposed Project and is consistent with the approved 2004 LAX Master Plan. However, this access point would not be accessible by the public, only airport employees and deliveries with the proper clearance. All passengers traveling to the MSC North would be subject to security screening within the CTA and then be transported to the concourse.

### MSC-AL00004-13

**Comment:** Second, on February 5, 2013, the Board of Airport Commissioners ("Board") approved the staff-recommended alternative in the SPAS Draft EIR ("SPAS DEIR"). In this alternative, Runway 6L-24R would be shifted 260 feet north to accommodate a centerfield taxiway on the northern airfield. See SPAS DEIR at 1-18. As a result of the Board's approval, LAWA will no longer move Runway 6R-24L 340 feet south, as the Master Plan assumed. See *id.* at 1-17. Under the Master Plan, the location of Runway 6R-24L had defined the northerly building limits for the TBIT West Gates and the MSC. *Id.*; see also IS at 19 fn. 6.

Since Runway 6R-24L will no longer be moved south, LAWA should consider moving the MSC farther north and include an alternative in the EIR for the Project reflecting this opportunity. An EIR must describe a reasonable range of alternatives to the proposed project, and to its location, that would feasibly attain the project's basic objectives while avoiding or substantially lessening the project's significant impacts. Pub. Res. Code § 21100(b)(4); CEQA Guidelines § 15126.6(a).

Moving the MSC farther north so it lines up with the other north side terminals would help encourage increased use of the northern airfield by aircraft leaving from and arriving at the MSC gates. Thus, consideration of a project alternative in which the MSC is moved north would be consistent with LAWA's efforts to address the existing imbalance between the level of operations on the northern and southern airfields, which places a disproportionate share of environmental impacts on El Segundo.

**Response:** Comment noted. While the Board of Airport Commissioners has approved the staff-recommended alternative, the relocation of Runway 6R-24L 260 feet north still must undergo a National Environmental Policy Act (NEPA) environmental approval process and a project-level review under CEQA. Because this process has not begun and will not start prior to completion of the MSC EIR, LAWA has maintained planning for the MSC consistent with the approved Master Plan. If the relocation of Runway 6R-24L 260 feet north is ultimately approved, LAWA may consider extending future phase(s) of the MSC to the north, but that could only occur if Runway 6R-24L is relocated. Any extension of the MSC to the north would also be subject to additional CEQA and/or NEPA review. As also discussed in Response MSC-AS00001-2, the project would not affect operations

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at LAX beyond what has already been analyzed in the LAX Master Plan EIS/EIR. Movement of the MSC farther to the north is limited by object free areas that must be maintained around the existing runways and taxiways. If the MSC building were moved as far north as possible, given the existing airfield configuration, it would only result in a shift of 400 feet, which would have no effect on the environmental impacts of the MSC North Project.

### MSC-AL00004-14

**Comment:** Construction Staging. The NOP states that some construction staging for the MSC North Project would be located on the southwest side of the airport, along the east side of Pershing Drive just north of Imperial Highway. IS at 36, 40, 64. Considering El Segundo's longstanding concerns related to noise and traffic impacts generated by uses at the airport's southern edge, the City urges that this construction staging be moved elsewhere. At the very least, the City expects all potential impacts from this construction staging to be thoroughly analyzed and mitigated in the EIR. The project description should state the duration of this and any other construction activities located near El Segundo, as well as the potential for any construction vehicle traffic to use the City's designated truck routes or major arterial corridors such as Imperial Highway or Pershing Drive.

**Response:** Comment noted. Please see response to comment MSC-AL00004-2.

### MSC-AL00004-15

**Comment:** Cumulative Impacts. The Project is being proposed while other airport projects, such as the WAMA, are still in varying stages of development. Thus, the EIR must identify and analyze the Project's impacts when considered with other past, present, and probable future projects at the airport and in the surrounding area. El Segundo urges a thorough analysis of these potential impacts and inclusion of meaningful alternatives and mitigation measures in the EIR.

**Response:** Comment noted. Cumulative environmental impacts for air quality, greenhouse gas emissions, human health, noise, public services, and construction surface transportation were analyzed in the Draft EIR within each respective section of Chapter 4, *Environmental Impact Analysis*. Twelve related projects were considered in the analyses, including: Runway Safety Area Improvements – South Airfield; Runway Safety Area Improvements – North Airfield; LAX Bradley West Project – Remaining Work; Terminal 3 Connector (part of Bradley West Project); North Terminals Improvements; South Terminals Improvements; Central Utility Plant Replacement Project – Remaining Work; Miscellaneous Projects and Improvements; West Aircraft Maintenance Area Project; LAX Northside Area Development; LAX Master Plan Alt. D/SPAS Development; and the Metro Crenshaw/LAX Transit Corridor and Station.

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MSC- PC00001

Peters, Lori

Los Angeles International Airport  
Airline Airport Affairs Committee

4/21/2014

### MSC- PC00001-1

**Comment:** This memorandum is written on behalf of the Airline Airport Affairs Committee (AAAC) at LAX. The comments as set forth herein have been reviewed with and approved by the AAAC and are respectfully submitted for consideration by Los Angeles World Airport (LAWA).

- The Midfield Satellite Concourse (MSC) Program consists of a new multi-level concourse located west of the existing Tom Bradley International Terminal (TBIT). The MSC also includes conveyance systems connecting the MSC and Central Terminal Processor (CTP) as well as a new taxilane, taxiway, and apron and utilities required to serve the MSC.
- LAWA has proposed a preferred alternative that is capable of serving both domestic and international operations and would provide at its final phase a concourse that can accommodate up to 29 aircraft gates for Airplane Design Group (ADG) III to ADG IV aircraft.
- LAWA has further proposed development in phases. Phase 1 includes the northern portion of the MSC, building up to 11 gates and associated facilities (MSC North). Those components not part of the MSC North Project are proposed as future phase(s).

**Response:** Comment noted. Please see responses to comments MSC-PC00001-2 and MSC-PC00001-3 below for a response to the comments submitted by the commenter for the Draft EIR.

### MSC-PC00001-2

- Comment:**
- The LAX AAAC supports the MSC North Project with the following caveats:
    - There is demonstrated demand for aircraft gates to reduce dependency on remote gates
    - It will provide gate capacity to enable much needed facility modernization and rehabilitation of the existing CTA
    - Phasing of the construction will be efficient and prudent
    - It will be financially feasible
    - LAWA will work with the airlines to further define and address operational requirements
    - Removal and/or relocation of facilities affected by the proposed MSC North Project will be accommodated in a collaborative manner with affected tenant(s)
    - Future phases of the MSC will be constructed on a demand basis

**Response:** Comment noted. The MSC North Project would provide 11 gates to reduce dependency on the West Remote Gates/Pads and to provide LAWA with the

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flexibility to modernize existing terminals at LAX. The MSC will allow LAWA to modernize the existing terminals/gates at LAX by temporarily moving aircraft operations from existing gates to the MSC. These activities will require extensive coordination and scheduling with the airlines and LAWA once MSC is operational. Due to the length of time it will take to construct the MSC it is impossible to predict which gates/terminals will be modernized at a specific time as this will be dependent on a number of operational and business variables that won't be known until the MSC can be utilized.

Facilitation of the demolition/relocation of existing site uses has been on-going with current tenants throughout the environmental review process. The construction schedule takes into account the relocation of these facilities and has been phased to complete the MSC North Project as soon as practicable. The future phase(s) of the MSC Program will be constructed at a time when LAWA determines necessary.

### MSC-PC00001-3

**Comment:** In closing, while the AAAC supports the MSC North Project, it also recognizes that the project has tremendous impact to current facilities that are critical to existing and future airline operations. It is paramount that accommodation of these affected facilities be done on an expedited basis in full collaboration with the affected tenants.

The AAAC looks forward to working with LAWA to further the planning design, construction and activation of the MSC.

**Response:** Comment noted. Also, please see response to comment MSC-PC00001-2 above.

<b>MSC-PC00002</b>	<b>Acherman, Robert Schneider, Denny</b>	<b>Alliance for a Regional Solution to Airport Congestion (ARSAC)</b>	<b>4/21/2014</b>
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### MSC-PC00002-1

**Comment:** We thank LAWA, especially you, for working with us during the preparation of this plan. The attempt to include intertwined programmatic and project level reviews in this EIR is problematic for us because some of the statements are broad and can be reinterpreted by future LAWA personnel to subvert agreements and intent as has been done in past activities.

ARSAC remains concerned that some of the issues we have brought up in our March 11, 2013 letter (copy attached) have yet to be fully addressed. We would appreciate responses.

Our comments below to the MSC Draft EIR re-iterate some of those previous concerns raised, as well as new ones. ARSAC is not opposing the MSC project, but we do have issues with the project and EIR methodology.

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**Response:** Comment noted. Please see responses to comments MSC-PC00002-1 through MSC-PC00002-10 below for a response to all comments submitted by the commenter for the Draft EIR. Please see responses to comments MSC-PC00002-11 through MSC-PC00002-49 below for a response to all comments submitted on the NOP.

### MSC-PC00002-2

**Comment:** ARSAC would like LAWA to do another Project Level EIR if and when the MSC South is constructed with new analysis. We worry about the aging of data used in projects and changes in airline business conditions. For example, although LAX is the number 1 US airport for the Airbus A380, it appears unlikely that LAX will have 28 A380 flights a year by 2025 as projected in the LAX SPAS EIR; the limit appears to be more the 12 daily flights that ARSAC has predicted. Asiana plans to add an A380 flight to LAX in August 2014. Similarly, airlines are pushing less fuel efficient Boeing 747-400's and Boeing 767 series aircraft out of their fleets in favor of more fuel efficient aircraft with smaller seating capacities such as the Boeing 777 (e.g. Cathay Pacific, LAX to Hong Kong) and Airbus A321 (e.g. American Airlines, LAX to New York-JFK), respectively. Since 9/11, frequency and profitability are more important to the airlines than capacity and market share, respectively.

**Response:** Comment noted. As described in Chapter 1, *Introduction and Executive Summary*, and Chapter 2, *Description of the Proposed Project*, the MSC Program was only assessed at a programmatic level under CEQA as part of the LAX Master Plan EIS/EIR. Therefore, a separate project-level CEQA review is required prior to construction and/or operations of any of the components of the future phase(s) of the MSC Program. As discussed in Chapter 2, *Description of the Proposed Project*, further project-level environmental review under CEQA will be required for the future phase(s) of the MSC Program before any component can be implemented. Project-level environmental documents for future phase(s) of the MSC Program will be initiated at such time as LAWA determines that they are needed. Consistent with CEQA, any future project-level review will take into account data that is relative to the future date when the future phase(s) of the MSC Program are proposed.

### MSC-PC00002-3

**Comment:** One example of a previous comment: Although LAWA prepared a section, 4.5, on Public Services- Fire Protection Services, LAWA failed to address emergency evacuation areas. ARSAC is gravely concerned that if the MSC were to be evacuated, then people inside the MSC would be forced out into the potentially dangerous Aircraft Operating Area (AOA). LAWA must have marked evacuation paths that lead from the MSC to evacuation assembly areas. There are also must be systems and procedures in place to warn aircraft and vehicle drivers to not cross emergency evacuation paths when an evacuation of the MSC is in process.

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**Response:** Comment noted. In accordance with LAX Master Plan Commitments *FP-1: LAFD Design Recommendations* and *PS-2: Fire and Police Facility Space and Siting Requirements*, and as discussed in Section 4.5.5 of the Draft EIR, LAWA will coordinate with the Los Angeles Fire Department (LAFD) to develop appropriate evacuation plans for the MSC. Additional details regarding regulatory safety requirements are included in Section 4.5.3.1. Evacuation onto the Airport Operations Area (AOA) should be avoided whenever possible. If determined necessary, evacuations to specific designated assembly areas will be coordinated with the Operations Chief/Relief Incident Commander, the Airport Traffic Control Tower (ATCT), the Transportation Security Administration (TSA), the LAFD, the Los Angeles Police Department (LAPD), LAX Operations, and LAX Security departments. In the event that passengers are evacuated from the MSC to the ramp areas, the LAX Operations representatives will respond as soon as possible to direct passengers to the appropriate areas and provide buses for relocating them, as available. In the event of evacuation onto the AOA, LAX Operations will close movement areas, as appropriate. Commitment FP-1 further specifies that “at least two different ingress/egress roads for each area, which will accommodate major fire apparatus and will provide for major evacuation during emergency situations, will be provided.” This is an operational issue common to all public buildings at the airport, which, with implementation of the LAX Master Plan Commitments discussed above, will not result in a significant impact.

### MSC-PC00002-4

**Comment:** Comments and Questions:

1. Introduction and Exec Summary talks about overall general alternatives for Programmatic level and refers to Terminal 0 alternatives. This is general in nature and doesn't specify details.
2. During the Specific Amendment Study LAWA drafted two versions of the “ARSAC 100 foot south” alternative for our review and comment. LAWA introduced an unnecessary “poison pill taxiway intersection bottleneck” into our alternative by ignoring ARSAC comments. Similarly, LAWA ignored our Terminal 0 comments. Since Terminal 0 references are non-specific we request programmatic as well as project review of this aspect if, when, this is considered in the future.

**Response:** Comment noted. To analyze future on-Airport conditions for the future phase(s) of the MSC Program, the approved Specific Plan Amendment Study (SPAS) Alternative 9 was assumed in on-Airport cumulative transportation modeling, which includes the construction of Terminal 0. Additionally, Chapter 5, *Alternatives*, discusses Terminal 0 as an alternative to the MSC North Project (Alternative 4 for the MSC North Project). However, construction and operation of Terminal 0 is not fully approved by the FAA and still subject to NEPA review and approval.



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### MSC-PC00002-5

**Comment:** 3. The general overview talks about the north section project being an 11 gate project. Please spell out how this impacts the net number of gates. When the remote gates will be eliminated?

**Response:** Comment noted. Please see response to comments MSC-AS00001-2. The MSC does not have an effect on the number or type of aircraft operations at LAX. As discussed on page 4-16 of the Draft EIR, LAWA will decommission the West Remote Gates/Pads once the future phase(s) of the MSC Program is completed, consistent with the approved 2004 LAX Master Plan. LAWA will remain in compliance with the 2006 Stipulated Settlement.

Additional analysis of gate closures at LAX is included in Appendix G, *Aircraft Gate Closures at LAX*, of the Draft EIR. Once the future phase(s) of the MSC Program is completed, the West Remote Gates/Pads would be eliminated.

### MSC-PC00002-6

**Comment:** 4. In Section 2, the people mover and baggage handling is necessarily broad. We understand the difficulty in preparing this review. The whole issue of passenger transport from gates was a basic tenant when the TBIT was redone. It is clear that something will be done in the future beyond bus movement of passengers, but this topic is so broad and unclear that we suggest delaying any action on this project until a more certain resolution is identified.

**Response:** Comment noted. As discussed in Chapter 2, *Description of the Proposed Project*, "this Project element will require coordination with other LAWA projects to identify which tunnel segments and/or provisions for future tunnels should be constructed as part of the MSC North Project, and to identify their respective alignments from the MSC to their connections in the CTA." However, from an engineering and economic standpoint, it is necessary to include provisions for the tunnels and segments of the tunnels as part of the MSC North Project (it will be much more difficult and more expensive to try and implement after an MSC North building is constructed). Because the approximate length, width, and depth of the tunnels, and general alignment, including the station at the MSC North building, are known, construction of the tunnels was assessed and evaluated as part of the MSC North Project. Delaying construction of the tunnels would result in greater potential environmental impact and costs, since it would most likely require digging up part of the apron and airfield area resulting in additional construction activities and additional environmental impacts if performed separately after the MSC North Project has been constructed. For these reasons, LAWA is retaining construction of the tunnels as part of the MSC North Project.

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### MSC-PC00002-7

**Comment:** 5. In Section 2 it refers to partial completion of the Crossfield Taxiway Project (CFTP). This is so critical to aircraft movement between the north and south complexes (and all environmental assessment) that we want assurances that this will be completed ahead of the start of any of the MSC gate construction. This must include all of the taxiway S and T support activities. This section also refers to an airside people mover (APM) which also needs more programmatic level certainty to ensure that the “temporary” bussing does not become permanent since this was the major justification of the TBIT gates to accommodate the NLA.

**Response:** Comment noted. Chapter 2, *Description of the Proposed Project*, explains the Crossfield Taxiway Project (CFTP) was completed in May 2010. The CFTP mainly included the construction of Taxiway C13 (Taxiway R) and does not include any provisions for Taxilanes S or T. Taxilane S was constructed as part of the Bradley West Project, and became operational in 2013. As discussed in Chapter 2, *Description of the Proposed Project*, Taxilane T is currently under construction under approval as part of the Bradley West Project. Completion of Taxilane T is dependent on the demolition of the former TWA Hangar: the existing tenant of that facility – Qantas Airlines – would relocate to the West Aircraft Maintenance Area, for which construction is expected to be complete by December 2016. Demolition of the former TWA Hangar was also entitled as part of the Bradley West Project. The MSC North Project includes construction of Taxiway C14 and the northern portion of Taxilane C12.

As part of the MSC planning process, a connectivity study was conducted in 2013 to analyze the effects of the increased busing and ground service equipment traffic on the airfield. The results of this study concluded that operations of the MSC North Project could be accommodated through busing and baggage tugs; however, full build-out of the MSC Program would require a mechanized baggage connection and dedicated passenger connection, most likely an airside APM.

### MSC-PC00002-8

**Comment:** 6. In the description of the Central Terminal Processor (CTP) in Section 4.6.7.3, we are very concerned how this new facility will harm traffic flows and eliminate some parking in the Central Terminal Area (CTA). The CTP will also alter way-finding for vehicles and pedestrians.

- a. Traffic flows. The CTP will be accessed by vehicles by a left hand turn versus having terminals always on the driver’s right hand side. While LAWA proposes to maintain a bypass from the north to the south terminals, the CTP could create a new traffic bottleneck in short-cut traffic from north to south World Way and perhaps limit traffic flow from TBIT and Terminal 4 departure level from exiting the CTA.
- b. Center Way ramp. The proposed elimination of the Center Way ramp, while not highly utilized, would be a tragic mistake. Elimination of this

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ramp will result in one less evacuation route for pedestrians and also hamper the ability of emergency vehicles to get between the upper and lower level roadways. The ceiling heights of the parking garages are too low for some fire trucks to be able to go between levels.

- c. Pedestrians. Wayfinding for pedestrians will also be harmed- LAWA is proposing using signs to direct passengers to cross the arrivals level street to be able to reach the LAX "A" Airline Connections Shuttle Bus. Why is it not mentioned that passengers would also have to cross the busy arrivals level street to access other ground transportation such as Lot C bus, LAX FlyAway, courtesy shuttles, shared ride vans, etc.??? If LAX wants to be a modern, world class airport, then why is the proposed CTP taking steps backwards in enhancing passenger comfort and convenience??? How much parking will be eliminated?
- d. Parking. Where will new parking be located that will be convenient for the proposed CTP and other terminals? Will parking be incorporated into the CTP? ARSAC is concerned that mixed use of parking and passenger facilities in the same building may invite terrorist attacks similar to the 1993 World Trade Center bombing.

**Response:** Comment noted. As discussed in Chapter 2, *Description of the Proposed Project*, the location and design of the Central Terminal Processor (CTP) has only been conceptually planned. In accordance with the LAX Master Plan, the CTP would be located within the Central Terminal Area (CTA). However, the exact location has yet to be determined. Traffic impacts for the CTP were modeled and evaluated in the MSC EIR at a program-level and were found to have no significant impact. The traffic model examined the changes to World Way that would occur from placement of the CTP in the center portion of the CTA. Although the location of the CTP may require the demolition of portions of existing parking garages, the future phase(s) of the MSC Program assume that the Intermodal Transportation Facility (ITF) and the Automated People Mover (APM) would both be operational by the time construction is complete, thereby reducing the need for parking, as well as traffic volumes, within the CTA, and reducing any environmental impacts associated with the search for parking spaces. At this time, LAWA is not proposing including automobile parking in the CTP. A project-level environmental review will be conducted for the future phase(s) of the MSC Program, including the CTP, at such time as LAWA determines the timing of future phase(s). Any future analysis will take into account turning movements, emergency access, and parking impacts, as well as potential security issues at a project level.

### MSC-PC00002-9

**Comment:** 7. In Appendix E, On-Airport Traffic, ARSAC has several questions:

- a. Appendix page numbers. Why are there no page numbers in Appendix E?
- b. PDF Page 3. Appendix E-1- Why is 2011 data listed when 2012 is supposed to be the base level year? Why is there no data calibration for

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2012?

- c. ARSAC has brought up numerous times in many LAX EIR's the choice of a date in August for traffic counts. We have asked, and to continue to ask, for traffic data to also be collected for September when schools and colleges around LAX are in session. September data, in addition to August data, can provide a useful comparison of the impact of non-LAX traffic on LAX.
- d. PDF pages 32 to 80. Appendix E-2- It appears that is no data for LAX Shuttles and RAC Shuttles except for a minor blip on page 80. Was traffic data taken at all terminals for LAX Shuttles and RAC Shuttles? Can you please provide the actual numbers for all of the data (LAX Shuttle, Limos, etc.) used in making the charts? The charts give the appearance that there is no volume of LAX or RAC vehicles and that even the FlyAway bus shows a greater volume than LAX or RAC shuttles.

**Response:** Comment noted. Page numbers for Appendix E were inadvertently omitted. The text in Appendix E pertaining to year 2011 was a typographical error, data from 2012 was used to calibrate the model. A correction has been added to Chapter 3, *Corrections and Additions to the Draft EIR*, of the Final EIR.

Appendix E pertains to *On-Airport* Transportation; therefore, traffic count data used in the analysis represents the peak traffic activity associated with LAX. As discussed in Section 4.6.3, *On-Airport Transportation Existing Conditions*, "the existing (Existing) conditions are characterized by the facilities and general conditions that existed in August 2012. August is historically the peak month for travel at LAX; thus August 2012 was selected to represent Existing (2012) conditions." Although September data may include local scholastic traffic, these impacts would be off-airport, and therefore not applicable to the on-airport transportation analysis. Traffic in the vicinity of LAX is not discussed in this appendix or corresponding section of the MSC EIR.

Data pertaining to the 2012 peak hour for LAX Shuttles and RAC Shuttles is shown on the graphs on pages 16-31 of Appendix E in the Draft EIR. Data for LAX Shuttles and RAC Shuttles pertaining to the future year (2025), with and without the future phase(s) of the MSC Program, are shown on pages 40, 44-55, and 64-81 of Appendix E in the Draft EIR. As the future year assumes the operations of the ITF and the APM, certain modes, like the LAX and RAC Shuttles, will cease to operate and those passengers will use the APM to access the CTA. Therefore, the analyzed traffic volumes for the LAX and RAC Shuttles for 2025 were zero. Conservatively, the curbside zones vacated by these modes were not re-allocated to other modes, which resulted in a curbside utilization of zero, as shown in the graphs in question. This applies to Shared Ride Shuttles also, which will pick-up passengers from the ITF in the future. As indicated in response to comment MSC-PC00002-8, a project-level environmental review will be conducted for the future phase(s) of the MSC Program, including the CTP, at such time as LAWA determines the timing of future phase(s).

The commenter also references previous comments on prior CEQA documents prepared by LAWA related to the selection of the date for traffic counts. LAWA

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provided similar responses, such as the following:

**Response SPAS-PC00130-639:** "...August was selected as the basis for the airport-related trip generation because, as noted above, it represents the peak month for airport-related traffic activity....Given the airport is the single largest traffic generator within the study area, it was determined that analysis of the off-airport roadway system should be based on peak August 2009 conditions. The use of traffic volumes collected during the peak summer months provides a more conservative assessment of traffic conditions (i.e., worst case level of service) within the vicinity of the airport than would traffic collected during a period when the airport is not operating at peak activity levels."

**Response BWP-PC00011-50:** "...Collecting counts during the peak months for airport-related traffic provides for a more conservative analysis as discussed on pages 4-14, 4-90, and 4-172 of the Bradley West Project Draft EIR. The study area intersections are located in close proximity to the airport and influenced by airport-related traffic activity; therefore, obtaining traffic count information when the airport is operating at peak conditions is important in obtaining a conservative estimate of traffic activity in the study area. [¶] The commentor indicated that collecting traffic at the intersection of LMU Drive and Lincoln Boulevard during the August peak month may result in an undercount at that location for the nine months when LMU is in regular session. Loyola Marymount University (LMU) is located north of the airport, approximately 2.5 miles driving distance from the entrance to the CTA. As described previously, the traffic data collection and resulting analysis for the off-airport roadway system was conducted during August, which represents the peak month for airport-related traffic around LAX. It is recognized that individual businesses, schools, and other traffic generators may produce localized peak traffic conditions that may differ from the airport. For example, each individual traffic generator would likely experience peak seasons and produce peak hour conditions at their primary access locations that would differ from that of the airport and the overall study area. However, given the large scale of the traffic study analysis area, it is important to analyze the roadway network for the overall ambient peak condition which is influenced by the airport as the largest trip generator within the study area and to assess conditions when the project is producing the highest number of trips and would produce the most potential impacts within the study area. There are numerous large buildings, shopping centers, business campuses, educational facilities, sport and entertainment centers, and other facilities within the approximately 37 square-mile study area for the Bradley West Project off-airport surface transportation analysis (please see Figure 4.2-2 of the Bradley West Project Draft EIR). Many of these facilities generate localized traffic that can affect the roadway network in the immediate vicinity of their site, and with seasonal and hourly peaking characteristics that may differ from the overall study area roadway network. It would not be feasible to study the traffic peaking

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characteristics of every individual trip generator within the geographic scope of the Bradley West Project off-airport surface transportation analysis shown in Figure 4.2-2. Nor is this level of detail required by CEQA. As discussed under CEQA Guidelines Section 15204(a), "reviewers should be aware that the adequacy of an EIR is determined in terms of what is reasonably feasible, in light of factors such as the magnitude of the project at issue, the severity of its likely environmental impacts, and the geographic scope of the project. CEQA does not require a lead agency to conduct every test or perform all research, study, and experimentation recommended or demanded by commentors." (See also CEQA Guidelines Section 15151.) [¶] As shown in Table 4.2-6 of the Bradley West Project Draft EIR, the magnitude and severity of the traffic impacts at and surrounding LMU would be minimal. The commentor references the intersection of LMU Drive and Lincoln Blvd (Intersection #104 shown in Figure 4.2-2). Intersection #104 would operate at LOS A with and without the proposed project in 2013 in the AM, MD, and PM peak hours. (See Table 4.2-6 of the Bradley West Project Draft EIR.) The intersection to the north of Intersection #104 (Intersection #22) and the intersection to the south (Intersection #111) would operate at LOS A and LOS B, respectively, with and without the project in the AM, MD, and PM peak hours. (See Table 4.2-6 of the Bradley West Project Draft EIR) As discussed above, the geographic scope of the Bradley West Project off-airport surface transportation analysis covers approximately 37 square miles. It is therefore not feasible or necessary to analyze individual traffic peaking characteristics within the geographic scope of the off-airport surface transportation analysis.

### MSC-PC00002-10

**Comment:** We may submit additional comments. ARSAC looks forward to your responses.

**Response:** Comment noted.

### MSC-PC00002-11

**Comment:** ARSAC has three areas of concern with the subject EIR:

1. Feasibility of design for long term operation such as the permanent check-in location and methodology for getting to/from gates (including baggage retrieval).
2. Relationship of this project to other "approved" projects in the Master Plan.
3. Phased construction and availability of other approved projects to mitigate impacts if an approved project is not yet built and not scheduled to be completed.

As LAWA prepares the Environmental Impact Report for this project level review it is expected that project details will be revealed to properly assess impacts. ARSAC expects LAWA to show that the plan is feasible as designed and that

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there are no overriding infrastructure issues.

**Response:** Comment noted. Chapter 2, *Project Description*, provides detailed information about the proposed MSC North Project and future phase(s) of the MSC Program.

### MSC-PC00002-12

**Comment:** LAWA has indicated that this project will be constructed in two separate phases – northern and southern complexes which are essentially separate. The EIR must review each construction project separately for final impacts because there is no assurance that the second half will be constructed within a reasonable time after the first is completed, if ever.

**Response:** To facilitate the implementation of the MSC, the full MSC Program has been divided into separate and independent phases. At the current time, only the components of the MSC North Project have been determined at a project-level. The components of the future phase(s) of the MSC Program have only been conceptually planned; therefore, the MSC Draft EIR continues to examine the full MSC Program on a programmatic level, focusing on any updates to the MSC Program from that assessed in the LAX Master Plan EIS/EIR. When LAWA determines the timing and need for the future phase(s) of the MSC, a project-level CEQA environmental analysis on that phase or phase(s) will be completed at that time.

### MSC-PC00002-13

**Comment:** One example of a design element of concern is controlled access to the gate area. The very high passenger bridge which has been shown in concept drawings doesn't appear to be practical. We have heard that buses will be used temporarily to ferry people from TBIT to the MSC gates, but we have not heard what the acceptable long term resolution is to be. We agree that bussing should not be a long term solution. LAWA has described a potential method of passenger access and baggage distribution as a massive tunnel with sanitized traffic to control security starting in the CTA going under TBIT and to the MSC (see specific notes about the NOP attachment). This element should be more completely described and evaluated for feasibility and impacts including emergency evacuation procedures. If this is done, LAWA should provide construction phasing impacts on traffic since it would significantly impact the CTA roadway flows. Will this tunnel also have shops and other conveniences for passengers and visitors as we have suggested? This tunnel should be completely identified in terms of size, employee access, and where they will park and how they will get into the CTA to ensure traffic counts include these people.

**Response:** It has been determined that a bridge connecting the MSC with TBIT or the CTA is not practical due to the required height (to allow A380 aircraft to taxi underneath the structure) and the expense associated with constructing a structure that could support an airside APM that high above ground with few piers (the bridge would need to span large distances to allow aircraft to taxi underneath it). Thus, the

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bridge connection between the MSC and TBIT is no longer being studied. The long-term resolution will be an underground automated people mover from a Central Terminal Processor to the MSC. The construction of the tunnel for a future automated people mover was studied as part of the MSC North Project in the Draft EIR, including emergency evacuation procedures and plans (see Section 4.5, *Public Services – Fire Protection Services*). Construction of an automated people mover would have minimal impact on traffic in the CTA since it would be constructed by tunneling underneath the roadway and TBIT. Any additional APM construction and operations impacts will be studied as part of the future phase(s) of the MSC Program when determined necessary by LAWA.

### MSC-PC00002-14

**Comment:** How will passengers get from check at a remote location to boarding gates and ultimately to another terminal without going through security checks multiple times? Will Federal Inspection Service support be required for these gates? How will it be provided? How will buses crossing the active airfield be controlled? As passenger traffic increases is this disruptive to aircraft flow and even result in new safety issues as bus service increases?

**Response:** As discussed in Section 2.5.2.2, *Busing Operations*, of the Draft EIR, passengers would access the MSC North building by airfield buses powered by clean fuel, traveling between existing CTA terminal facilities and the MSC North building using existing and relocated vehicle service roads. Passengers would obtain tickets, check luggage, and be screened by security at the existing passenger terminals within the CTA and would be bused to and from existing bus gates located within these terminals. If the MSC is extended to add additional gates, an automated people mover system connecting a CTP to the MSC will be required, which would eliminate busing to the MSC. However, these are components of the future phase(s) of the MSC Program, and will undergo a project-level CEQA review when determined necessary by LAWA.

### MSC-PC00002-15

**Comment:** LAWA has talked broadly about a supplemental control tower to address the increased amount of non-visibility areas. Will LAWA provide enough detail to include this tower in the study to see how safety is properly controlled and assessed? Since aircraft ground traffic will require special treatments in this area has LAWA planned to incorporate any technological solutions in addition to full tower staffing?

**Response:** The MSC North Project will include a ramp observation area or ramp control tower, and/or a supplemental FAA air traffic control tower. As discussed in Section 2.5.2.4 of the Draft EIR, it is assumed that a ramp control tower would be integrated into the MSC North building at a height of between 131 and 211 feet. The final height of the tower is expected to be within the analyzed range and will be confirmed by FAA once FAA completes its review process. The final location and height of a supplemental ATCT, if required by FAA, would be the subject of additional environmental review under CEQA and NEPA.



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### MSC-PC00002-16

**Comment:** ARSAC requests that time phasing of all program level Master Plan elements be presented with this EIR to show the proper relationship to the subject project. What contributions to noise and pollution are dependent?

What has LAWA assumed about the construction and completion for all surrounding elements to be built and completed for purposes of the EIR? The impacts are dramatically different during both MSC construction and subsequent operation if not all planned items are constructed. What is the completion schedule for all items? If the taxiways, for instance are incomplete for an extended period beyond MSC construction the times to gate assumed in establishing air pollution levels will be severely divergent. Aircraft noise from taxiing or APU use (if any) may face different areas and be for different durations. We ask that LAWA identify all elements that will be delayed more than one year beyond MSC and what criteria are used as triggers to build the missing elements. We also ask that alternatives be provided for any element relied upon which will be built greater than five years after the MSC.

**Response:** All elements associated with the MSC North Project were disclosed and evaluated as part of the MSC EIR. It is assumed that all elements of the MSC North Project would be completed prior to opening of the MSC North building. LAWA projects that may overlap with the MSC North Project were evaluated as part of the cumulative effects of the MSC North Project, analyzed within each section of Chapter 4, *Environmental Impact Analysis*, of the Draft EIR. As with the future phase(s) of the MSC Program, it was assumed that all elements of the LAX Master Plan would be in place by 2025. The future phase(s) of the MSC Program were evaluated in the Draft EIR at a programmatic level; a project-level environmental review will be conducted for the future phase(s) of the MSC Program at such time as LAWA determines the timing of future phase(s).

### MSC-PC00002-17

**Comment:** We have heard that LAWA would like to use the gates in the MSC as temporary fill in for other refurbishment and expansion. Please identify what areas are impacted and show the interim environmental impacts of anything greater than one year duration which will result.

**Response:** The MSC will allow LAWA to modernize the existing terminals/gates at LAX by temporarily moving aircraft operations from existing gates to the MSC. Because this will be an ongoing process, it is assumed that the evaluation of operational effects of the MSC North Project will account for these temporary effects. No schedule of these activities has been developed since it will require extensive coordination and scheduling with the airlines and LAWA once MSC is operational. Due to the length of time it will take to construct the MSC it is impossible to predict which gates/terminals will be modernized at a specific time as this will be dependent on a number of operational and business variables that won't be known until the MSC can be utilized. Additional analysis regarding

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intermittent aircraft gate closures at LAX is included in Appendix G, *Aircraft Gate Closures at LAX*, of the Draft EIR.

### MSC-PC00002-18

**Comment:** We expect LAWA will be performing substantial refurbishments to the CTA parking lots and roadways. How is this addressed in the EIR? LAWA has said that MSC and TBIT cannot be accessed on the same loop around LAX (you won't be able to go from one directly to the other). Has LAWA fully accounted for the resulting traffic patterns? Specifically, will traffic be better because international travelers will be more dispersed (less crowded at TBIT)? Or will traffic be worse because of buses/shuttles having to complete a partial loop of the CTA to go from MSC to TBIT?

**Response:** The MSC North Project would not change traffic patterns within the CTA. Passengers would access the MSC North building by airfield buses powered by clean fuel, traveling between existing CTA terminal facilities, including TBIT, and the MSC North building using existing and relocated vehicle service roads. Passengers would obtain tickets, check luggage, and be screened by security at the existing passenger terminals within the CTA and would be bused to and from existing bus gates located within these terminals. Modifications to parking lots and roadways within the CTA would be a part of the future phase(s) of the MSC Program. Future traffic patterns through the CTA associated with the future phase(s) of the MSC Program were analyzed in Section 4.6, *On-Airport Transportation*, of the Draft EIR. A project-level environmental review will be conducted for the future phase(s) of the MSC Program, including the CTP, at such time as LAWA determines the timing and need of future phase(s).

### MSC-PC00002-19

**Comment:** Figure 1- MSC Project Location. Why isn't the proposed tunnel between the Midfield Satellite Concourse (MSC) and the Central Terminal Processor (CTP) shown in Figure 1?

Why is the passenger bridge between the MSC and CTP no longer being considered? Will the bridge be removed from the scale model of the MSC and CTP on display in the lobby of the Clifton Moore Administration Building at LAX?

**Response:** Figure 1 in the Initial Study, which is included in Appendix A of the Draft EIR, shows the general proposed project location. Figure 2 of the Initial Study shows the representative alignment of the tunnel connecting the MSC and the CTA.

Upon further review, the passenger bridge was found not to be feasible (see response to comment MSC-PC00002-13).

### MSC-PC00002-20

**Comment:** Page 19. What would have to "change substantively" to trigger an Environmental Impact Statement (EIS / NEPA) re-review? It appears that this section conflicts

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with Page 34, 1.5.1. Federal approvals. FAA approval would be required for relocation of the beacon and antenna array and for the supplemental FAA tower on top of the MSC.

**Response:** The full MSC Program was included as part of the LAX Master Plan EIS, thus no further NEPA review is required. As discussed in Section 2.5.2.4 of the Draft EIR, it is assumed that a ramp control tower would be integrated into the MSC North building at a height of between 131 and 211 feet. The final height of the tower is expected to be within the analyzed range and will be confirmed by FAA once FAA completes its review process. The final location and height of a supplemental ATCT, if required by FAA, would be the subject of additional environmental review under CEQA and NEPA.

### MSC-PC00002-21

**Comment:** What are the triggers for adding MSC-south? Will this be determined by terminal redevelopment, an increase in flights (by what number?) or other factors?

**Response:** The need and timing of the future phase(s) of the MSC Program will be dictated by economic conditions and the capacity of LAWA to undertake the project in conjunction with other future projects.

### MSC-PC00002-22

**Comment:** Figure 2- Project Components. Item 5- Ramp Tower. What is the height of the ramp tower? Has the FAA been consulted about the ramp tower? Are there plans to place other towers on the LAX airfield as the current tower does not have visibility behind the Tom Bradley International Terminal and the maintenance areas on the west side of the airfield?

**Response:** Please see response to comment MSC-PC00002-15.

### MSC-PC00002-23

**Comment:** Figure 2- Project Components. Item 8- Landside Access from World Way West. ARSAC requests that no passenger access be permitted to the MSC or other terminals from World Way West. ARSAC has strongly opposed any passenger access to the passenger terminals from Pershing and World Way West.

**Response:** No passenger access from World Way West is contemplated or proposed. Please also see response to comment MSC-AL00004-12.

### MSC-PC00002-24

**Comment:** Figure 3- Concourse and Aprons. Why are the bus routes not shown from the MSC to the other terminals? How many bus gates will there be at the MSC? Where will the MSC bus terminal be located on the MSC? What is the minimum

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safest distance between aircraft parked at the MSC gates and the MSC bus gates?

**Response:** General bus routes to and from the MSC are shown on Figure 6 in Appendix B, *Air Quality and Greenhouse Gas Emissions*, of the Draft EIR. It is anticipated that one or more bus stations would be integrated to be part of the MSC North building. The exact location and size of the bus terminal will be determined during the design phase of the MSC North building. All of the existing terminals at LAX have bus gates; proper spacing between the bus gates and aircraft parking positions will be provided and maintained in accordance with FAA Advisory Circular 5300-13A, *Airport Design*. Please see response to comment MSC-PC00002-14.

### MSC-PC00002-25

**Comment:** Figure 3- Concourse and Aprons. Does the proposed tunnel between the MSC and the CTP go under aircraft gates? On the figure, it appears that the tunnel goes under two Airbus A380 gates. Will the tunnel be able to withstand fully loaded A380's sitting at the gate for up to three hours?

At what depth will the proposed tunnel be dug? What are the dimensions of the tunnel? How will contamination toxics be handled during and after construction?

Will the tunnel have a stop at the Tom Bradley International Terminal? How will the tunnel handle departing and arriving passengers?

Will there be a sterile corridor in the tunnel for arriving international passengers? Where will the Federal Inspection Services (e.g. Customs, Immigration, Agriculture, etc.) facilities be for arriving international passengers at the MSC? In the MSC? Tom Bradley International Terminal? Terminal 2? Terminal 5? Terminal 6? Other terminals?

Will the sterile corridor only allow passengers and airport workers to use the APM? Will there be a walkway in the tunnel between the MSC and the CTP? Will speedwalks (flat escalators) be used?

**Response:** As part of the MSC North Project, provisions for the future APM tunnel have only been conceptually planned; an exact alignment is yet to be determined. As discussed in Chapter 2, *Description of the Proposed Project*, "this Project element would require coordination with other LAWA projects to identify which tunnel segments and/or provisions for future tunnels should be constructed as part of the MSC North Project, and to identify their respective alignments from the MSC to their connections in the CTA." It is assumed in the Draft EIR that a 2,600-foot long segment of the tunnel(s) would be constructed from the MSC North building to an East Station in the CTA. The tunnel(s) would be a maximum of 90 feet wide by 60 feet tall with the bottom of the tunnel at an average depth of 50 feet below the apron. The air quality and construction traffic analyses conducted as part of the Draft EIR included the haul trips and associated emissions for the excavation of the tunnel. Portions of the tunnel(s) could be constructed using cut and cover (those portions by the MSC North building),

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while other sections that would traverse under the existing airfield and terminal infrastructure would most likely be constructed by boring. The tunnels would be constructed in compliance with Los Angeles Building Code, Caltrans Bridge Design Specifications, FAA design standards, and Caltrans Seismic Design Criteria. Before an APM is constructed or operated, the APM will be studied at a project-level as part of the future phase(s) of the MSC Program. The cross-section for the tunnel can accommodate an APM system, moving walkways, baggage handling, utilities, and emergency walkways. The exact components of the tunnel will be determined as part of the future phase(s) of the MSC Program.

As discussed in the Initial Study, included as Appendix A of the Draft EIR, Project-specific Mitigation Measure *MM-HM (MSC)-2 Hazardous Materials Contingency Plan* will be incorporated into the MSC North Project. The mitigation measure requires that LAWA or its contractors prepare a hazardous materials contingency plan addressing the potential for discovery of unidentified USTs, hazardous materials, petroleum hydrocarbons, or hazardous or solid wastes encountered during construction.

The apron pavement on the east side of the MSC North building will be designed to accommodate ADG VI aircraft (which includes the Airbus A380). Any tunnels constructed underneath the apron will be designed to structurally support all structures and aircraft that may be constructed or parked above the tunnel.

### MSC-PC00002-26

**Comment:** Page 25- Footnote 7. Does the comment imply that other terminals will be redeveloped? What are the terminals proposed to be redeveloped? What is the timeline for terminal redevelopments? If terminals are moved from current locations will there be potential changes to the MSC already built in to accommodate connecting terminals?

**Response:** Please see response to comment MSC-PC00002-17.

### MSC-PC00002-27

**Comment:** Page 26- Item 3, Ramp Tower. Is FAA approval required for the ramp tower? Will an EIS (NEPA) need to be prepared for the ramp tower? Will a complete safety review be conducted? What will be the traffic capacity of the new tower?

**Response:** Please see response to comment MSC-PC00002-15.

### MSC-PC00002-28

**Comment:** Page 26- Enabling Projects. Are the “E” numbered projects the actual numerical sequence of the order for these enabling projects? If the order for the “E” projects is different, then what is that sequence?

**Response:** The “E” numbered projects are not in sequential order. The proposed conceptual schedule for the MSC North Project, including enabling projects, is included in

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Attachment B.1 to Appendix B, *Air Quality and Greenhouse Gas Emissions*, of the Draft EIR.

### MSC-PC00002-29

**Comment:** Page 35- I. Aesthetics. Will the architecture of the MSC be similar to that of Bradley West?

**Response:** The architecture of the MSC will be complementary to Bradley West and terminal upgrades being implemented as part of the ongoing modernization of LAX.

### MSC-PC00002-30

**Comment:** Page 35- I. Aesthetics. Construction staging areas. ARSAC prefers that the construction staging areas and construction worker proposed south of Westchester Parkway be moved closer to Pershing and World Way West away from homes.

**Response:** Please see response to comment MSC-AL00004-2.

### MSC-PC00002-31

**Comment:** Page 35- I. Aesthetics. Light and glare. ARSAC requests that lighting on MSC not point directly into Westchester/Playa del Rey or El Segundo. If at all possible, lighting should be confined to spill over only into the MSC apron and adjoining taxilanes.

**Response:** In general, lighting associated with the MSC will be similar to the lighting associated with TBIT and Bradley West or other taxiways and taxilanes at the airport. Lights will be confined and directed downward to light the ramp and apron areas. Taxiway and taxilane lights will consist of in-pavement or edge lighting installed close to the ground.

### MSC-PC00002-32

**Comment:** Page 38- III. Air Quality. ARSAC requests that the Air Pollution Apportionment Study be included in this EIR for the MSC.

**Response:** The Air Pollution Apportionment Study is a separate study unrelated to the proposed Project, is not required by the CEQA environmental review process, and therefore was not included in the Draft EIR. As discussed in previous Response to Comments, the purpose of the AQSAS is to assess and “apportion,” to the extent possible, the present sources of certain air pollutants from multiple sources in the vicinity of LAX. While the purpose of the MSC EIR is to evaluate the air quality impacts of the proposed project. Consequently, the availability of data developed through the AQSAS does not affect the adequacy of the air quality analysis contained in the MSC EIR. The MSC EIR provides sufficient information to describe the existing setting and the environmental impacts of the

## 2. Comments and Responses

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proposed project, consistent with CEQA Guidelines Sections 15125(a) and 15124.

### MSC-PC00002-33

**Comment:** Page 42- V. Cultural Resources. Theme Building view preservation. In the LAX Specific Plan Amendment Study (SPAS) EIR, LAWA has committed to protecting the surrounding views of the Theme Building to keep the Theme Building within its historical context. ARSAC requests that photos be made of current conditions from the Theme Building to the current and future MSC project locations (e.g. CTP, removal of Parking Structures 3 and 4.) ARSAC requests that the photos be used to assist architects and engineers in designing MSC projects that preserve the Theme Building's historical context surroundings.

**Response:** The CTP and removal of parking structures P2B and P5 are part of the future phase(s) of the MSC, which were studied in the Draft EIR at a programmatic level. Because the design of the CTP has not been initiated, it is premature to conduct studies of aesthetic effects to the Theme Building. However, this issue would be analyzed as part of a project-level CEQA document that would need to be conducted for any future phase(s) of the MSC that included changes within the CTA.

### MSC-PC00002-34

**Comment:** Pages 46 to 47- VI. Geology and Soils. ARSAC is concerned about soil contamination in the American Airlines and former Trans World Airlines/current Qantas maintenance sites. Please see comments under Section VIII, Hazards and Hazardous Waste.

**Response:** Potential hazardous waste issues associated with the former Trans World Airlines/current Qantas maintenance building were analyzed as part of the Bradley West EIR.<sup>6</sup> Potential issues associated with the American Airlines High Bay Hangar were disclosed in the MSC Initial Study, included as part of Appendix A in the Draft EIR. As noted in the Initial Study, appropriate mitigation measures will be employed to mitigate to a less than significant level any hazardous wastes that may be encountered during construction. These mitigation measures include:

- *MM-HM (MSC)-1. Asbestos-Containing Materials and Lead Based Paint.*
- *MM-HM (MSC)-2. Hazardous Materials Contingency Plan.*
- *MM-HM (MSC)-3. Hazardous and Solid Waste Disposal.*

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<sup>6</sup> City of Los Angeles, Los Angeles World Airports, Final Environmental Impact Report for Bradley West Project, Los Angeles International Airport (LAX), September 2009.

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### MSC-PC00002-35

**Comment:** Page 51- VII. Green House Gas Emissions. Why is there is nothing in the Initial Study document to indicate how passengers will be loaded or unloaded from aircraft at the MSC? Will there be electrically powered passenger loading bridges at the MSC? Will there be a passenger loading bridge to provide upper deck access for Airbus A380 aircraft?

Will there be electrical power provided at the MSC gates so aircraft do not have to use Auxiliary Power Units (APU's) at the gates?

ARSAC requests that the MSC gates provide electrical power to aircraft and that the use of APU's be banned at the MSC. LAWA has already committed to 100% gate electrification in the LAX Master Plan and the Community Benefits Agreement with the LAX Coalition.

**Response:** In compliance with the LAX Master Plan, gate electrification (electric power and heating/cooling hookups) will be included as part of the MSC North Project and future phase(s) of the MSC Program. All aircraft are equipped with APUs and it is the pilot's decision, in concert with airline policy, on how and when to use APUs. Most airlines require use of electrical power and pre-conditioned air when aircraft are parked at the gates because it saves fuel. However, LAWA cannot dictate how aircraft are operated; they can only provide the infrastructure to minimize APU usage at the gates. Section 2.5.2 of the Draft EIR states that the MSC North Project will include passenger boarding bridges; these will be similar to the passenger boarding bridges located at aircraft gates throughout the CTA. Some gates may be equipped with loading bridges to provide upper deck access for Airbus A380 gates (but this would only occur at the gates located on the east side of the building).

### MSC-PC00002-36

**Comment:** Page 52- VIII. Hazards and Hazardous Materials. ARSAC is extremely concerned about soil contamination in the American Airlines and former TWA/Qantas maintenance areas. LAWA is already aware of soil contamination issues under the former Continental hangar immediately west of the American Airlines High Bay hangar. These maintenance areas have been in use for almost 50 years. In that time span, all kinds of lubricants, grease, oil, jet fuel, solvents, Skydrol, paint, coolant, wastewater and other toxics could have been dumped or leaked into the soil. These facilities could also include industrial gases, lead based paint and asbestos. ARSAC requests that LAWA study and inventory these hazardous materials and to develop an appropriate clean-up program.

**Response:** Please see response to comment MSC-PC00002-34.

### MSC-PC00002-37

**Comment:** Page 56- g. Evacuation Plan. Unlike the other passenger terminals which have street access, the MSC is located in the middle of the Aircraft Operating Area. In



## 2. Comments and Responses

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case of evacuation, where will people in the MSC go? ARSAC requests that LAWA set-up evacuation areas for the MSC so that evacuees will not be dispersed into the AOA.

**Response:** Please see response to comment MSC-PC00002-3.

### MSC-PC00002-38

**Comment:** Page 57- Pollution discharge. Will there be any discharge or drainage from the MSC to the Argo Ditch?

**Response:** Section 2.5.2.7, *Project Utilities*, discusses the proposed stormwater drainage for the MSC North Project. Stormwater from the MSC North Project site would be directed to storm drains located in the middle of World Way West and eventually flow out of the Pershing Drainage Outlet into the Pacific Ocean. Flows would not enter the Argo Ditch or Argo Drainage Outlet.

### MSC-PC00002-39

**Comment:** Page 63- XII. Noise. ARSAC again requests electrically powered passenger loading bridges be used at the MSC. The gates should also provide electricity to aircraft so that the APU's do not need to be used. APU usage should be banned in the MSC.

**Response:** In compliance with the LAX Master Plan, gate electrification will be included as part of the MSC North Project and future phase(s) of the MSC Program. See also response to comment MSC-PC00002-35.

### MSC-PC00002-40

**Comment:** Page 63- XII. Noise. ARSAC requests a noise study of taxiing aircraft around the MSC. Why does it state that there will not be a significant increase in noise in Westchester/Playa del Rey and El Segundo due to the new MSC taxilanes and taxiways? This is not the same as proving changes in noise levels with a noise study. How will LAWA monitor run-up activities? It has used cameras in other parts of the airport. The projection of the MSC handling from 9% to 19% of LAX daily operations is significant. In the LAX SPAS EIR, LAWA predicts 2,053 operations per day by the year 2025. This would yield 185 and 390 daily operations, respectively.

**Response:** Aircraft taxiway noise for the MSC North Project was analyzed in Section 4.4, *Noise*, of the Draft EIR. As discussed therein, impacts for Project-related taxiing noise were found to be less than significant. Run-ups of all aircraft would be performed in compliance with LAWA rules and procedures.

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### MSC-PC00002-41

**Comment:** Page 67- XIV. Public Services, a. Fire Protection. ARSAC is concerned about emergency evacuation plans and areas for the MSC, proposed Automated People Mover (APM) and proposed tunnel. ARSAC requests that emergency evacuation scenarios be studied in the MSC EIR.

**Response:** Please see response to comment MSC-PC00002-3. Please also see MSC Draft EIR Section 4.5.3.1 (Table 4.5-3) for discussion of regulatory requirements and evacuation plans associated with the proposed APM.

### MSC-PC00002-42

**Comment:** Page 68- XIV. Public Services, b. Police Protection. ARSAC requests that an Airport Police office be designated in the MSC.

**Response:** As discussed in the Initial Study, The Los Angeles World Airports Police Division (LAWAPD), the City of Los Angeles Police Department LAX Detail (LAPD LAX Detail), and the Los Angeles Police Department (LAPD) provide police protection services to LAX, including the MSC North Project site. The LAWAPD and LAPD LAX Detail stations are located approximately 1 mile east of the MSC North Project site. Demand for on-Airport police protection services is typically determined by increases in aircraft activity and employees. The proposed MSC North Project would not increase existing passenger capacity or aircraft operations at LAX, and would only modestly increase long-term employment. However, the MSC North building would provide additional square footage at LAX that the LAWAPD, the LAPD LAX Detail, and the LAPD would need to patrol. These entities will determine whether a designated Airport Police office is required in the MSC North building.

### MSC-PC00002-43

**Comment:** Page 69- XIV. Public Services, d. Parks. ARSAC requests that an indoor park or green space be established in the MSC for the enjoyment of passengers and airport workers.

**Response:** Comment noted.

### MSC-PC00002-44

**Comment:** Page 71- XVI- Transportation/Traffic. ARSAC requests that construction traffic trips be studied in the EIR. LAWA should encourage the use of ride sharing, shared vans and buses for construction workers.

ARSAC requests that current private vehicle traffic be studied in this EIR today and again in future phases of the MSC. As the Initial Study document notes, "The LAX Master Plan EIR assumed that no private vehicles would circulate through the CTA." LAWA needs to establish some kind of baseline now and using existing conditions would be helpful in that regard when proposing future MSC

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projects such as the CTP which alter traffic flows in the CTA. Traffic flow will be greatly affected in the CTA if the CTP is constructed as the ramps between the departure and arrivals levels will be eliminated, two parking garages will be torn down and the recirculating lane from Terminal 4 to Terminal 3 will also be likely removed.

If Parking 3 and 4 are torn down, then where the replacing parking spaces be located? How many parking spaces are in Parking 3? How many parking spaces are in Parking 4? How many bus stalls are located between Parking 3 and 4? Will these parking spaces be replaced on a one-to-one basis? Will the bus stalls be replaced on a one-to-one basis?

Since the CTP will change traffic flow in the CTA, where will the bus stops be located for LAX parking lot shuttles, LAX FlyAway busses, shared vans, courtesy shuttles, taxis, etc.???

**Response:** Construction traffic associated with the MSC North Project was analyzed in Section 4.7, *Construction Surface Transportation*, of the Draft EIR. The possibility that the CTA would remain open in the future year 2025 was analyzed in the Draft EIR. As discussed in Section 4.6, *On-Airport Transportation*, the future phase(s) of the MSC Program assumes that circulation by private vehicles through the CTA could remain and that passengers would access the CTP via private vehicle or commercial vehicle. Thus, trips associated with operation of the future phase(s) of the MSC Program are analyzed at a program level in the Draft EIR. The on-Airport surface transportation analysis was conducted to estimate MSC and CTP impacts on the operation of the CTA curbsides, intersections, and roadway links.

As discussed in Chapter 2, *Description of the Proposed Project*, the location of the CTP has only been conceptually planned. In accordance with the LAX Master Plan, the CTP would be located within the CTA. However, the exact location has yet to be determined. Traffic impacts for the CTP will be fully evaluated in a future project-level CEQA analysis. Although the location of the CTP may require the demolition of portions of existing parking garages, the future phase(s) of the MSC Program assume that the Intermodal Transportation Facility (ITF) and the APM would both be operational by the time construction is complete, thereby reducing the need for parking within the CTA. A project-level environmental review will be conducted for the future phase(s) of the MSC Program, including the CTP, at such time as LAWA determines the timing of future phase(s).

LAWA has a comprehensive rideshare and vanpool program available to all employees, which offers financial incentives and discounts to participating employees. As noted in the annual Sustainability Report, LAWA's Rideshare Program has eliminated eight billion pounds of air pollutants and over seven million vehicle miles traveled since its inception, which has led to reduced congestion during peak morning and evening commuting hours at the LAWA airports. Additionally the U.S. Environmental Protection Agency (EPA) considers the LAWA program to be one of the most comprehensive programs offered by an employer in Southern California. It is part of the EPA's Best Workplaces for

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Commuters Program that distinguishes and provides national recognition to employers offering outstanding commuter benefits. In order to participate in this program, employers must meet the EPA's National Standard of Excellence in commuter benefits. This program would continue agency-wide and is not particular to the MSC.

LAWA's multi-faceted Rideshare Program includes 66 vanpools, 88 carpool program participants, 320 free monthly transit passes, and numerous marketing and advocacy activities to recruit and retain program participants. Currently, about 26 percent of LAWA's employees are participating in the Rideshare Program, saving over 1,000 vehicle trips to LAWA facilities every day.

LAWA also provides a transit subsidy for LAWA employees, which can be used to purchase Metrorail/Metrobus or FlyAway tickets or passes, so long as the participating employees make a specified number of commutes using the transit service over the course of a month. Additionally, as discussed in Section 4.6 of the SPAS Draft EIR, the City of Los Angeles' Green Building Code includes measures to provide designated parking for any combination of low emitting, fuel efficient, and carpool/vanpool vehicles. However, it is legally infeasible to mandate ridesharing. (See Health and Safety Code Sections 40454, 40716, 40717.5, and 40717.9; *Merced Alliance for Responsible Growth v. City of Merced* (2012 Case No F062602)).

### MSC-PC00002-45

**Comment:** Page 72- XVI. Transportation/Traffic, c. Air Traffic. ARSAC requests that the EIR add a section to evaluate air traffic from 2025 to the year 2040.

**Response:** Traffic impacts for the MSC North Project and future phase(s) of the MSC Program were analyzed through the year 2025 in the Draft EIR. Air traffic impacts beyond 2025 are beyond the scope of the MSC North Project.

### MSC-PC00002-46

**Comment:** Page 72- XVI. Transportation/Traffic, e. Emergency Access. ARSAC reiterates our request to include studying of emergency evacuation plans for the MSC and proposed APM and proposed tunnel. This study should be expanded to include fire and disaster recovery access.

**Response:** Please see response to comment MSC-PC00002-3. The proposed tunnel(s) would be constructed in compliance with Los Angeles Building Code, Caltrans Bridge Design Specifications, FAA design standards, and Caltrans Seismic Design Criteria. Emergency exit provisions will be incorporated into the design per National Fire Protection Association (NFPA) standards. The maximum distance to an "exit" will be 300 feet, which will consist of fire-rated doors through the center wall between tunnels at a regular spacing as permitted by NFPA in subway or highway tunnels. In addition, the tunnels will be equipped with ventilation systems consisting of jet fans installed in pairs at approximately 200-foot intervals in each tunnel. The tunnels will also include lighting, emergency

## 2. Comments and Responses

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lighting, drainage, vent shafts, fire protection (sprinkler) systems, and other features as required by the Los Angeles Department of Building and Safety (LADBS). See response to comment MSC-PC00002-25.

### MSC-PC00002-47

**Comment:** Page 77- XVII. Utilities. Where will LAX send its trash once the Sunshine Canyon Landfill closes in 2031? The MSC and other LAX buildings will continue to be operation beyond 2031.

As stated on page 77, "LAWA's goal is to divert 70 percent of waste by 2015." How will LAWA accomplish diversion of 70 percent of waste? Will LAWA sort trash onsite to pull out recyclable items? Where will this trash sort facility exist? How will LAWA handle disposal of left-over food from inbound international flights?

**Response:** Solid waste issues associated with projected closure of a landfill in 2031 will be dealt with on a regional basis; these issues are beyond the scope of the MSC EIR. Please see MSC EIR Appendix A (Initial Study pages 76 through 78), which addresses this issue in greater detail.

AB 939 also requires each county to prepare and administer a Countywide Integrated Waste Management Plan. For Los Angeles County, the County's Department of Public Works (Public Works) is responsible for preparing and administering the Los Angeles County Countywide Integrated Waste Management Summary Plan (Summary Plan) and the Countywide Siting Element (CSE). These documents were approved by the County, a majority of the cities within the County containing a majority of the cities' population, the County Board of Supervisors, and CalRecycle. The Summary Plan, approved by CalRecycle on June 23, 1999, describes the steps to be taken by local agencies, acting independently and in concert, to achieve the mandated state diversion goal by integrating strategies aimed toward reducing, reusing, recycling, diverting, and marketing solid waste generated within the County. The CSE, approved by CalRecycle on June 24, 1998, identifies how, for a 15-year planning period, the county and the cities within would address their long-term disposal capacity demand to safely handle solid waste generated in the county that cannot be reduced, recycled, or composted.<sup>7</sup>

### MSC-PC00002-48

**Comment:** Page 77- XVII. Utilities. ARSAC requests that the hazards of electrical vaults be included in the EIR. On the various drawings, there is an electrical vault shown near an Airbus A380 capable gate on the west side of Bradley West. ARSAC is concerned that an electrical vault explosion could occur at this location similar to

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<sup>7</sup> County of Los Angeles, Department of Public Works, *Countywide Integrated Waste Management Plan, 2012 Annual Report*, August 2013. Available: <http://dpw.lacounty.gov/epd/swims/docs/pdf/CIWMP/2012.pdf>.

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the one that killed Los Angeles City Firefighter Brett Lovrein at the Citibank building (Sepulveda and La Tijera) in Westchester, just north of LAX.

<http://lafd.blogspot.com/2008/03/los-angeles-firefighter-killed-in-line.html>

ARSAC's concern about the electrical vault is even greater given the presence of jet fuel.

**Response:** The commenter is incorrect in stating there is an electrical vault shown near an Airbus A380 gate on the west side of Bradley West. The electrical vault shown on the figures in the Initial Study is just north of World Way West and will be relocated as part of the proposed Project, as discussed in Chapter 2, *Description of the Proposed Project*, of the Draft EIR. No electrical vaults will be on or near the apron of the MSC. De-commissioning of the electrical vault will be undertaken in compliance with all applicable laws, and regulations before demolition, including the 2013 California Electrical Code (California Code of Regulations Title 24, Part 3) and Occupational Safety and Health Administration (OSHA) standards.

### MSC-PC00002-49

**Comment:** Page 78. XVIII- Mandatory Findings. ARSAC agrees with the ratings of Potentially Significant Impacts in this section. ARSAC requests that LAWA provides more frequent disclosures for compliance with mitigation measures. ARSAC requests that LAWA employ an independent third party to verify LAWA's EIR mitigation compliance. ARSAC also requests that LAWA provide penalties for itself when mitigation measures are not met.

**Response:** Comment noted. In compliance with the Community Benefits Agreement, LAWA utilizes an independent third party monitor to report on LAWA's compliance with the construction mitigation measures approved as part of the LAX Master Plan EIR. Copies of the annual reports can be found on LAWA's website at: <http://www.lawa.org/ourlax/AnnualReports.aspx?id=8034>.

MSC-PC00003      Evans, Kathy

4/21/2014

### MSC-PC00003-1

**Comment:** I have concerns about the section titled Known Controversy and Issues to be Resolved, specifically under Transportation. The DEIR claims that there would be no long-term operational changes to traffic activity and traffic flows within the Airport area because it would not change the number of aircraft operations or where aircraft passengers are dropped off or picked up at LAX. In addition, trips associated with operation of the future phases of the MSC Program were analyzed only at a program level because the LAWA Master Plan EIR assumed that no private vehicles would circulate through the CTA. LAWAs recent actions have made it pretty clear that they intend to try to increase the total number of aircraft and passengers handled at LAX each year. The MSC North project will

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undoubtedly be used to handle some of this increased traffic, not just to alleviate capacity to allow for renovations of existing terminals. The on airport changes in traffic should be analyzed in this EIR to prepare for that eventuality. To ignore that it is a possibility is naive. In the same way, there have been no serious indications that LAWA will actually close the CTA to private vehicles anytime in the near future so to assume that it will happen and not examine the possibility that it remain open is absurd.

**Response:** Comment noted. Please see response to comment MSC-AS00001-2. Although airport operations are expected to increase by the time the MSC North Project is completed, this growth will occur independently of the Project. Passenger operations are expected to increase with or without the proposed Project. The effects of this growth were accounted for at a programmatic level under Alternative D in the LAX Master Plan EIS/EIR.

The possibility that the Central Terminal Area (CTA) would remain open in the future year 2025 was analyzed in the Draft EIR. As discussed in Section 4.6, *On-Airport Transportation*, the future phase(s) of the MSC Program assumes that circulation by private vehicles through the CTA could remain and that passengers would access the Central Terminal Process (CTP) via private vehicle or commercial vehicle. Thus, trips associated with operation of the future phase(s) of the MSC Program are analyzed at a program level in the Draft EIR. The on-Airport surface transportation analysis was conducted to estimate MSC and CTP impacts on the operation of the CTA curbsides, intersections, and roadway links.

## ***2. Comments and Responses***

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## 3.0 CORRECTIONS AND ADDITIONS TO THE DRAFT EIR

### 3.1 Introduction

As provided in Section 15088(d) of the California Environmental Quality Act guidelines, responses to comments may take the form of a revision to a Draft Environmental Impact Report (EIR) or may be a separate section in the Final EIR. This chapter complies with the latter of these two guidelines and provides changes as a result of clarifications to, and comments received on, the Draft EIR for the MSC. The following revisions are hereby made to the text of the Draft EIR. Changes in the text are signified by strikeouts where text is removed and shown with underline where text is added, unless otherwise noted. These changes do not add significant new information to the EIR, nor do they disclose or suggest new or more severe significant environmental impacts of the Project.

### 3.2 Corrections and Additions to the Draft EIR Text

#### Chapter 1 Introduction and Executive Summary

Revise Table 1-2, under Greenhouse Gases, *Greenhouse Gases-Construction and Operations*, under column “**Existing Commitments and/or Mitigation Measures**,” additional measures as follows:

LAX-AQ-3. Traffic-Related Control Measures (3a through 3r)

#### 4.1 Air Quality

Revise the heading of Table 4.1-44 under Section 4.1.7, Cumulative Impacts, on Page 4-56, of Section 4.1, *Air Quality*, as follows:

Peak Potentially Overlapping Daily Tons/Quarter Emissions

#### 4.3 Human Health Risk Assessment

Revise the following information under Section 4.3.7 Cumulative Impacts, on Page 4-154, of Section 4.3, *Human Health Risk Assessment*, as follows:

##### 4.3.7 Cumulative Impacts

In contrast to cancer risk, the SCAQMD policy does have different significance thresholds for project-specific and cumulative impacts for hazard indices for TAC emissions. A project-specific significance threshold is one (1.0) while the cumulative threshold is 3.0. Based on this SCAQMD policy, chronic non-cancer hazard indices associated with airport emissions under the proposed MSC North Project, and the future phase(s) of the MSC Program, would not be cumulatively significant.

### **3. Corrections and Additions to the Draft EIR**

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#### **4.5 Public Services – Fire Protection Services**

Revise the following information under Section 4.5.6.2 Impacts Analysis, of Section 4.5, Public Services – Fire Protection Services, as follows:

##### **Removal / Relocation of Existing Facilities**

Under the MSC North Project the following buildings and facilities would be either relocated or demolished:

- Five Eight RON aircraft parking spaces;

##### **Ground Access Improvements and Parking**

Ground access improvements under the future phase(s) of the MSC Program include construction of a new dual-level central terminal processor (CTP) in the area ~~east of parking structures P3 and P4~~ where parking structures P2B and P5 are located and extend between World Way North and World Way South. This would require roadway modifications along World Way and the associated terminal roadway network. Construction of the ground access improvements under the future phase(s) of the MSC Program would reduce traffic congestion and curb-front demands, which would reduce the potential for automobile collisions, automobile/pedestrian conflicts, and emergency response incidents at the airport compared to existing conditions. Improved traffic flow associated with new ground access facilities also is expected to improve response times for fire protection services. LAX Master Plan Commitments FP-1, LAFD Design Recommendations, and PS-2, Fire and Police Facility Space and Siting Requirements, as well as enforcement of fire code requirements, would ensure maintenance of adequate response times, staffing, equipment, facilities, and emergency access. Additionally, the future phase(s) of the MSC Program would not require any new or expanded fire stations. Thus, impacts to fire protection services associated with ground access improvements of the future phase(s) of the MSC Program would be less than significant.

#### **4.7 Construction Surface Transportation**

Revisions to Section 4.7, *Construction Surface Transportation*, based on comments received on the Draft EIR, as follows:

##### **4.7.1 Introduction**

The traffic analysis presented in this section addresses the construction traffic impacts specific to the proposed MSC North Project. The construction traffic impacts were determined for both the peak construction period for the proposed MSC North Project (December 2018) and the peak cumulative condition (December 2018). The peak construction month for the proposed MSC North Project corresponds to the peak cumulative condition, which includes traffic from the construction of other known projects anticipated to be under construction during the approximate 60-month construction schedule.

Implementation of the future phase(s) of the MSC Program would also generate vehicle traffic associated with workers traveling to and from the construction employee parking areas, associated shuttle trips between the parking areas and the construction site, haul/delivery trips, and miscellaneous construction-related travel. These trips could result in traffic impacts on the

### **3. Corrections and Additions to the Draft EIR**

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local roadway system during the construction period. However, these construction trips were analyzed in the LAX Master Plan EIS/EIR at a program level and would not be substantively different. Thus, construction traffic for the future phase(s) of the MSC Program is not analyzed in this EIR, as identified in the Initial Study (see Appendix A). LAWA intends to perform a construction traffic analysis at a project level when the future phase(s) of the MSC Project are implemented.

#### **4.7.5.2 Planned Transportation Network Improvements**

The Bradley West Project EIR identifies several intersection improvements throughout the study area to mitigate potential future impacts. The following study area intersections that were anticipated to be significantly impacted by the Bradley West Project would be improved when traffic activity levels reach certain activity thresholds at which an impact would be triggered.

- Imperial Highway and Sepulveda Boulevard (Intersection #12)
- La Cienega Boulevard and I-405 Ramps N/O Century Boulevard (Intersection #18)
- La Tijera Boulevard and Sepulveda Boulevard (Intersection #21)
- Sepulveda Boulevard and 76th/77th Street (Intersection #26)

Additionally, the City of Inglewood is planning modifications to Century Boulevard, possibly occurring during the next five years, which include reducing the number of through lanes east of I-405 to Van Ness Avenue.

Though it is possible the improvements discussed above would be in place prior to the peak cumulative traffic period (December 2018), for purposes of this study it has been conservatively assumed that these improvements would not be in place. Therefore, it is not anticipated that any transportation improvements would be implemented during the timeframe analyzed for this study that would alter traffic patterns or modify the intersection capacity assumptions in such a way that would affect the assessment of potential traffic impacts associated with the proposed MSC North Project.

#### **4.7.9.2 Intersection Improvements Determined to be Feasible**

The following improvements were identified at the intersections that were anticipated to be significantly impacted by construction-related traffic generated by the MSC North Project, and were determined to be feasible to implement.

- Sepulveda Boulevard and Manchester Avenue (Intersection #23)

To mitigate construction-related impacts at this intersection, the westbound approach of Manchester Avenue would be ~~widened~~ restriped to provide a right-turn lane and one additional left-turn lane. The resulting westbound lane configuration would be comprised of two left-turn lanes, two through lanes, and one right-turn lane. Implementation of this mitigation measure would reduce the impact to a less-than-significant level for all scenarios and all impact comparisons.

### ***3. Corrections and Additions to the Draft EIR***

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#### **Appendix E**

Corrected pages follow.

**Attachment 1  
MIDFIELD SATELLITE CONCOURSE  
Final EIR**

**Corrections and Additions to Appendix E  
of the MSC Draft EIR**

**June 2014**

***Prepared for:***

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# **Midfield Satellite Concourse Draft EIR**

## **Appendix E**

### **On-Airport Traffic**

**E.1 Calibrated Traffic Volumes**

**E.2 Curbside Utilization**

**E.3 Intersection Capacity Analysis Worksheets**





## ***Appendix E1- Calibrated Traffic Volumes***

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### Appendix E1- Calibrated Traffic Volumes

The following tables show the ~~2011~~ 2012 LAX CTA traffic volumes and the modeled traffic volumes. The tables also show the difference between modeled values and actual volumes.

The lower level models were calibrated during the evening peak hour from 5:00 p.m. to 6:00 p.m. and upper level models were calibrated during the morning peak hour from 7:00 a.m. to 8:00 a.m.

## Appendix E1- Calibrated Traffic Volumes

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Lower Level Roadway Volume Calibration			
Roadway Link	Modeled Volume	Actual Volume	Difference
CA	33	29	-4
CB	0	0	0
CC	0	0	0
CD	0	0	0
CE	211	207	-4
CF	284	284	0
CG	46	50	4
CH	47	50	3
CI	549	549	0
CJ	549	549	0
CK	380	388	7
CL	317	331	13
CM	379	368	-12
CN	284	284	0
CO	663	652	-12
CP	0	0	0
CQ	704	692	-12
CR	0	0	0
CS	0	0	0
CT	0	0	0
CU	962	951	-12
CV	0	0	0
CW	234	258	24
CX	234	258	24
CY	276	256	-20
CZ	276	256	-20
CAA	253	233	-20
CAB	962	951	-12
CAC	1113	1102	-12
CAD	1113	1102	-12
CAE	128	119	-9
CAF	986	983	-3
CAG	1137	1134	-3
CAH	1137	1134	-3
CAI	1530	1536	6
CAJ	1530	1536	6
CAK	517	501	-16
CAL	101	117	16
CAM	393	393	0
CAN	386	388	2
CAO	513	507	-6
CAP	143	147	4
LA	2220	2177	-43

## Appendix E1- Calibrated Traffic Volumes

Lower Level Roadway Volume Calibration			
Roadway Link	Modeled Volume	Actual Volume	Difference
LB	2713	2751	38
LC	2456	2456	0
LD	2456	2456	0
LE	2414	2414	0
LF	2839	2839	0
LG	2704	2704	0
LH	2704	2704	0
LI	2704	2704	0
LJ	2704	2704	0
LK	2704	2704	0
LL	2588	2588	0
LM	2758	2758	0
LO	2238	2238	0
LP	2140	2140	0
LQ	2140	2140	0
LR	2017	2017	0
LS	2178	2178	0
LT	1712	1732	20
LU	1679	1699	20
LV	1623	1643	20
LW	2104	2124	20
LX	1779	1799	20
LY	1651	1671	20
LAA	1651	1671	20
LAB	1950	1971	20
LAC	2200	2178	-22
LAD	2122	2100	-22
LAE	2015	1993	-22
LAF	1997	1975	-22
LAG	1997	1975	-22
LAH	1997	1975	-22
LAI	1734	1712	-22
LAJ	1987	1965	-22
LAK	1841	1819	-22
LAL	1841	1819	-22
LAM	1803	1781	-22
LAN	1740	1718	-22
LAO	1769	1747	-22
LAP	2086	2064	-22
LAQ	2086	2064	-22
LAR	2123	2101	-22
LAS	1220	1226	6
LAT	1915	1910	-6
LAU	720	732	12

## ***Appendix E1- Calibrated Traffic Volumes***

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<b>Upper Level Roadway Volume Calibration</b>			
<b><u>Roadway Link</u></b>	<b><u>Modeled Volume</u></b>	<b><u>Actual Volume</u></b>	<b><u>Difference</u></b>
UX	1694	1689	5
UV	1730	1725	5
UU	36	36	0
UT	808	807	1
UW	778	787	-9
UA	2512	2512	0
UB	565	566	-1
UC	527	529	-1
UD	480	481	-1
UE	2013	2012	1
UF	639	640	-1
UG	615	616	-1
UH	0		0
UI	0	0	0
UJ	615	616	-1
UK	536	537	-1
UL	1374	1372	2
UM	1347	1344	2
UN	1286	1284	2
UO	1826	1821	5
UP	66	66	0
UQ	2236	2236	0
UR	1392	1393	-1
US	844	843	1
EP1	38	38	0
EP2	24	24	0
EP3	27	27	0
EP4	60	60	0
EP5	79	79	0
EP6	0		0
EP7	48	48	0

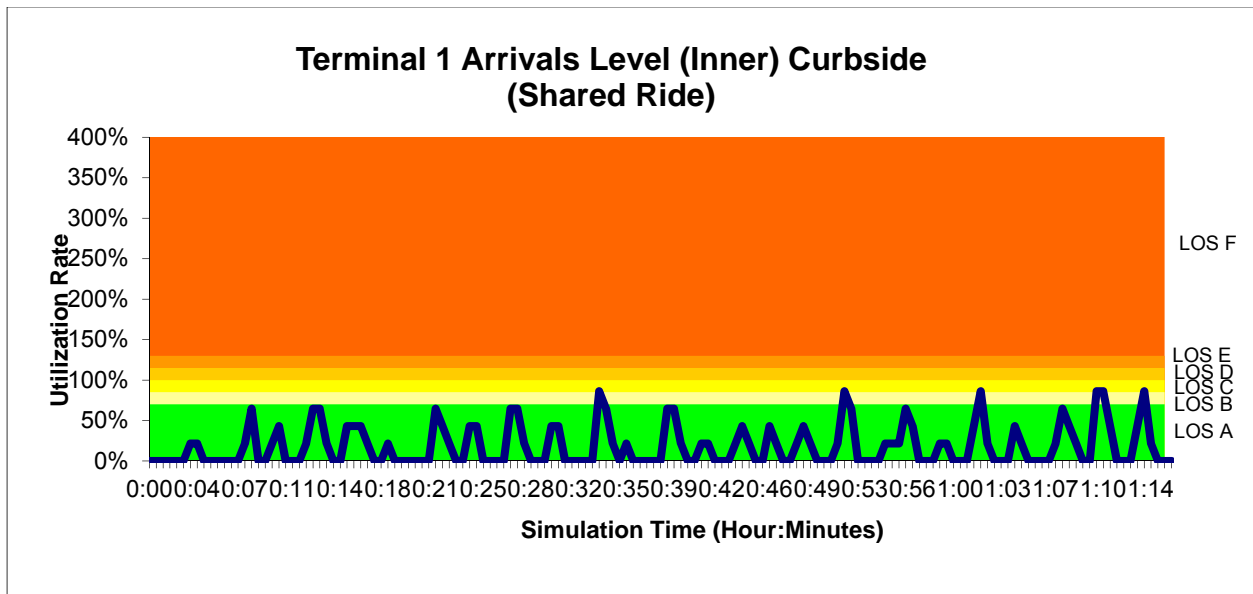
## ***Appendix E2- Curbside Utilization***

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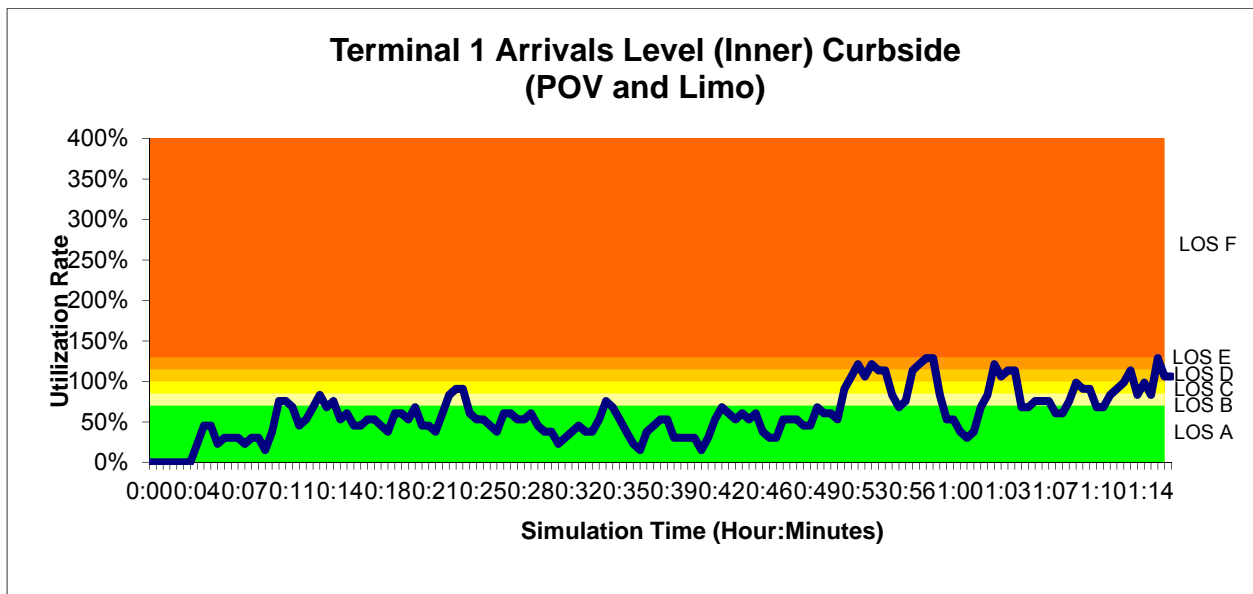
### **Appendix E2**

The following graphs show the minute by minute curbside utilizations for all curbsides within the CTA on the upper level as well as lower level. Further, curbside utilization graphs are provided for the baseline 2012 as well as the future with and without program scenarios.

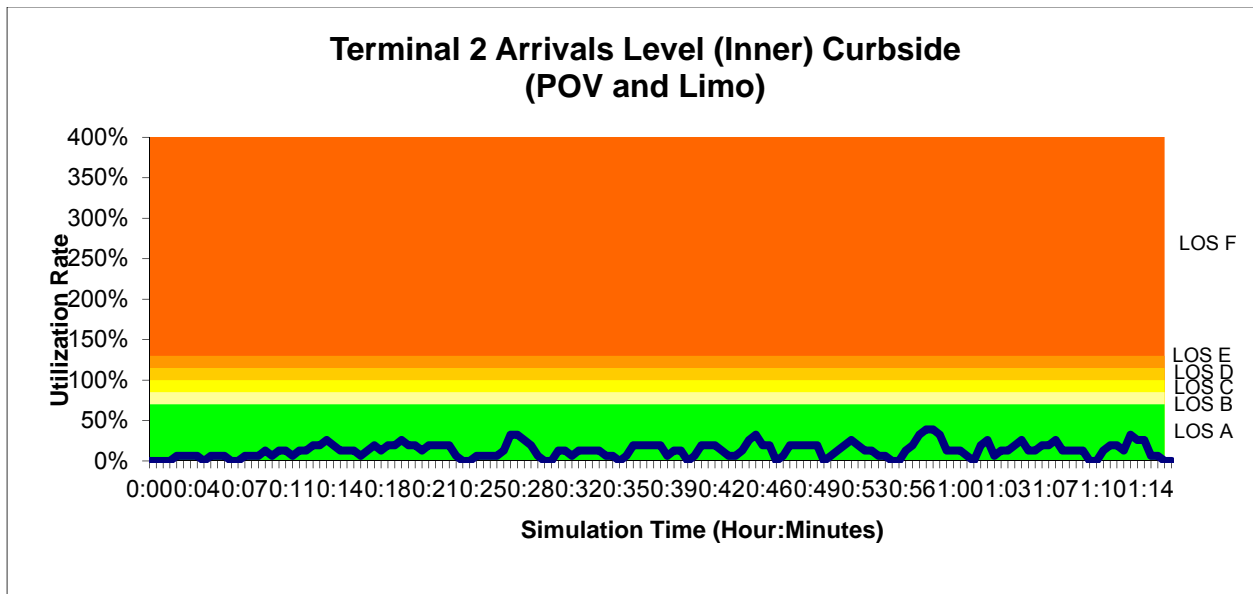
## Appendix E2- Curbside Utilization



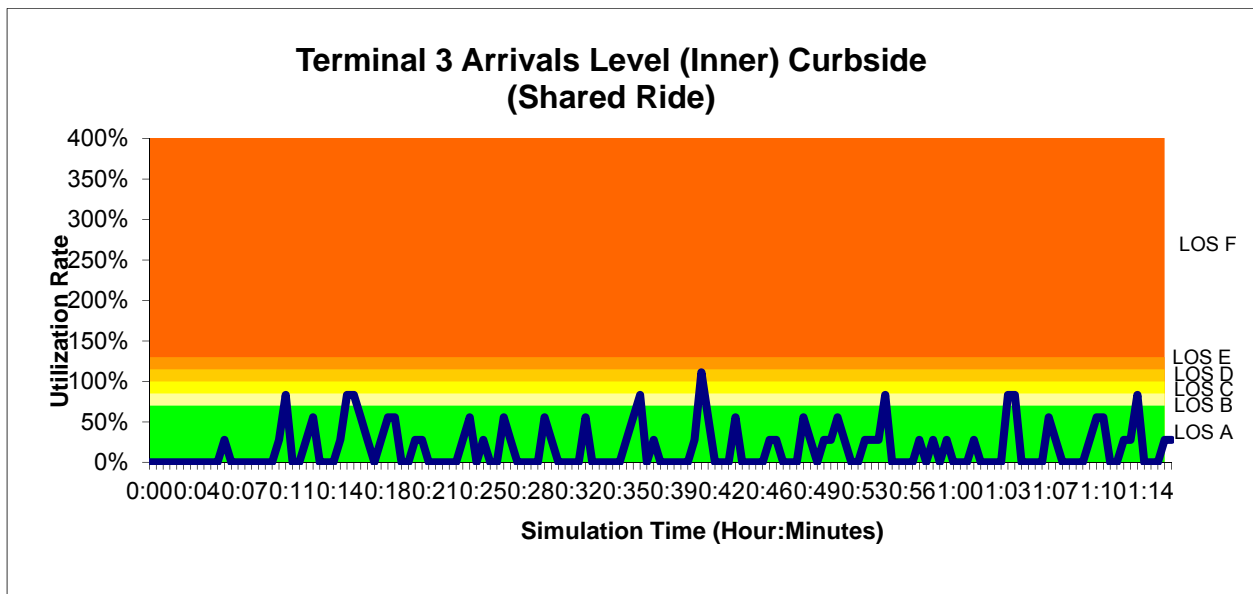
### Arrivals Level 2012 Peak Hour



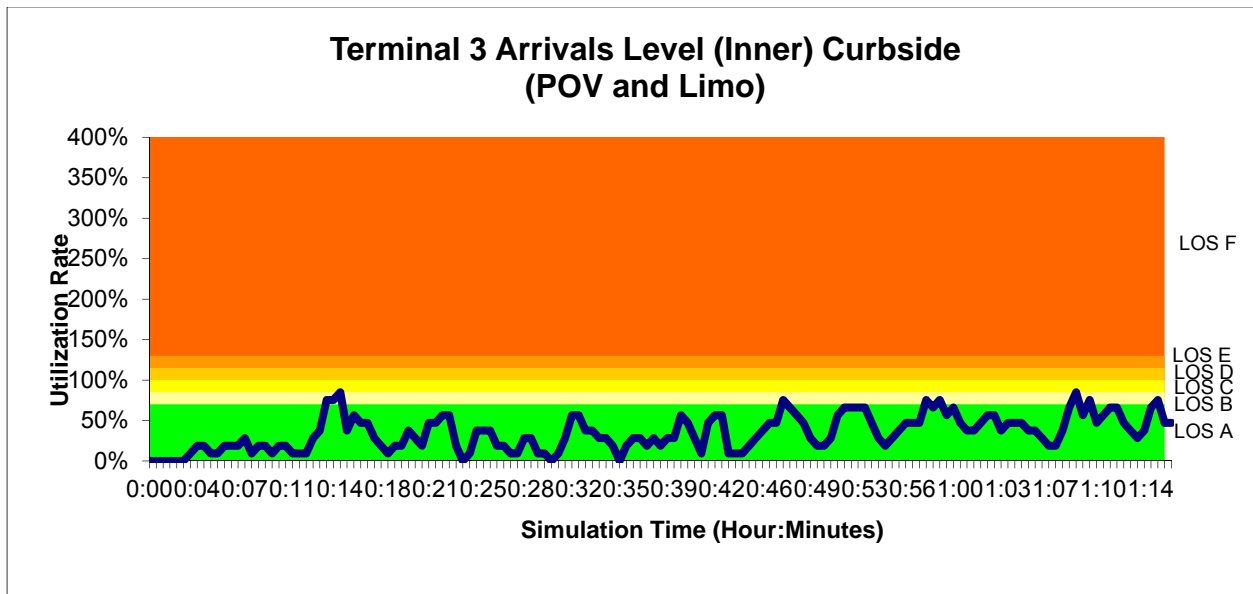
## Appendix E2- Curbside Utilization



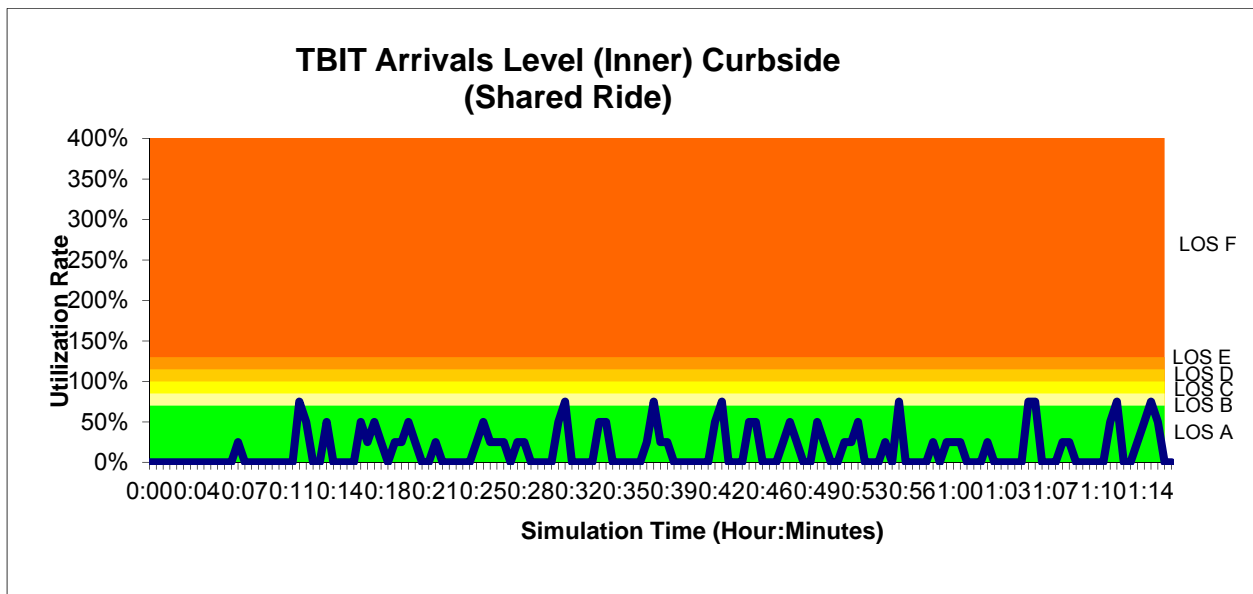
### Arrivals Level 2012 Peak Hour



## Appendix E2- Curbside Utilization

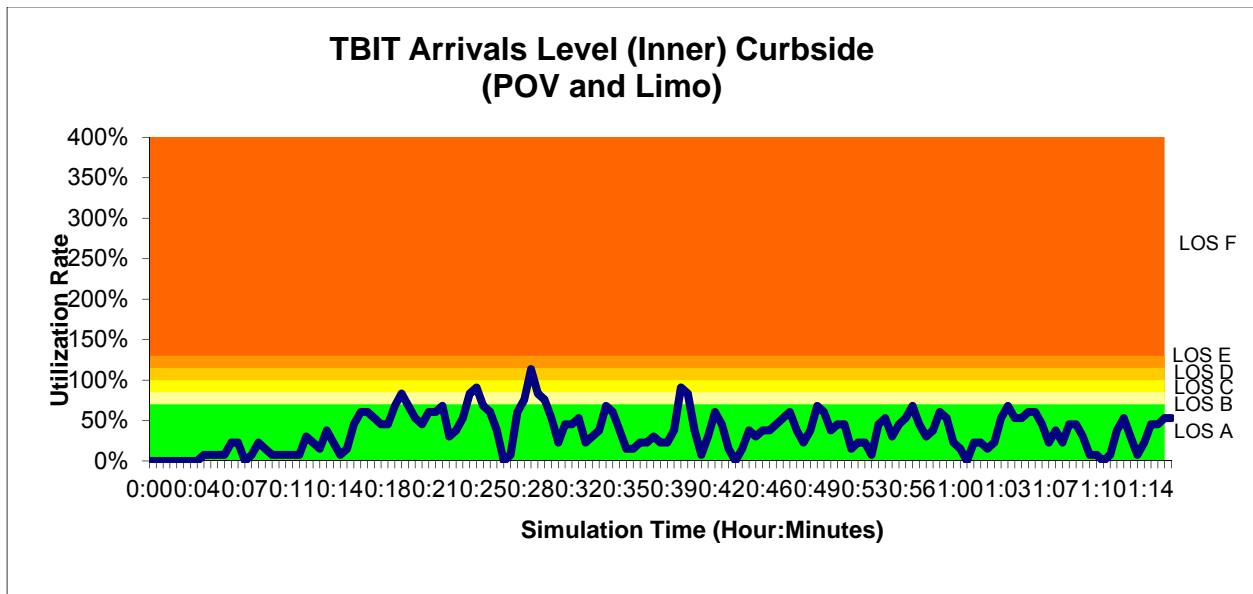


### Arrivals Level 2012 Peak Hour

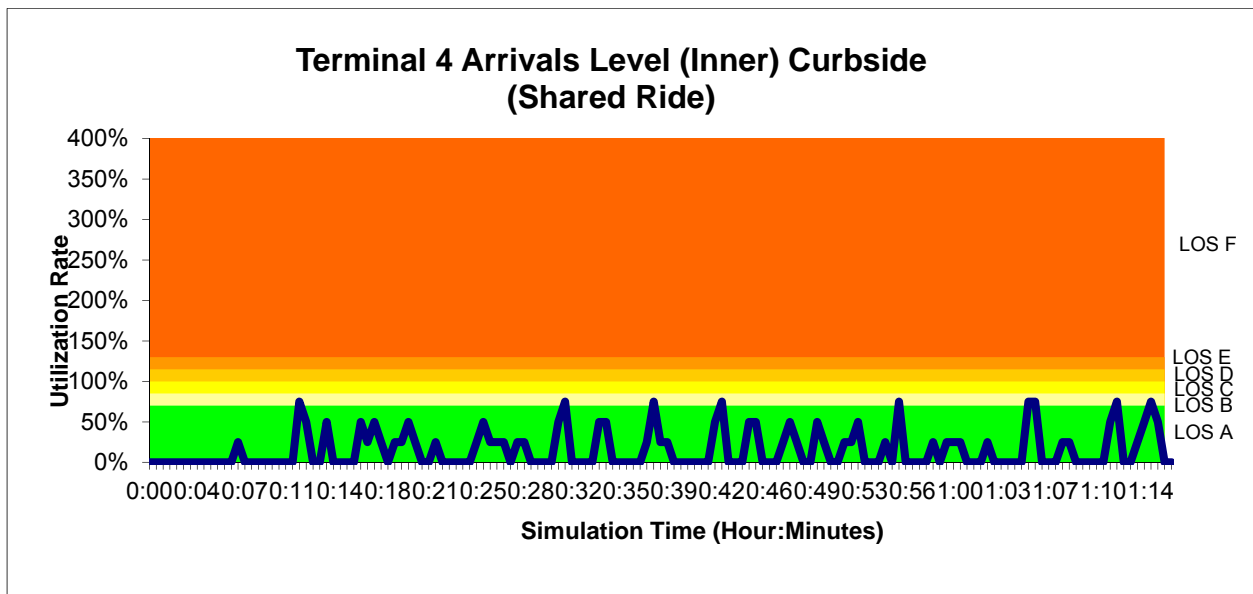




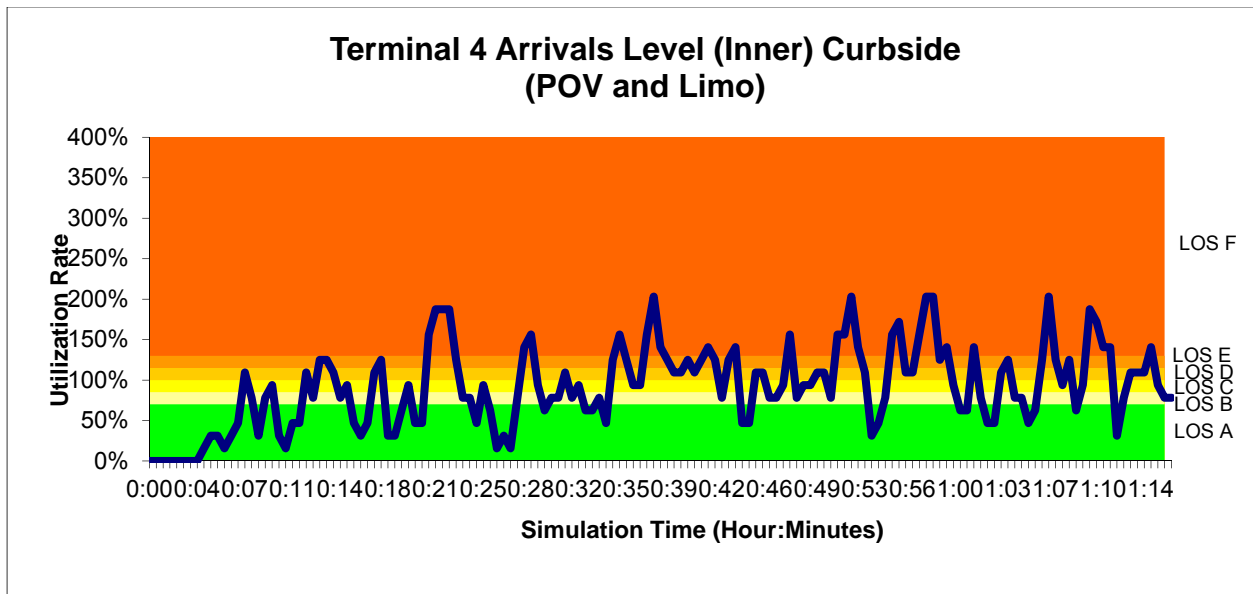
## Appendix E2- Curbside Utilization



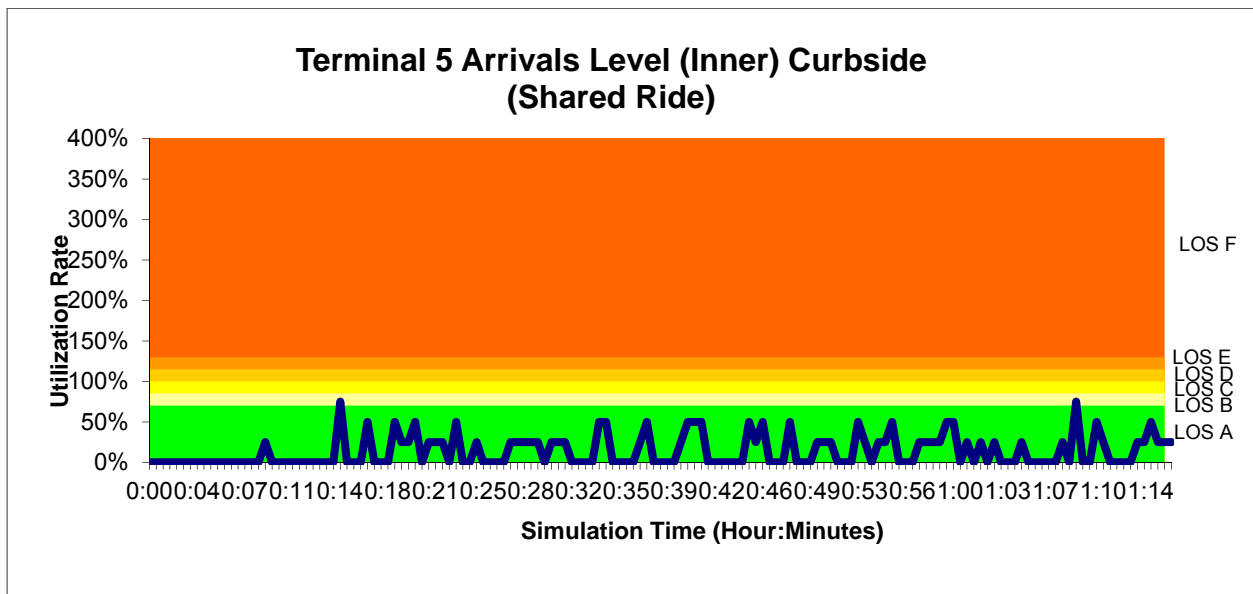
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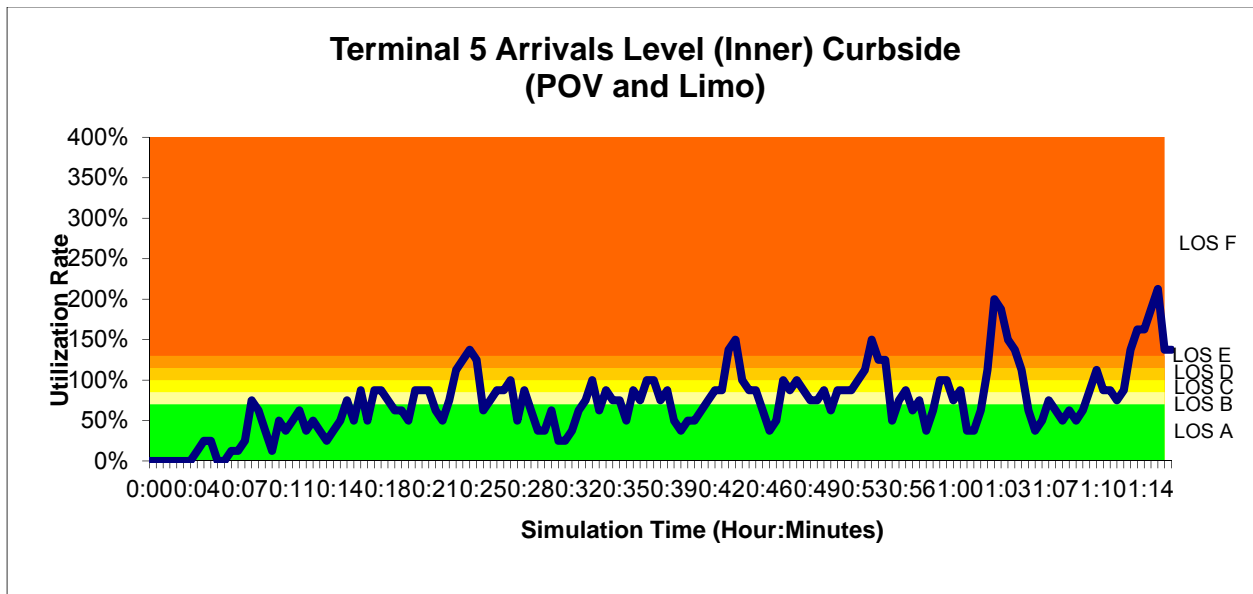
## Appendix E2- Curbside Utilization



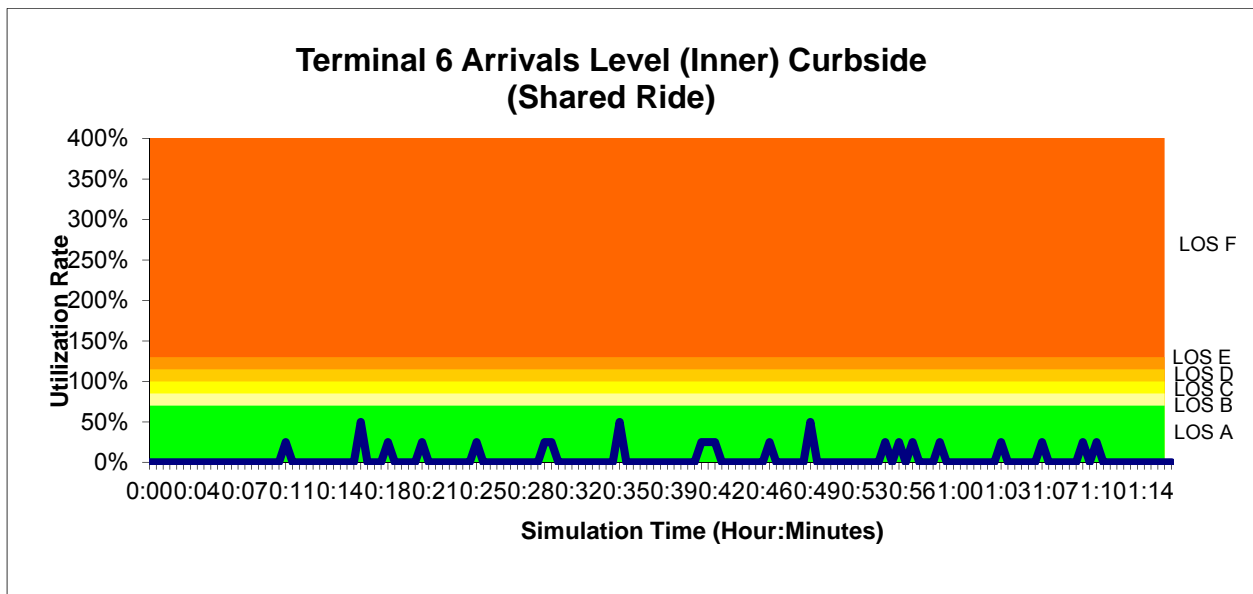
### Arrivals Level 2012 Peak Hour



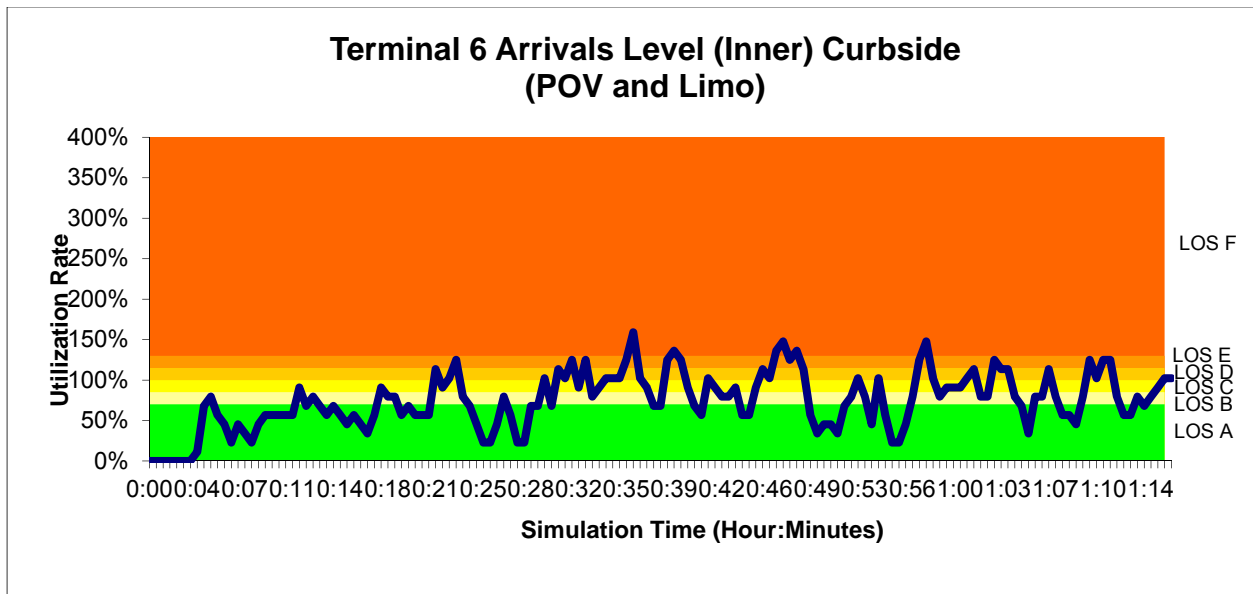
## Appendix E2- Curbside Utilization



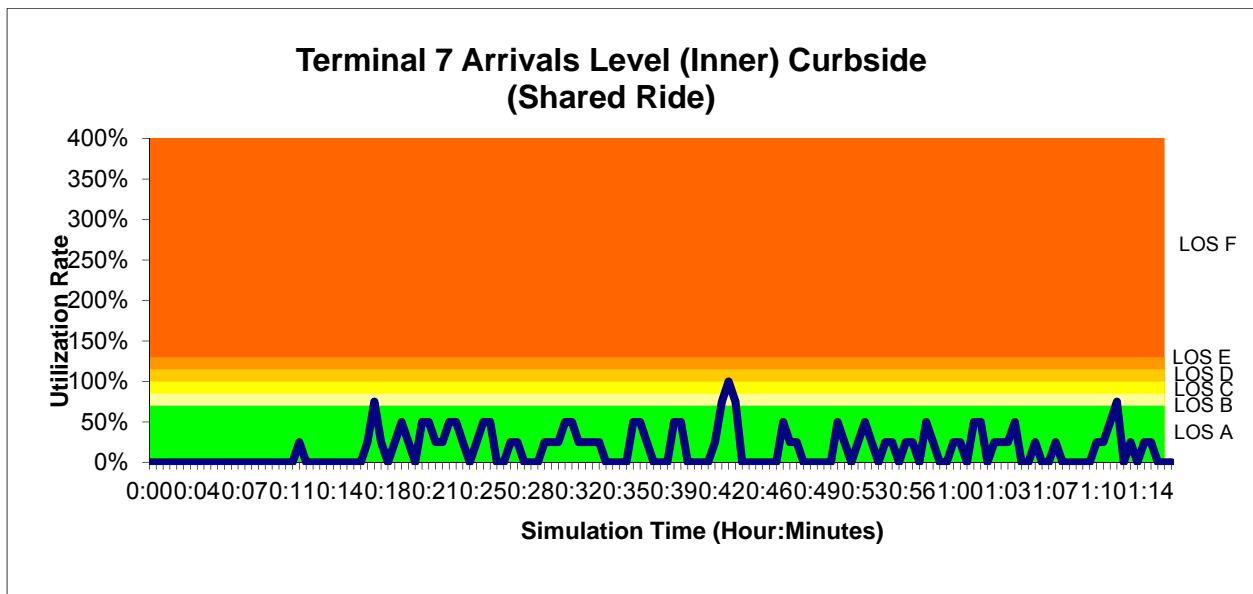
### Arrivals Level 2012 Peak Hour



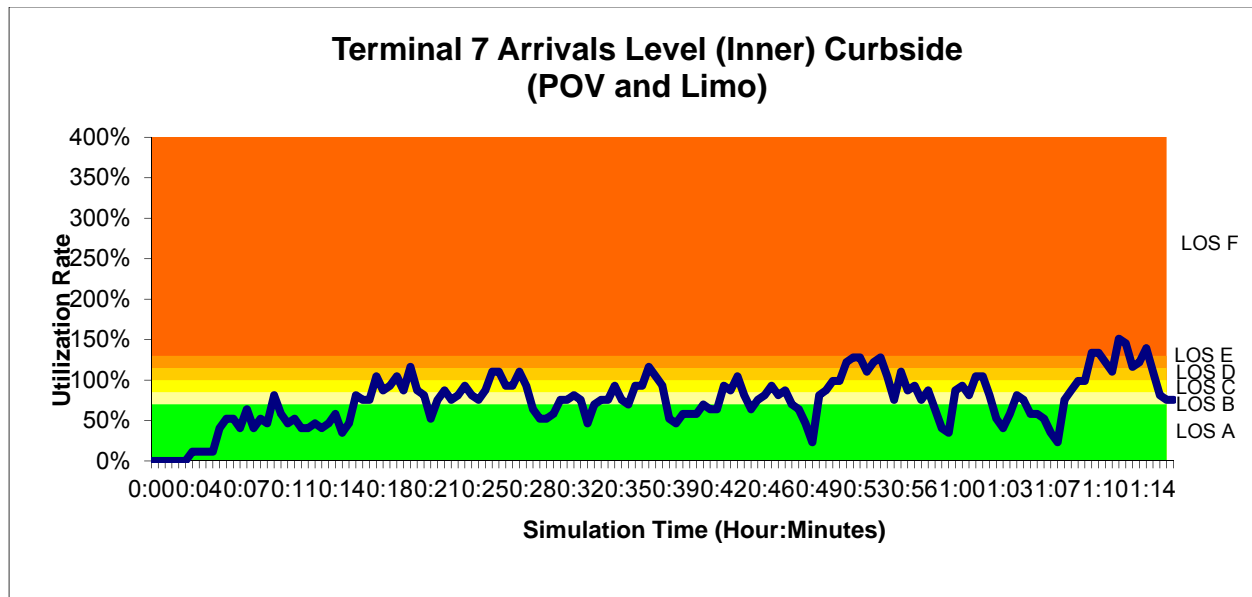
## Appendix E2- Curbside Utilization



### Arrivals Level 2012 Peak Hour

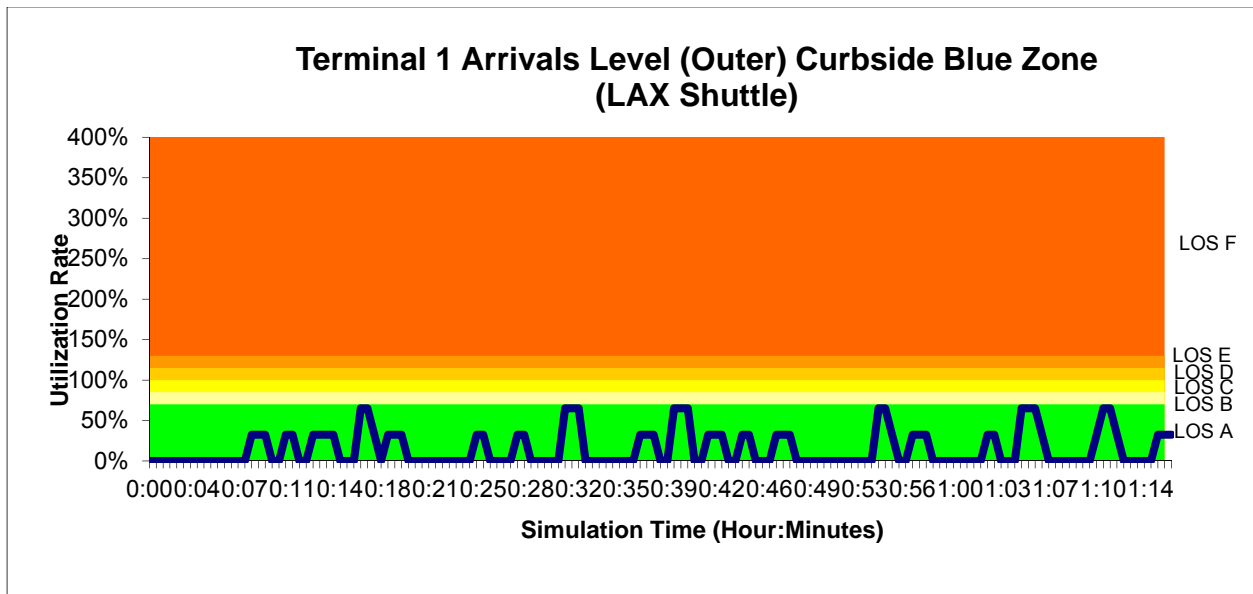


## Appendix E2- Curbside Utilization

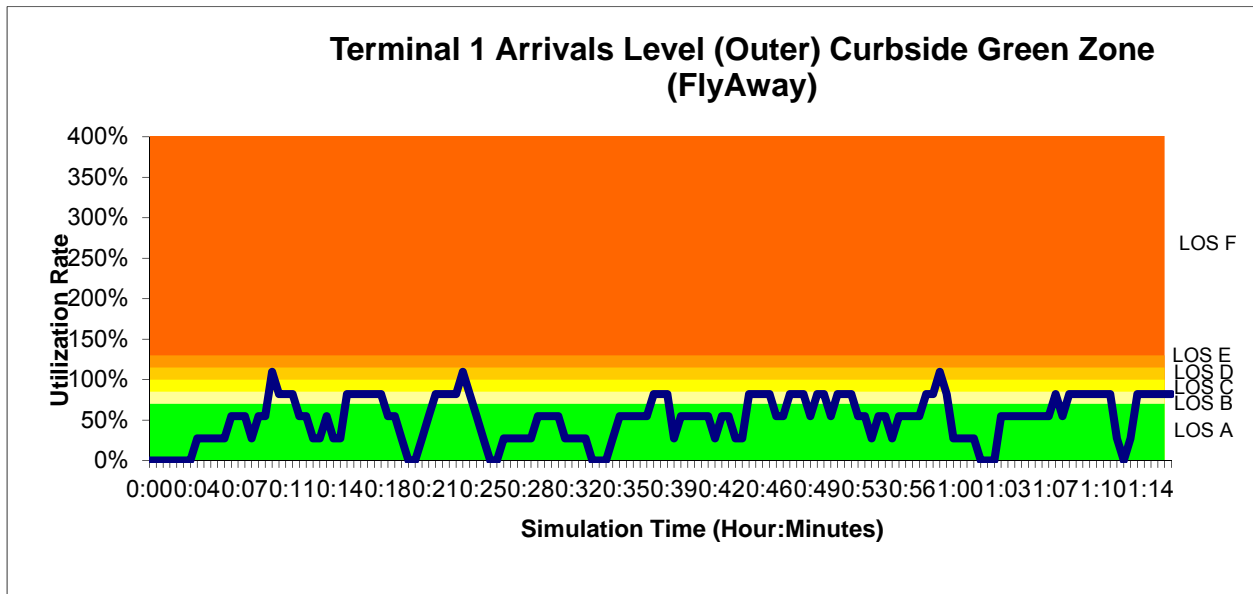


### Arrivals Level 2012 Peak Hour

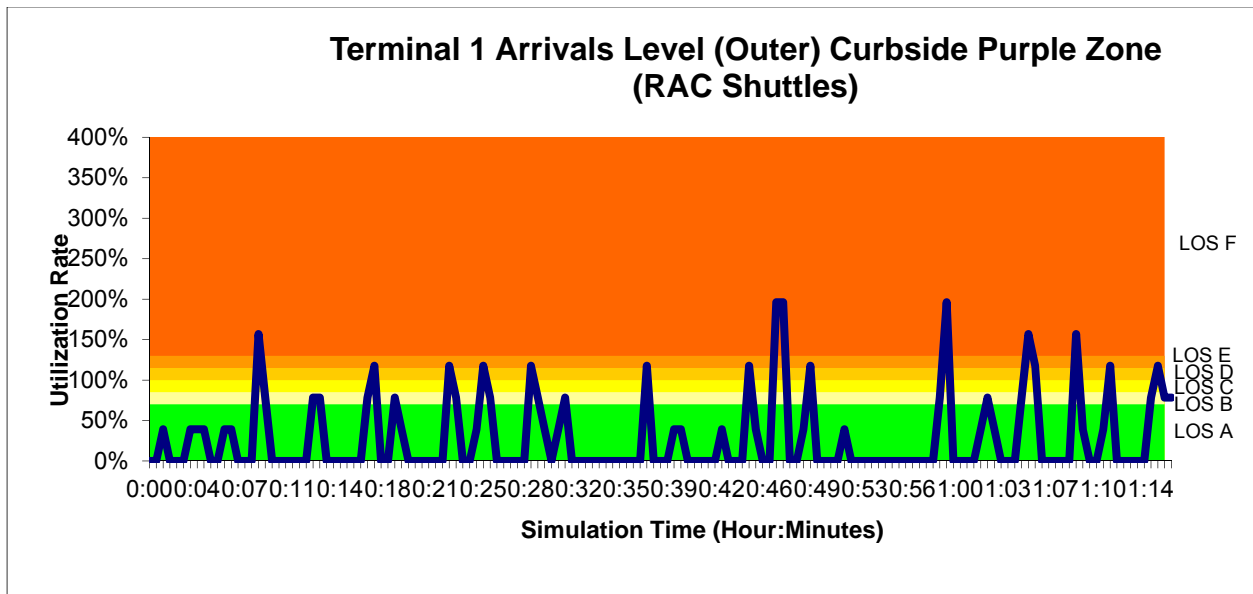
## Appendix E2- Curbside Utilization



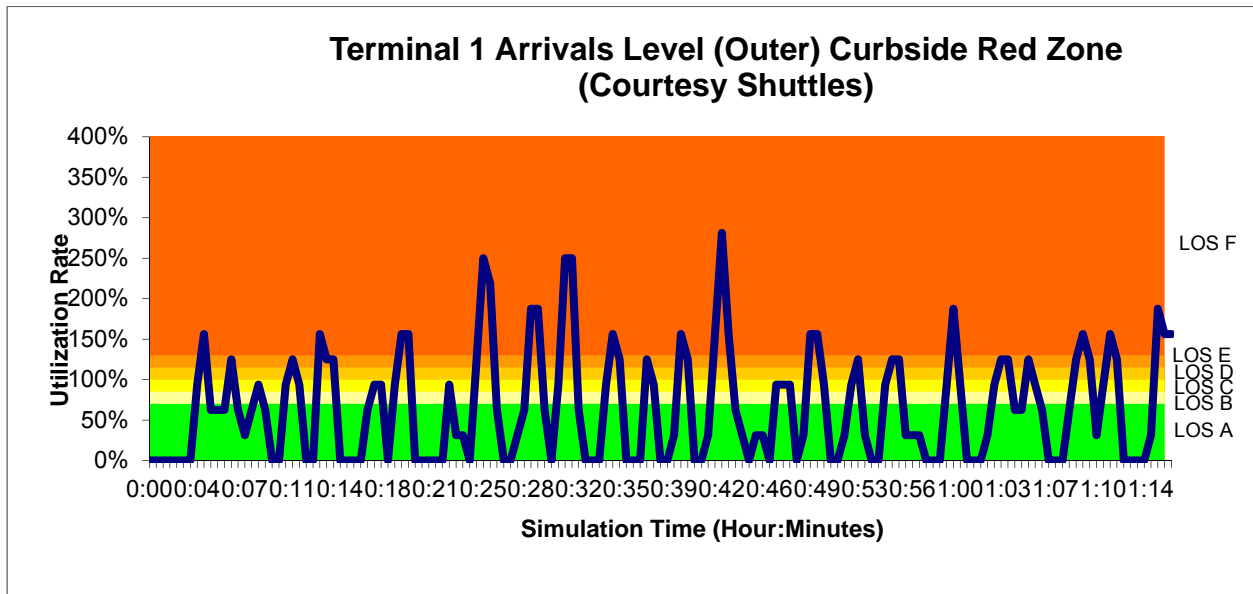
Arrivals Level - 2012 Peak Hour



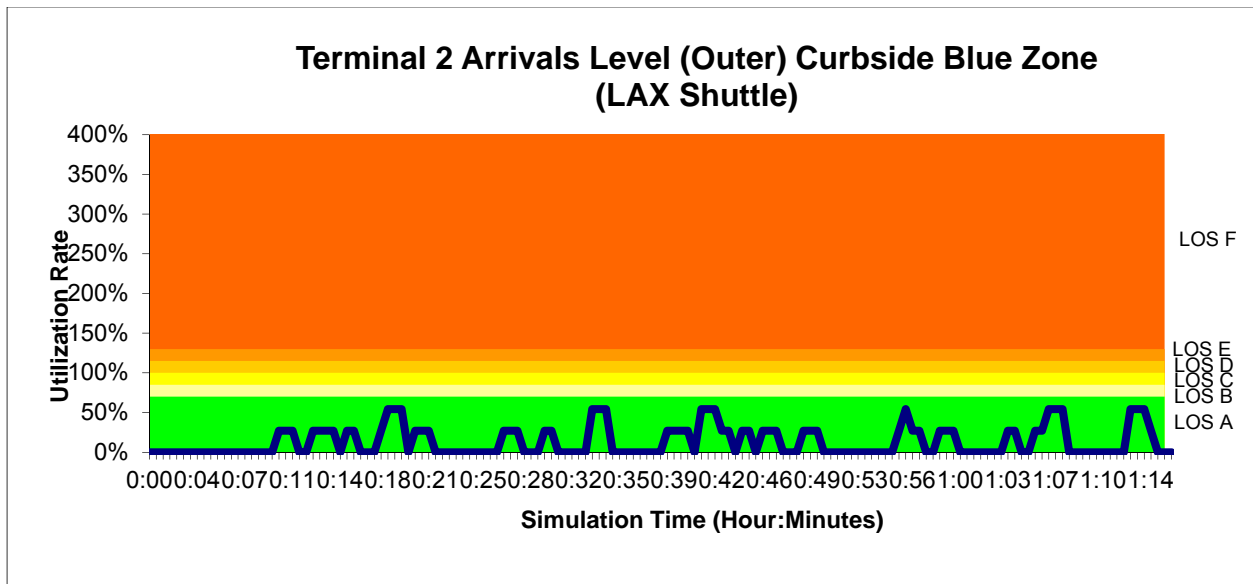
## Appendix E2- Curbside Utilization



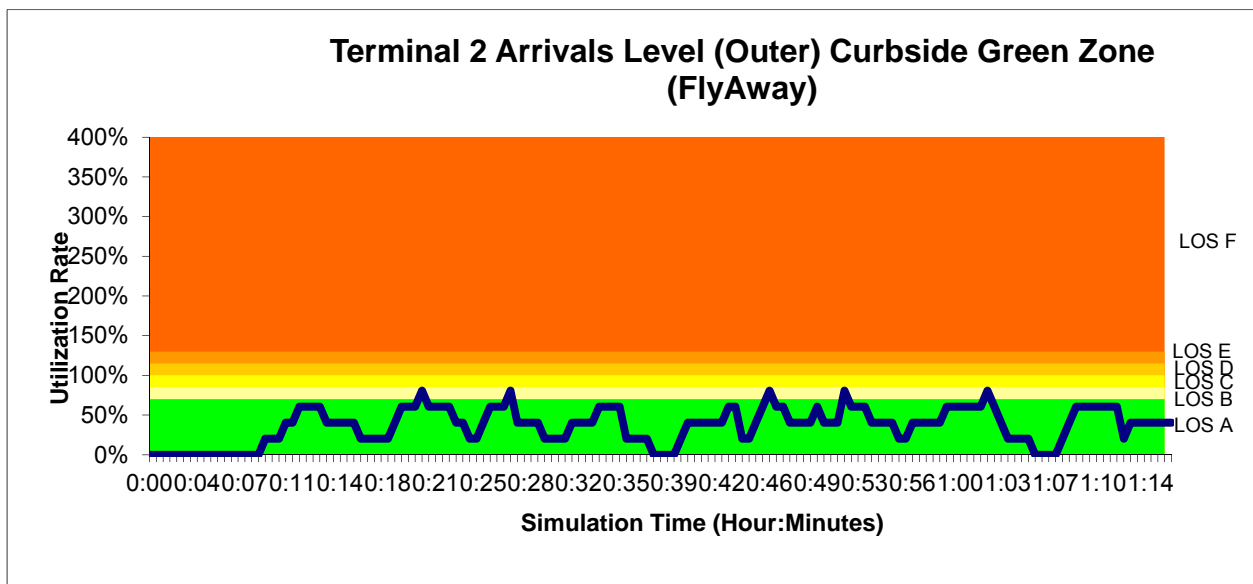
Arrivals Level - 2012 Peak Hour



## Appendix E2- Curbside Utilization

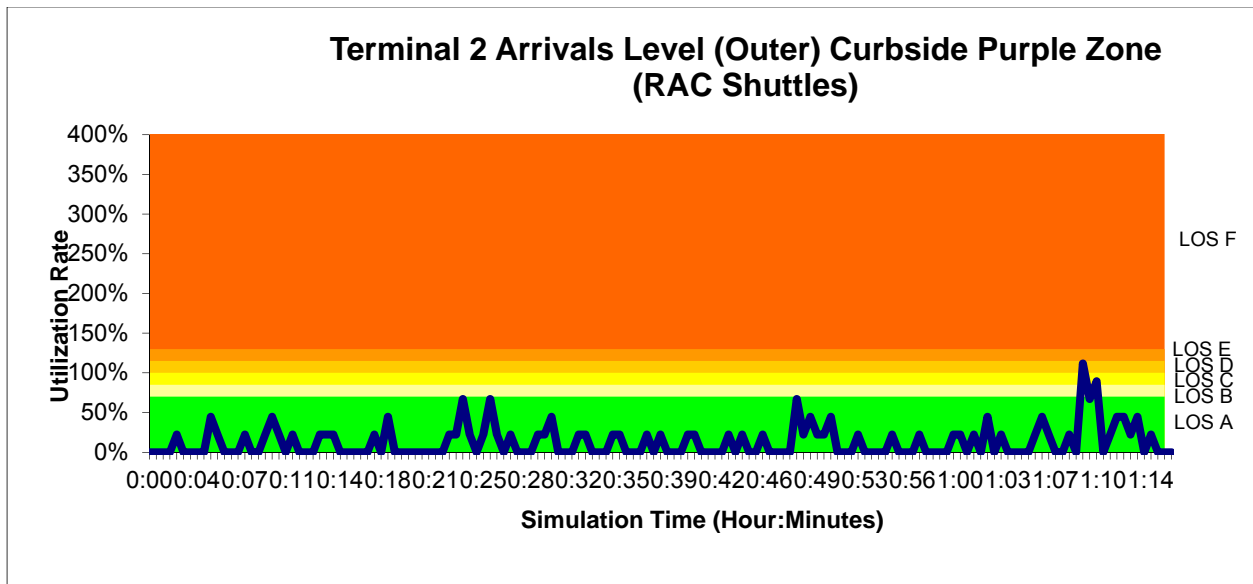


**Arrivals Level - 2012 Peak Hour**

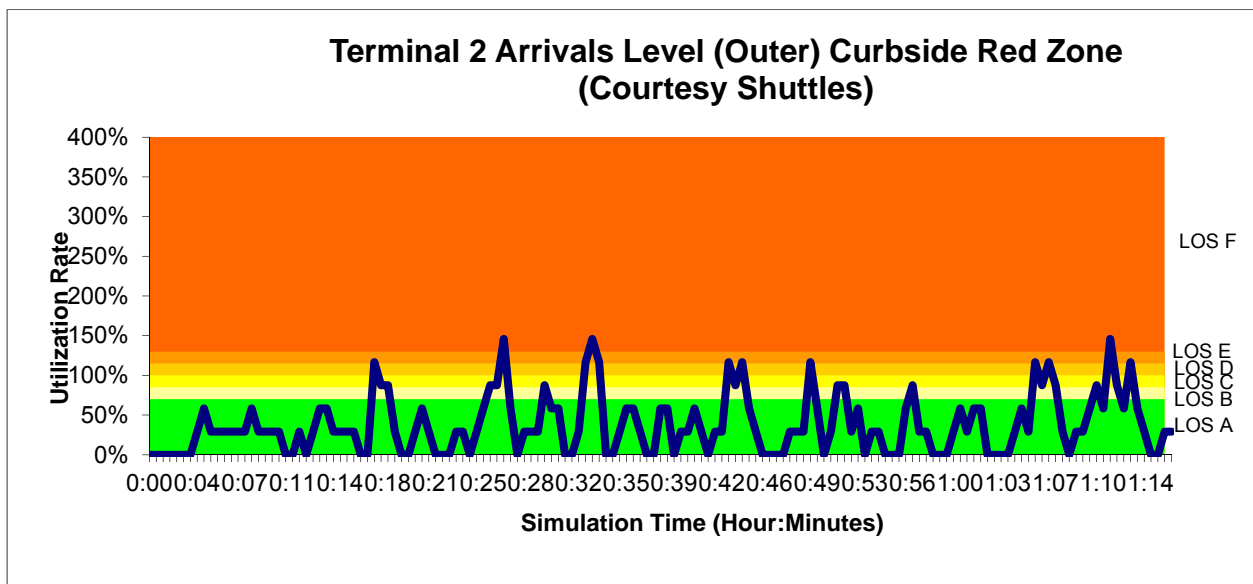


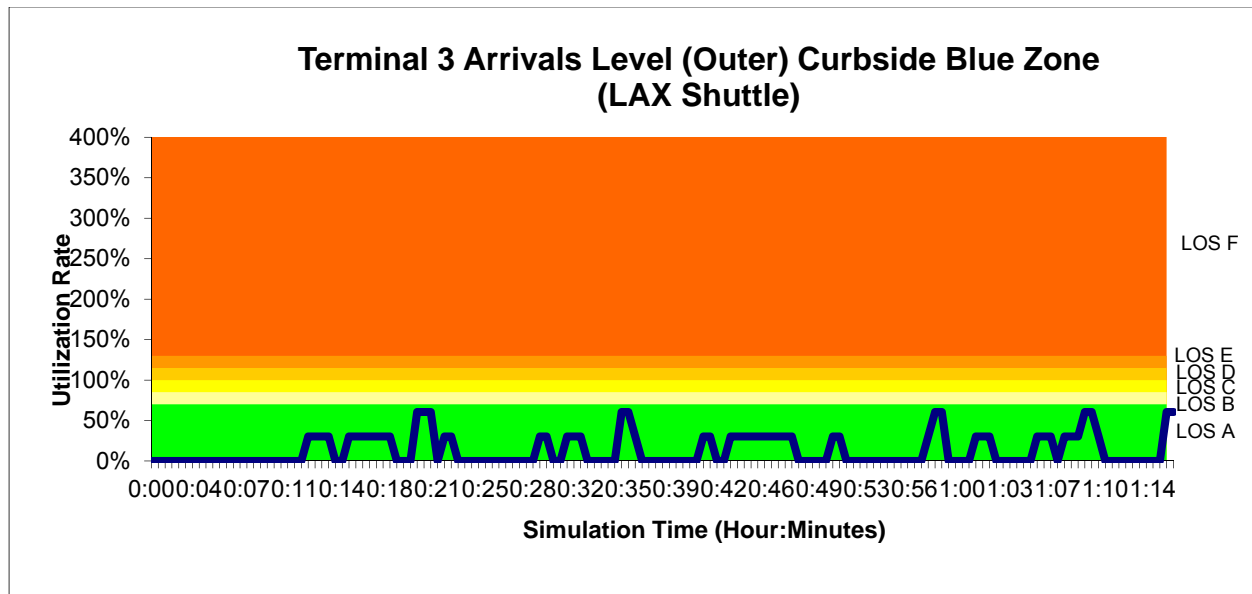


## Appendix E2- Curbside Utilization

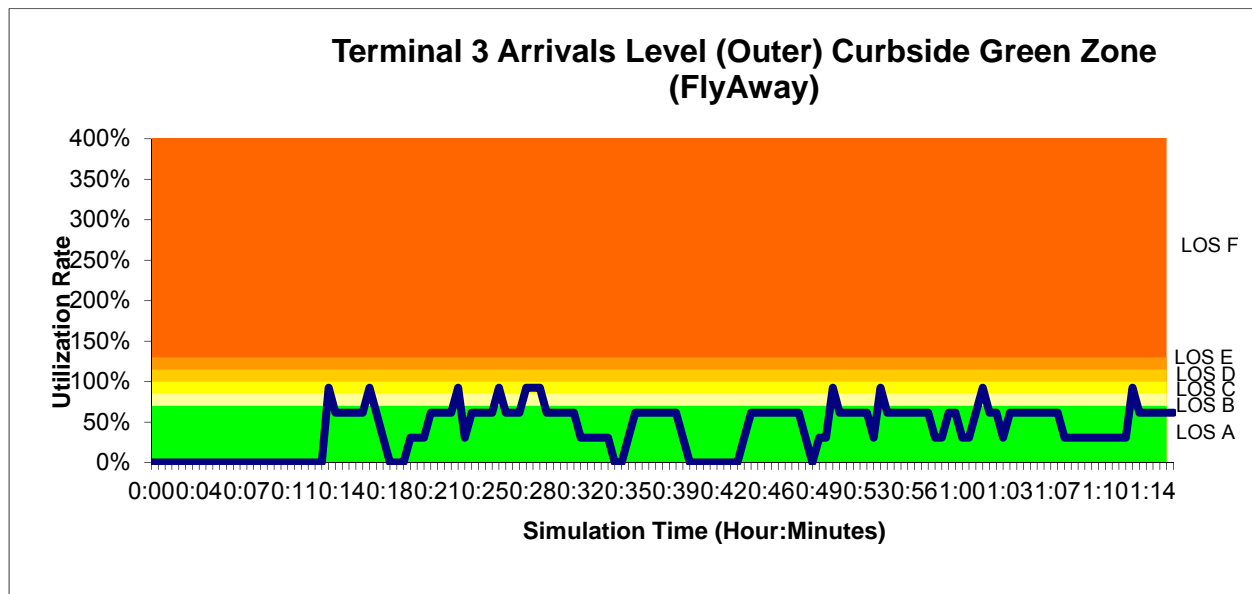


**Arrivals Level - 2012 Peak Hour**

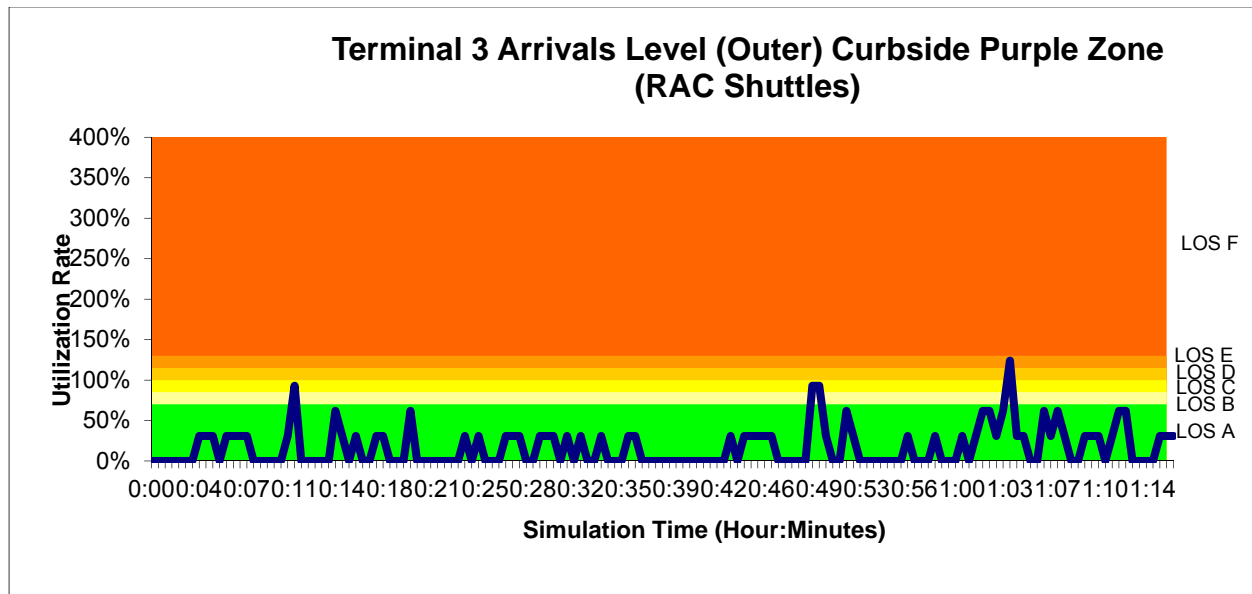




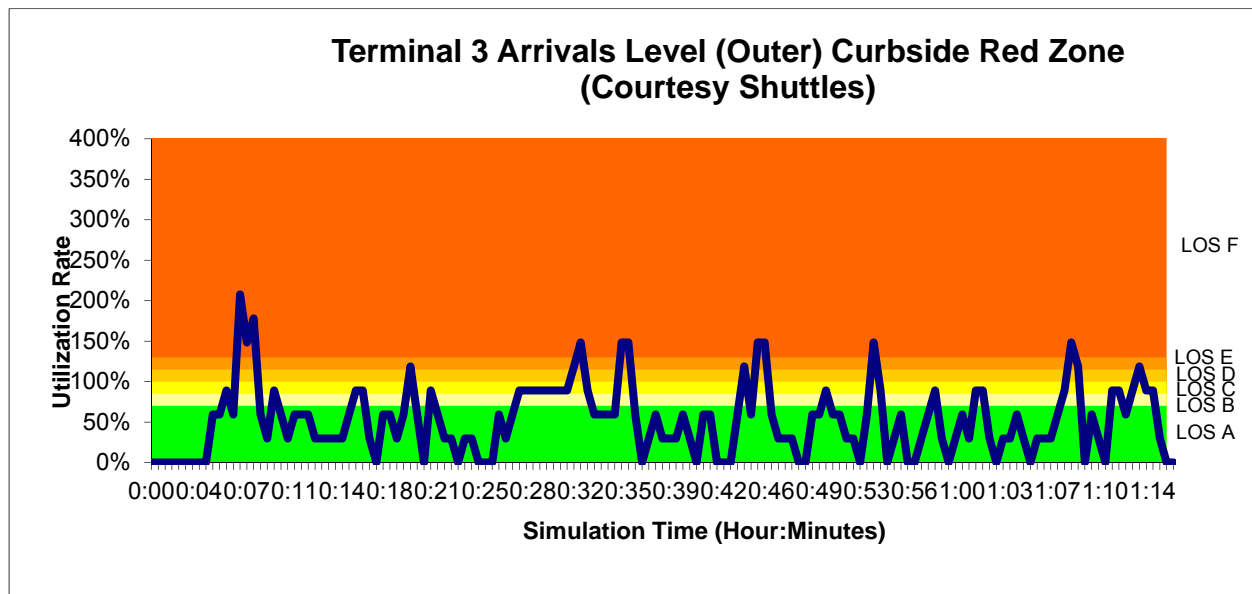
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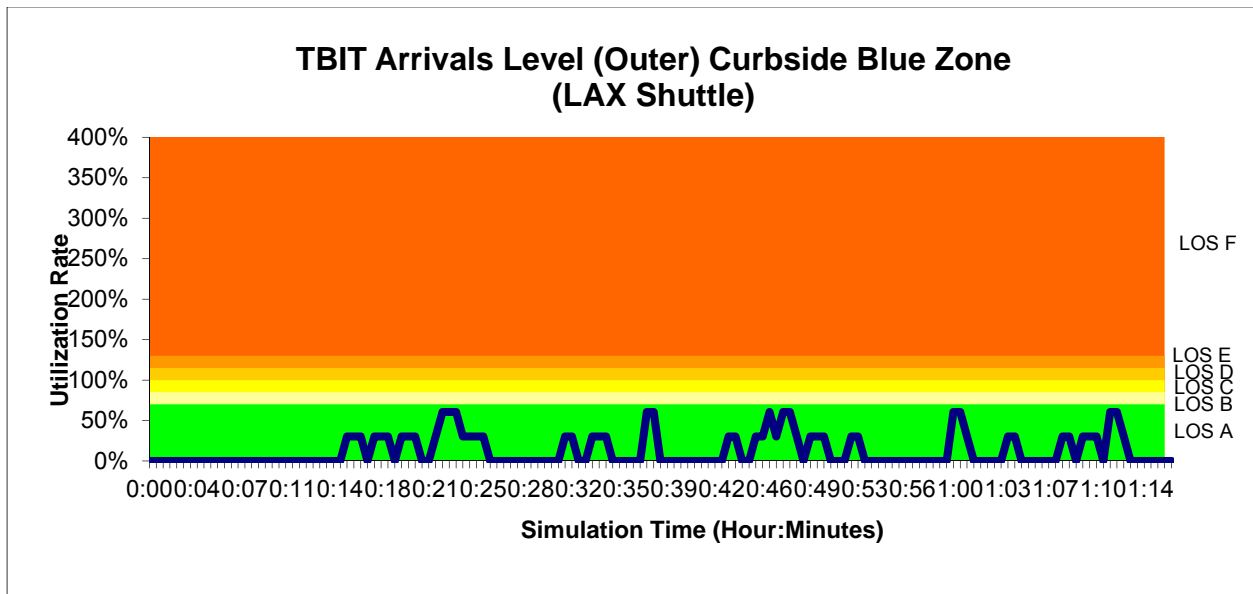
## Appendix E2- Curbside Utilization



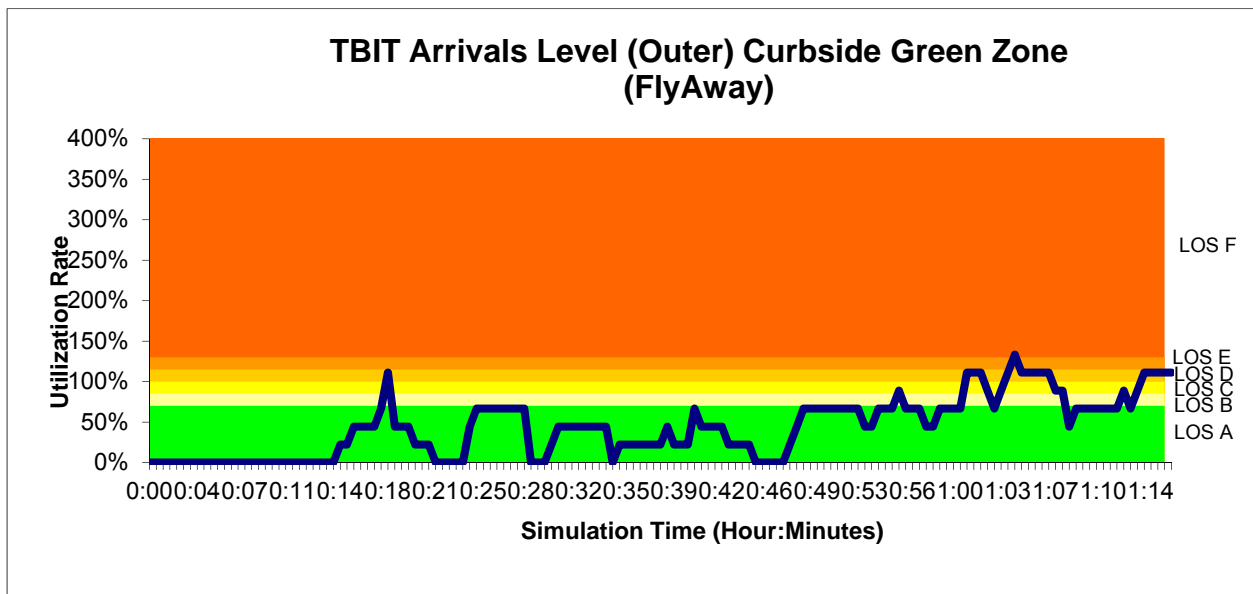
Arrivals Level - 2012 Peak Hour



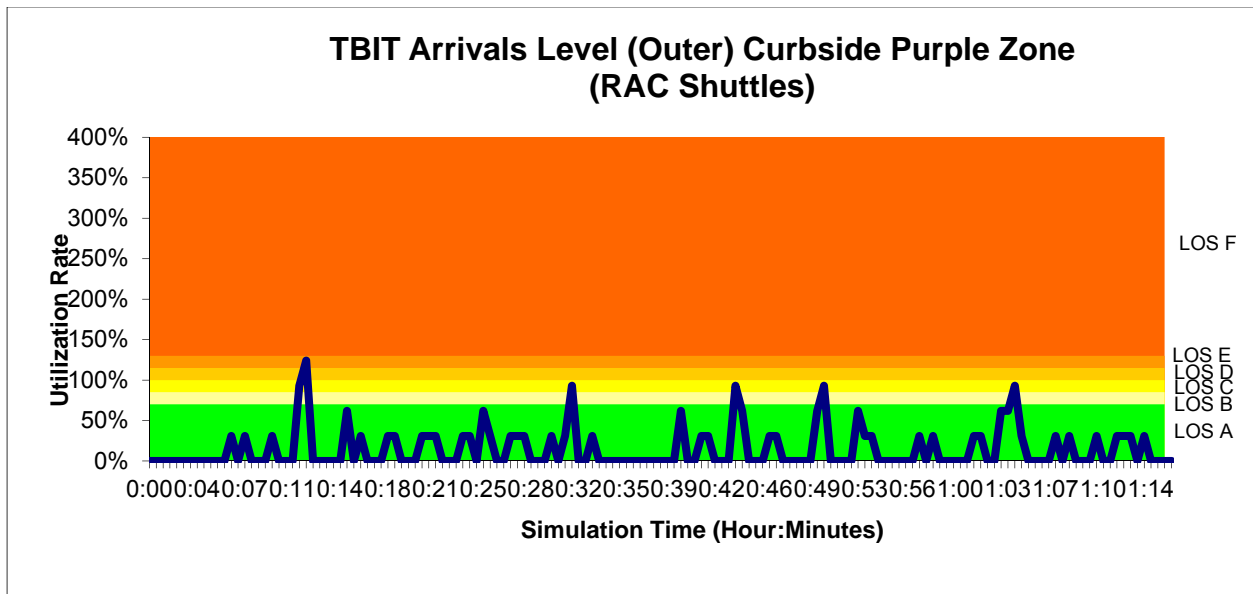
## Appendix E2- Curbside Utilization



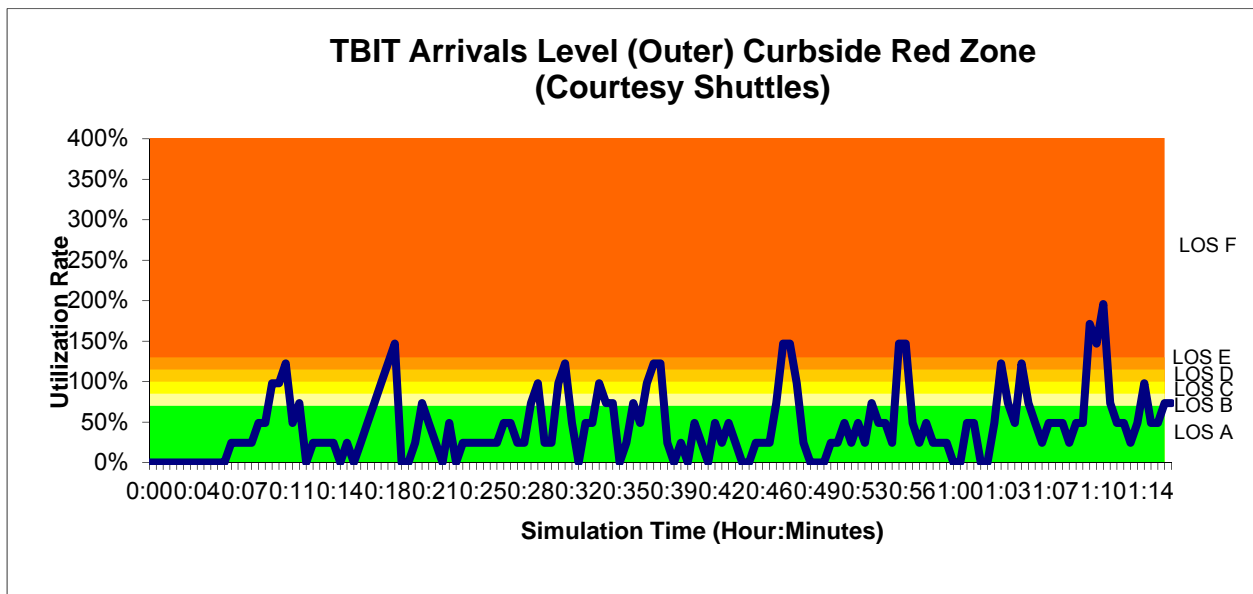
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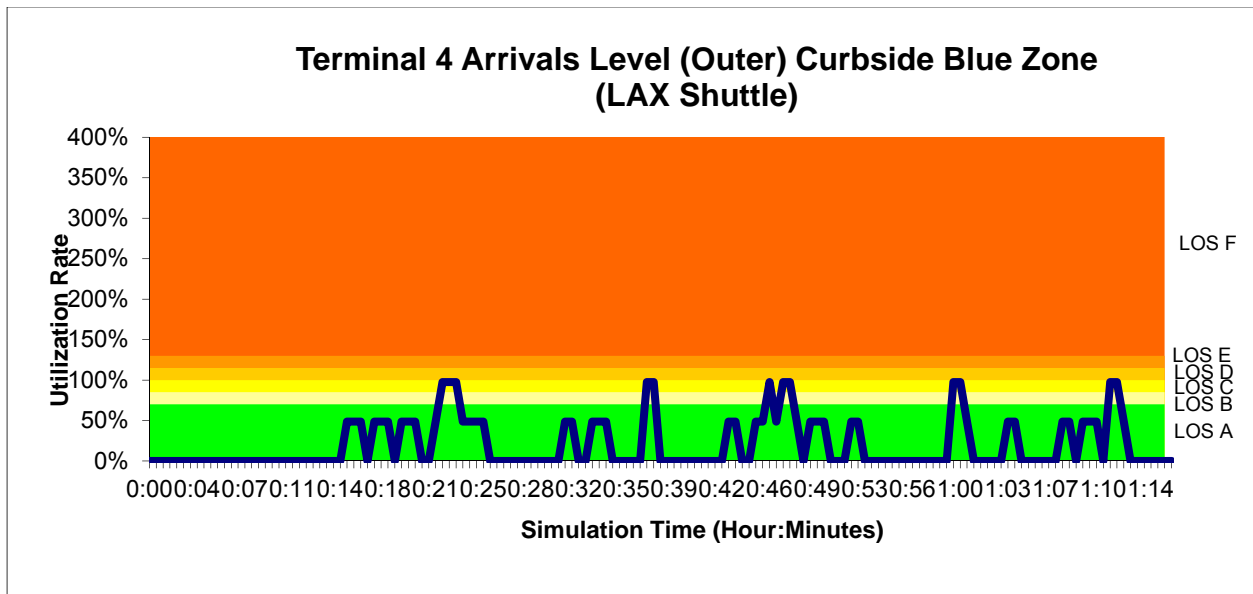
## Appendix E2- Curbside Utilization



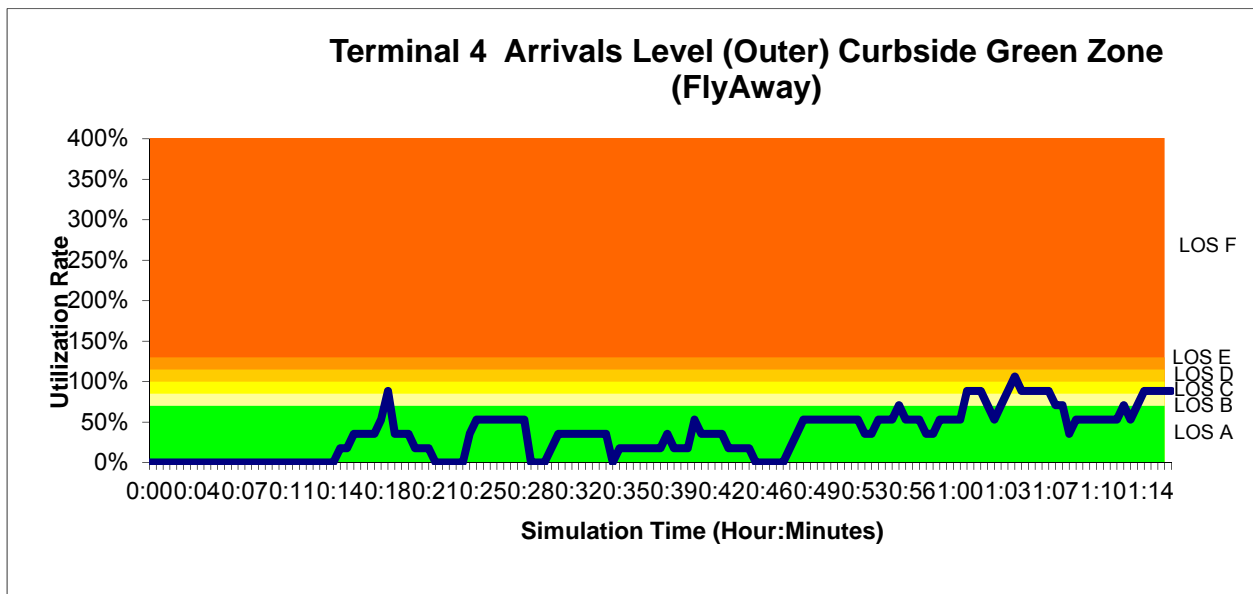
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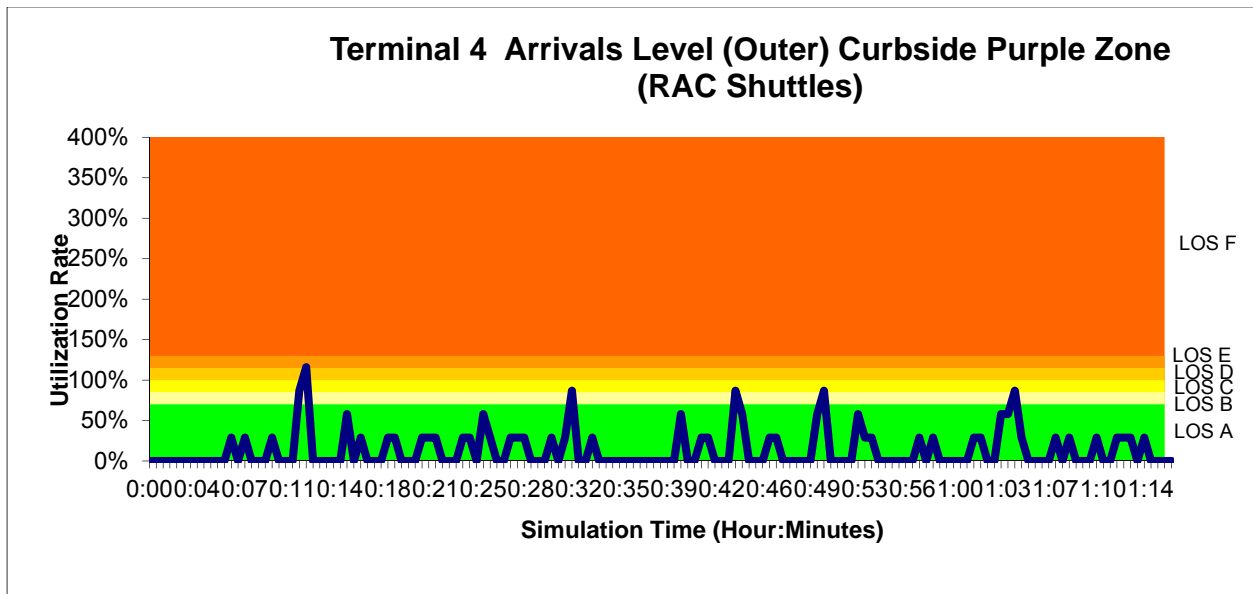
## Appendix E2- Curbside Utilization



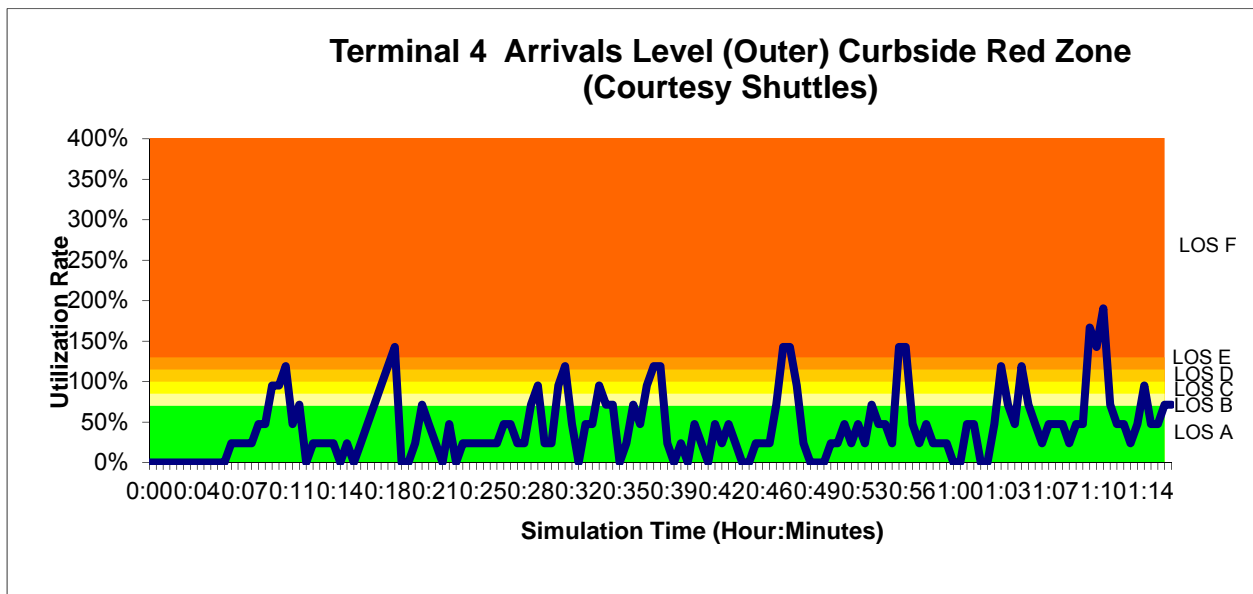
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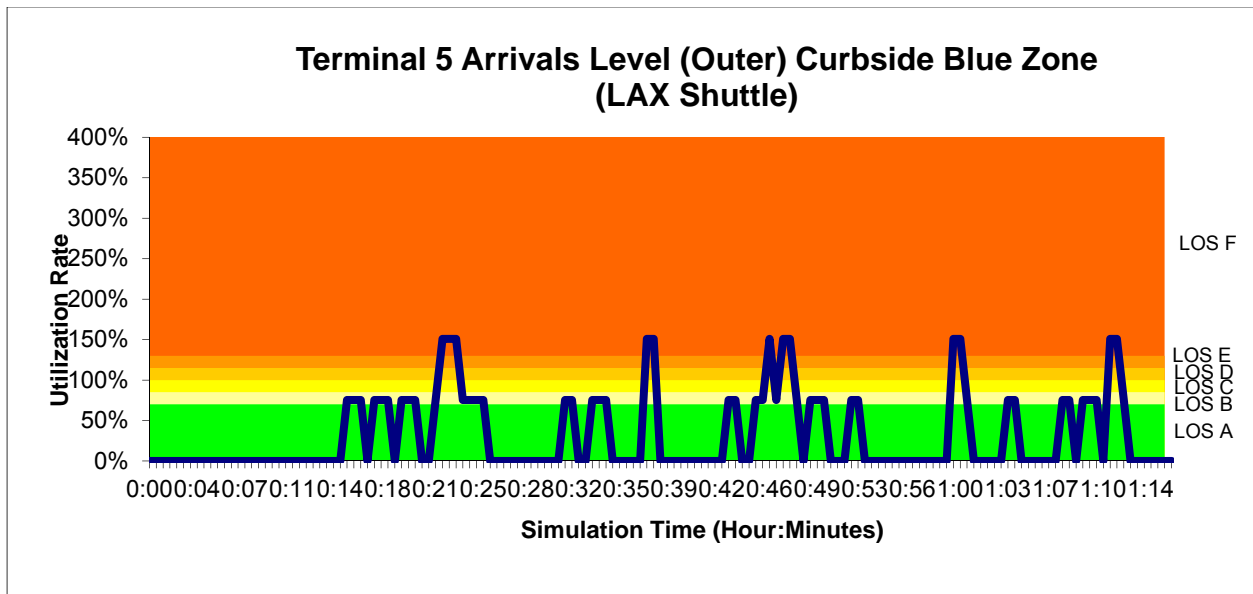
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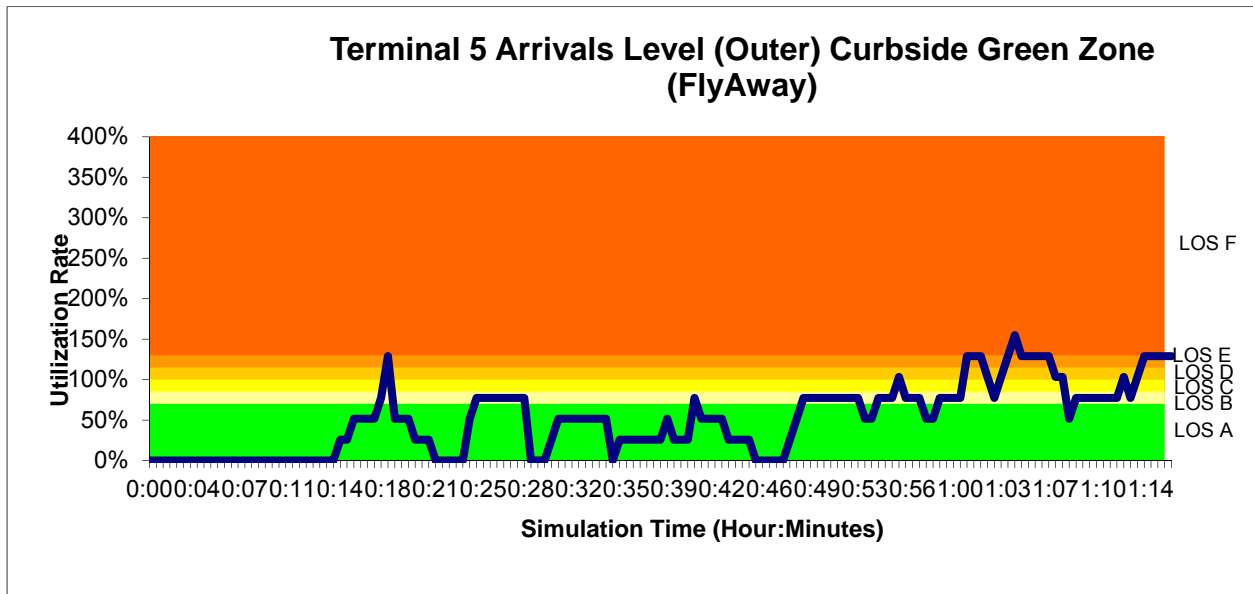
Arrivals Level - 2012 Peak Hour



## Appendix E2- Curbside Utilization

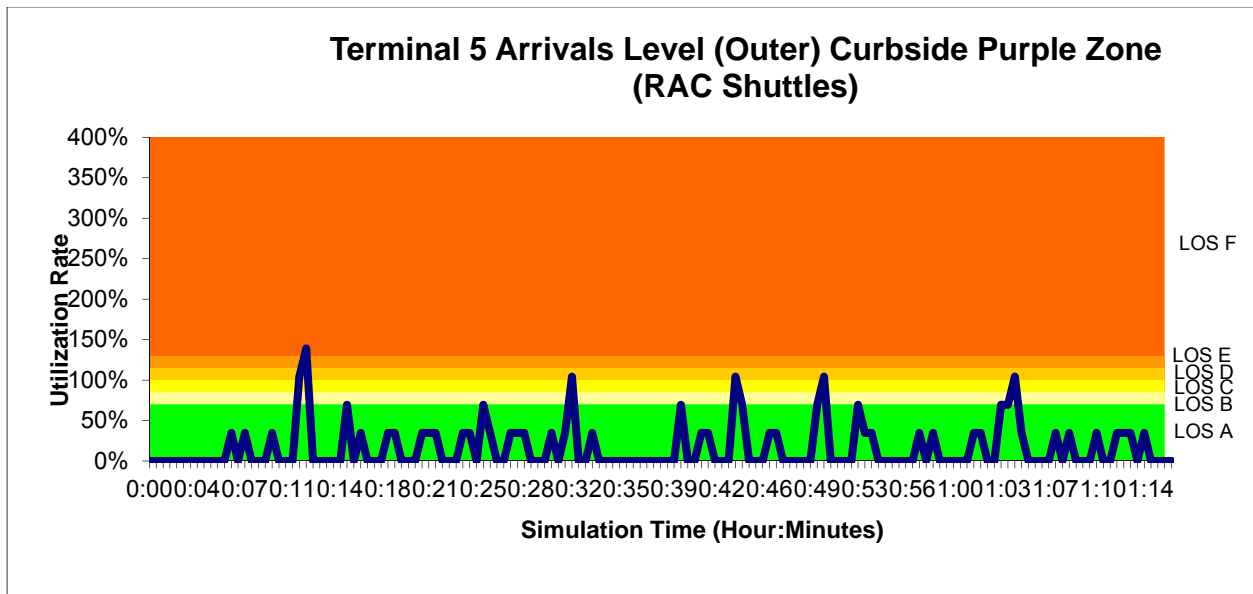


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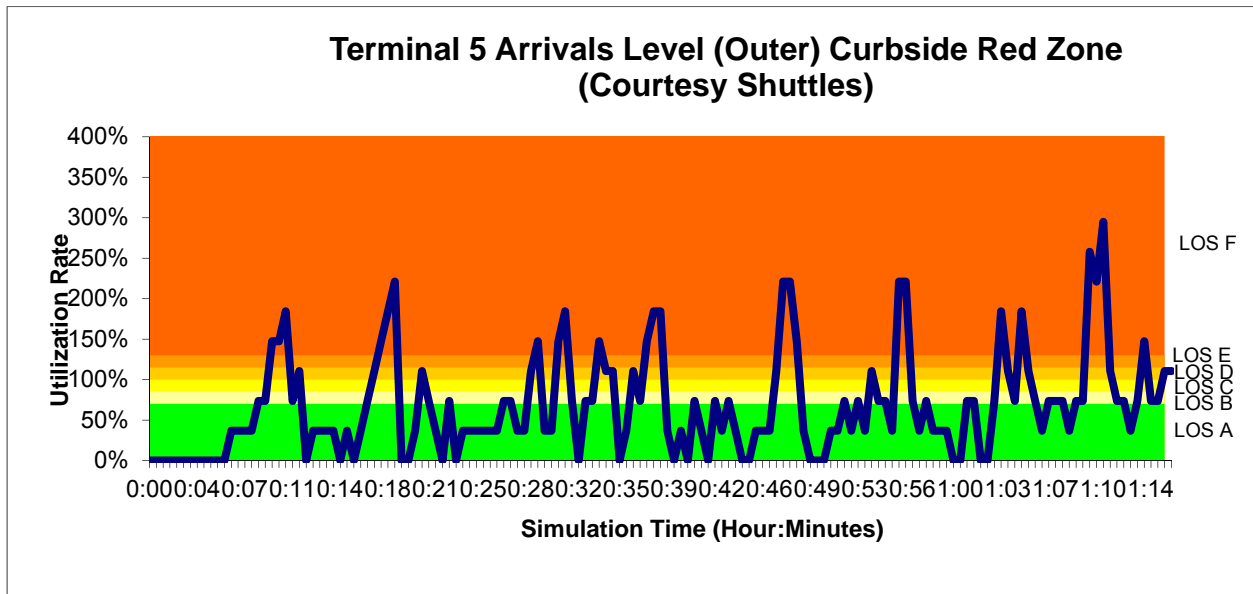




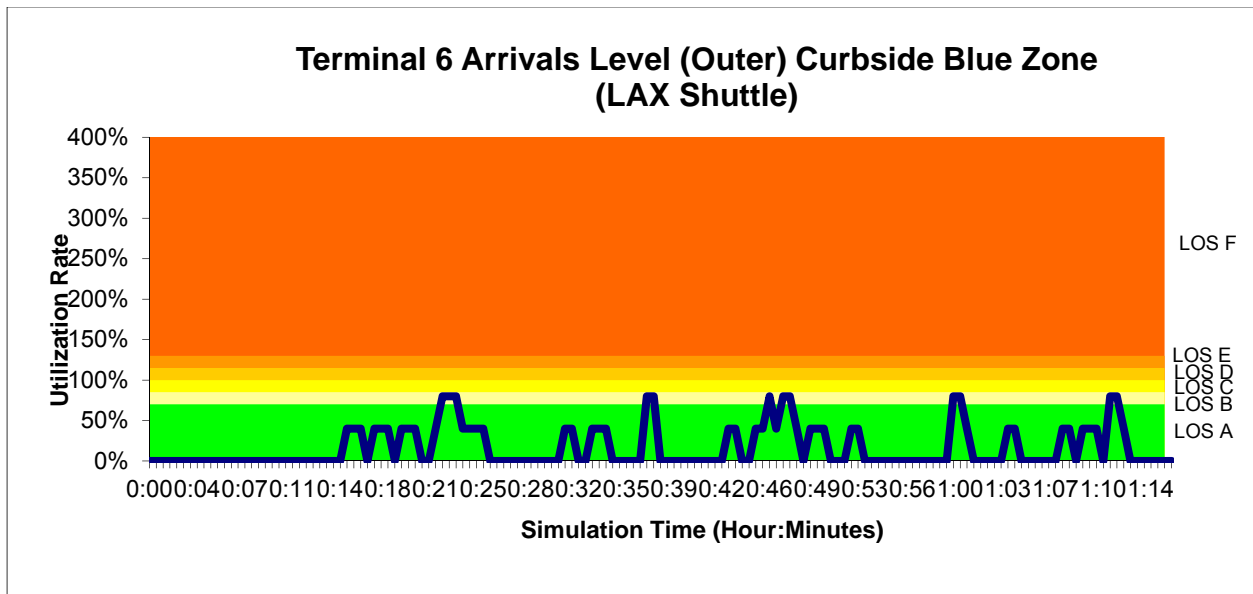
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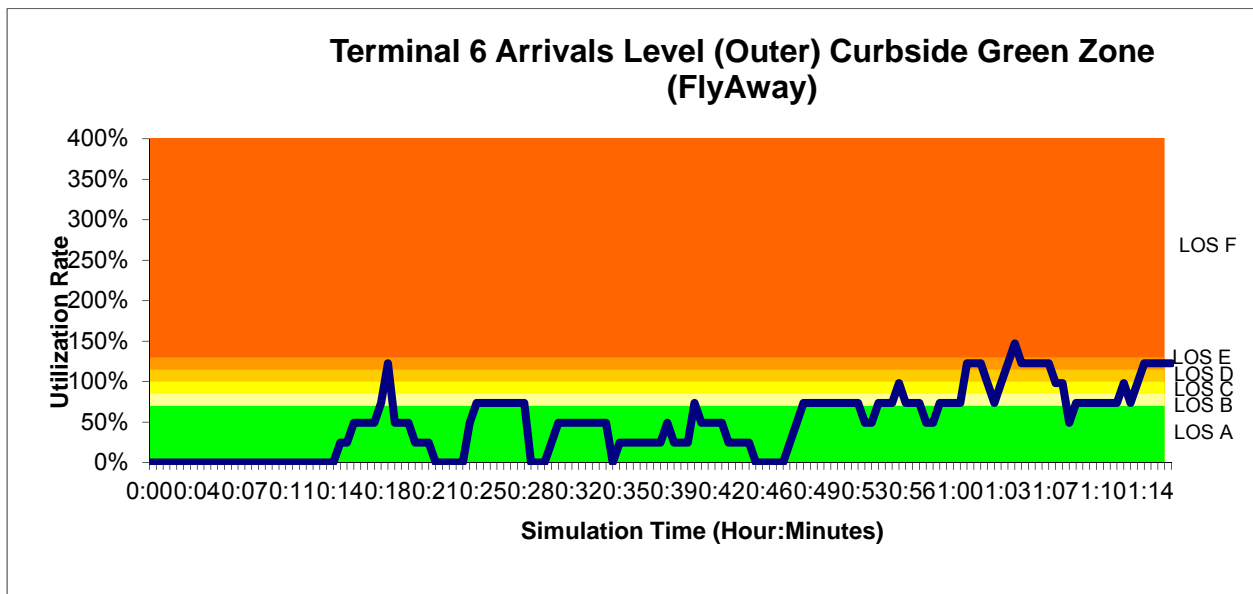
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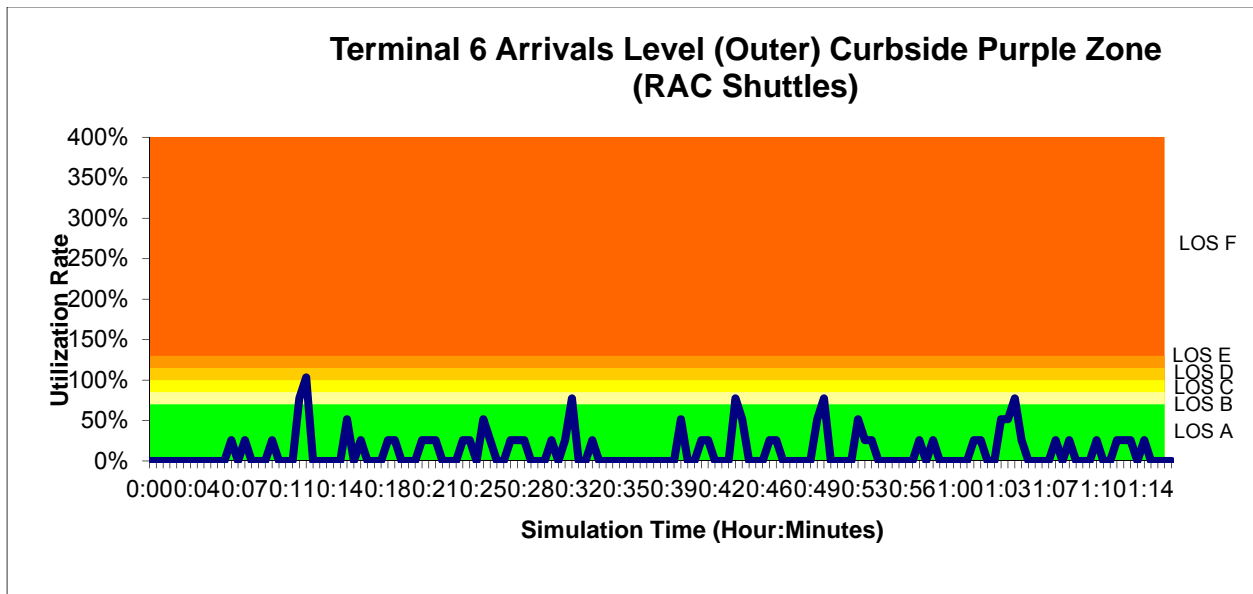
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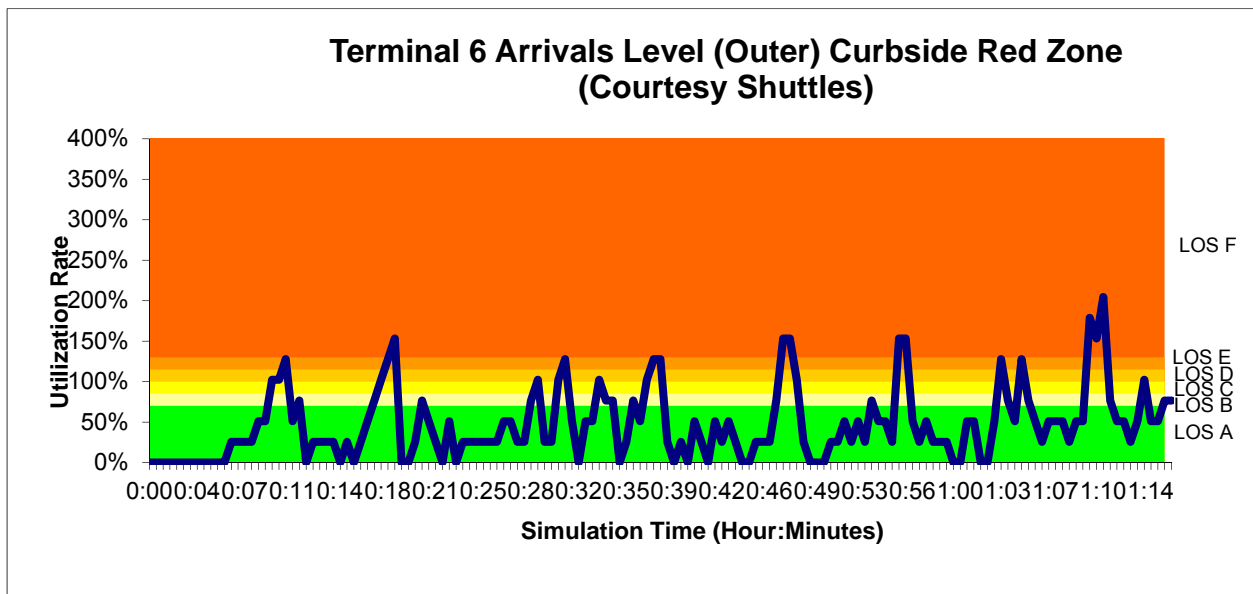
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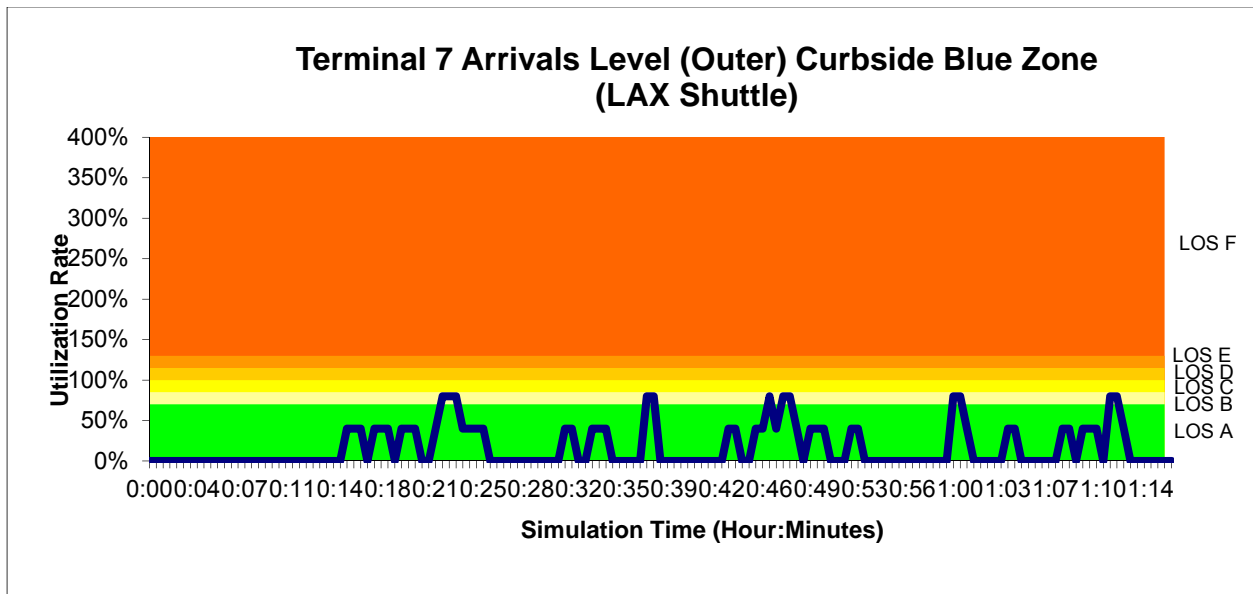
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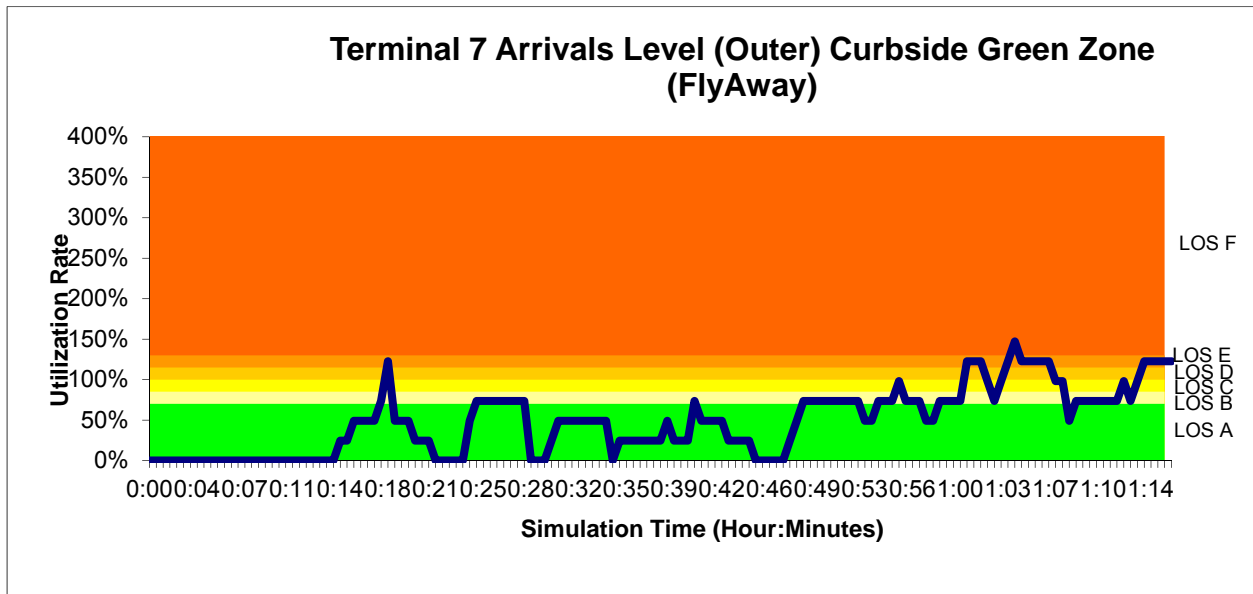
Arrivals Level - 2012 Peak Hour



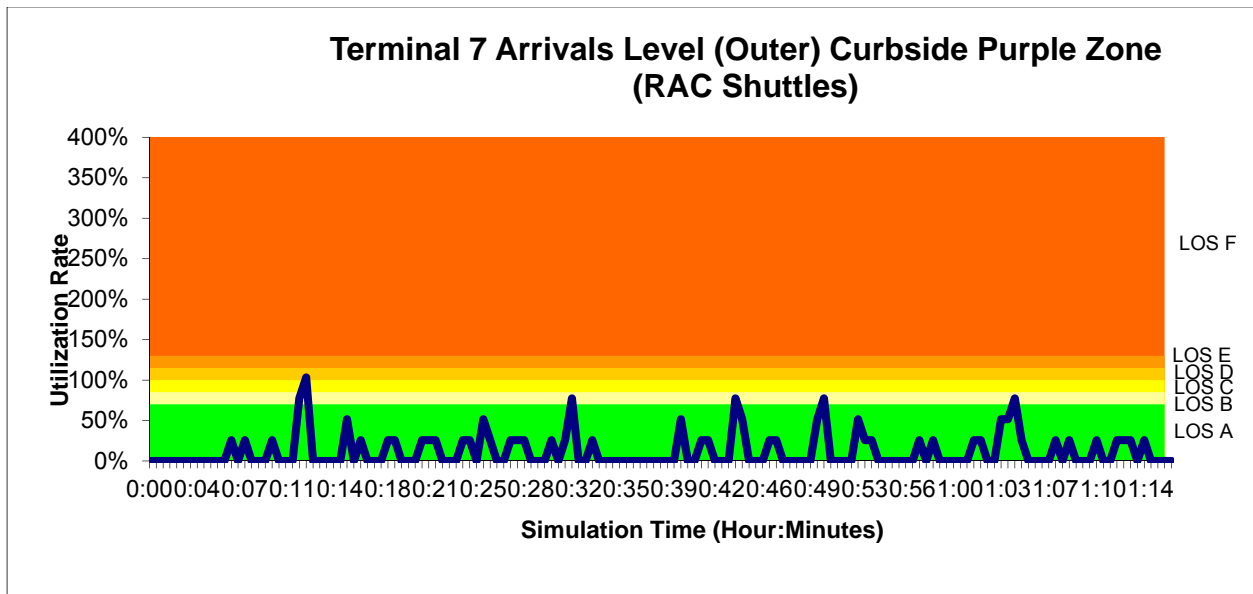
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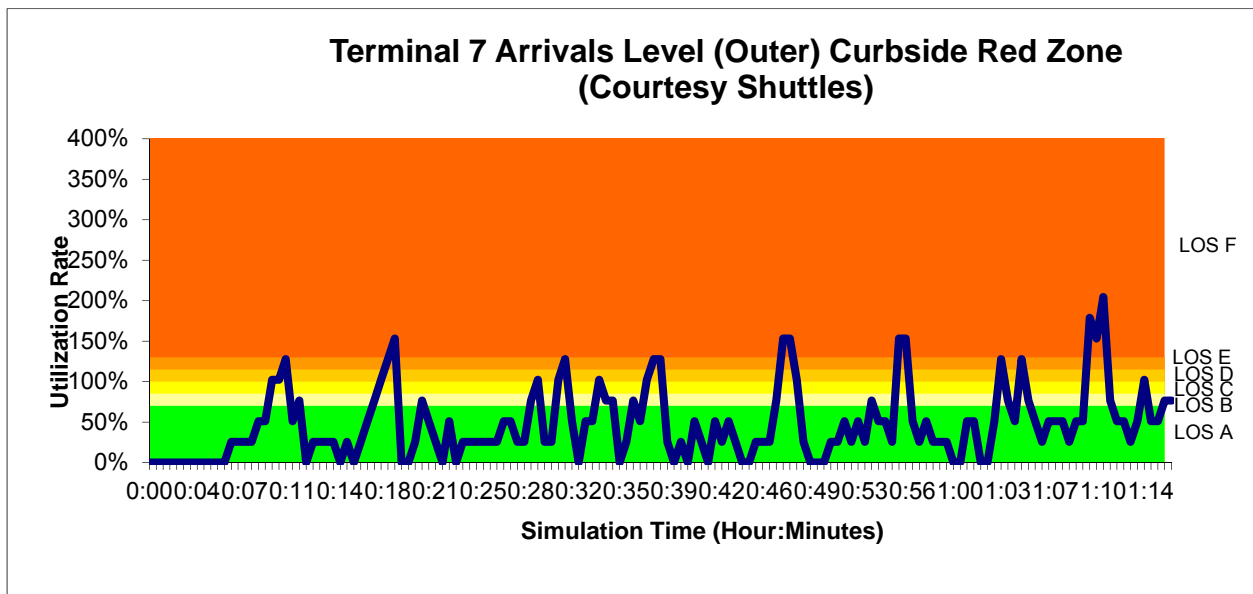
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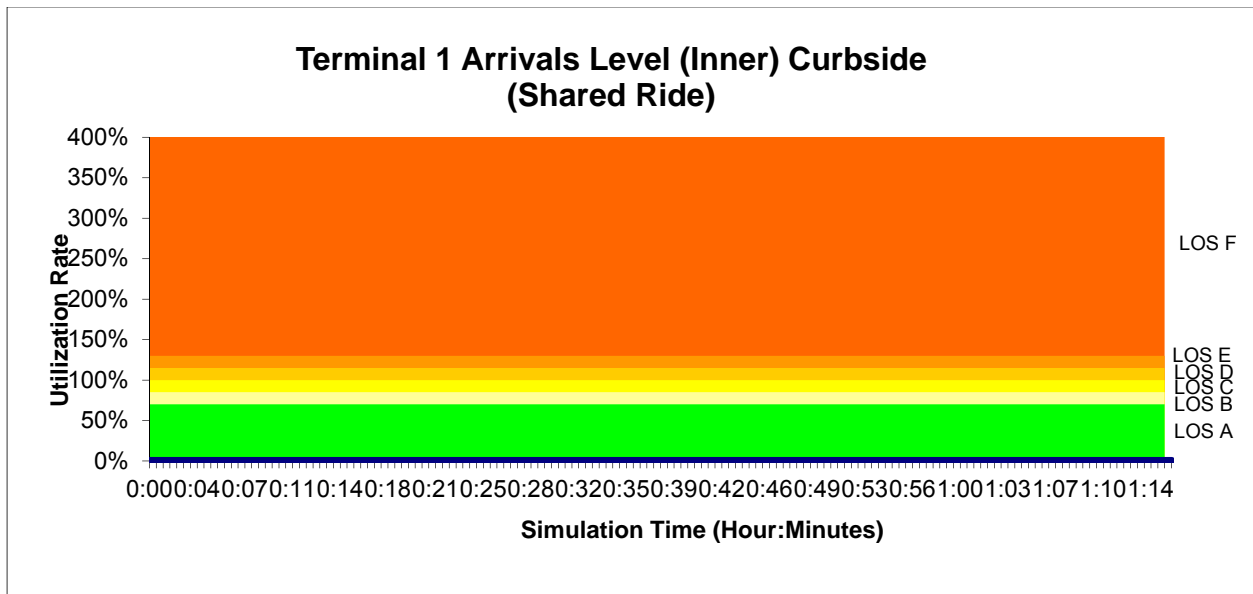
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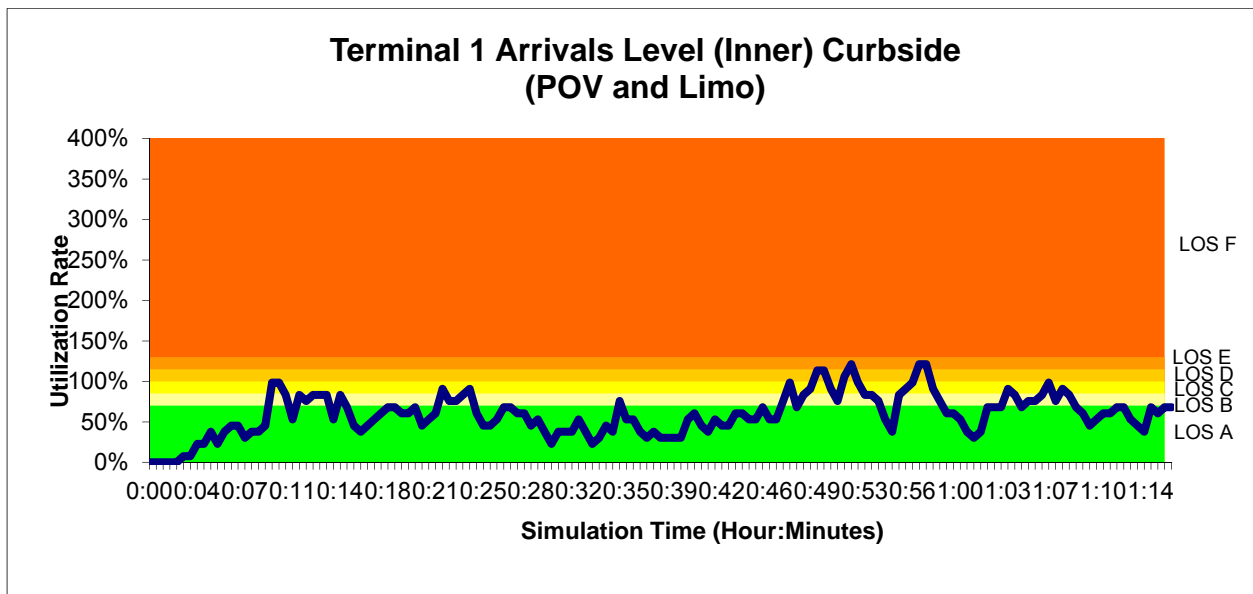
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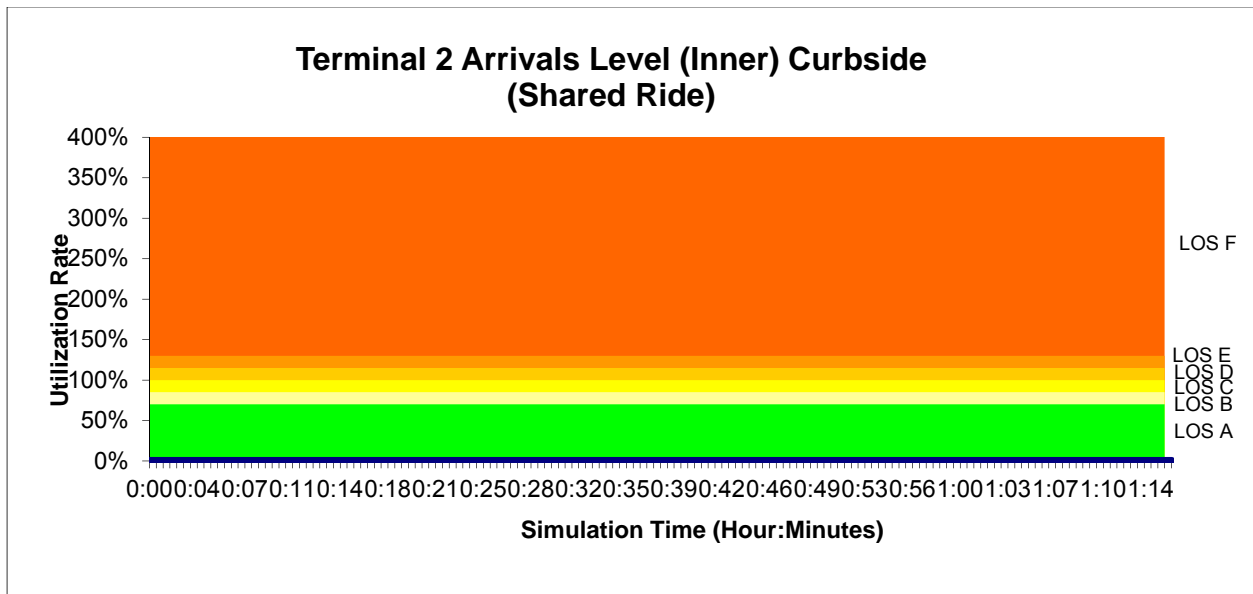
## Appendix E2- Curbside Utilization



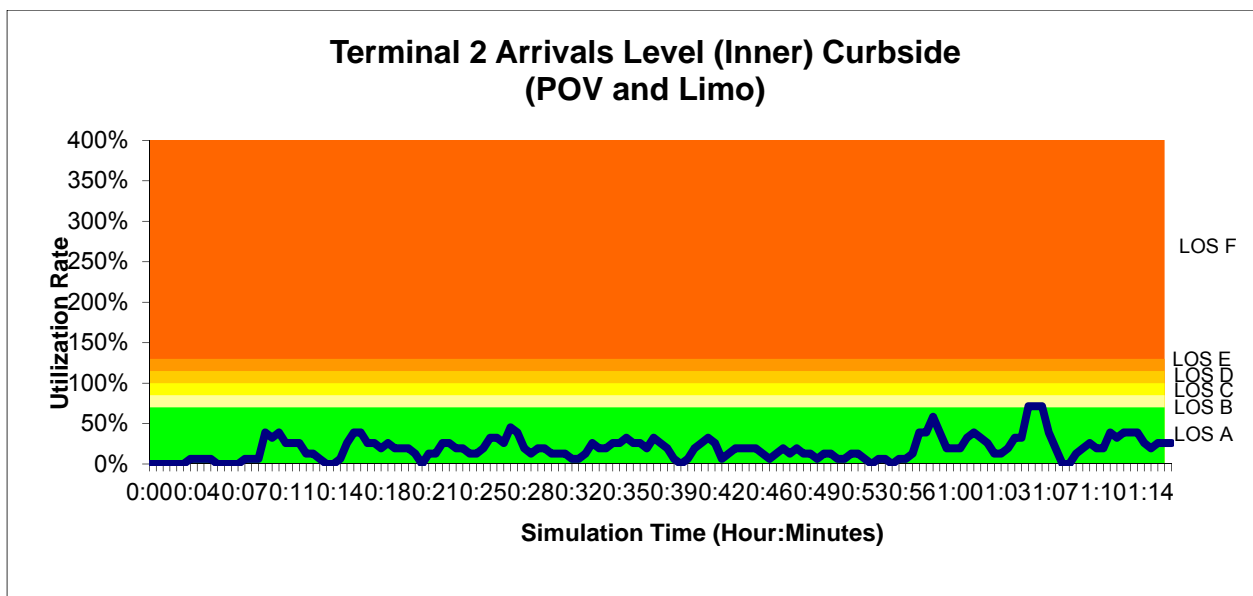
### Arrivals Level -Future Without Program



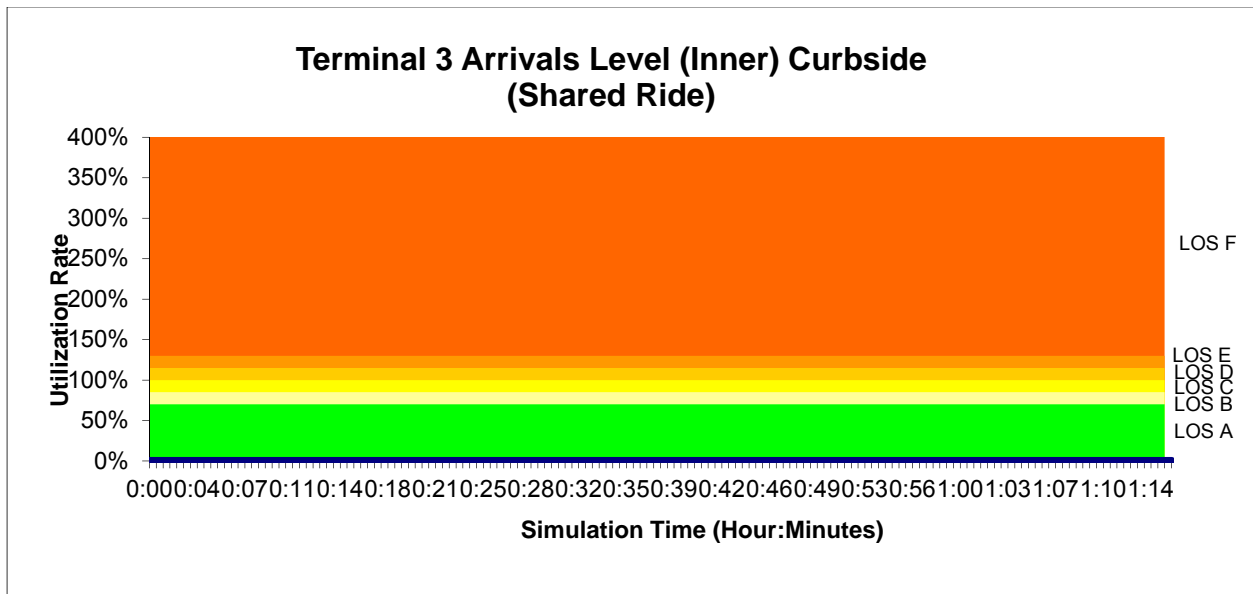
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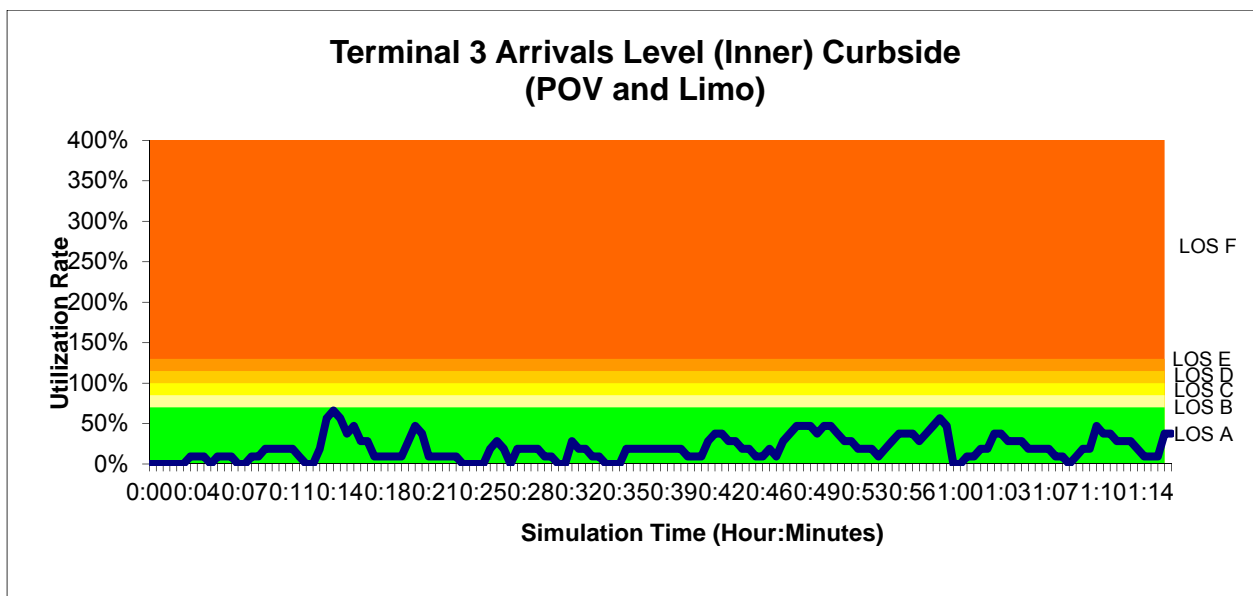
### Arrivals Level -Future Without Program



## Appendix E2- Curbside Utilization

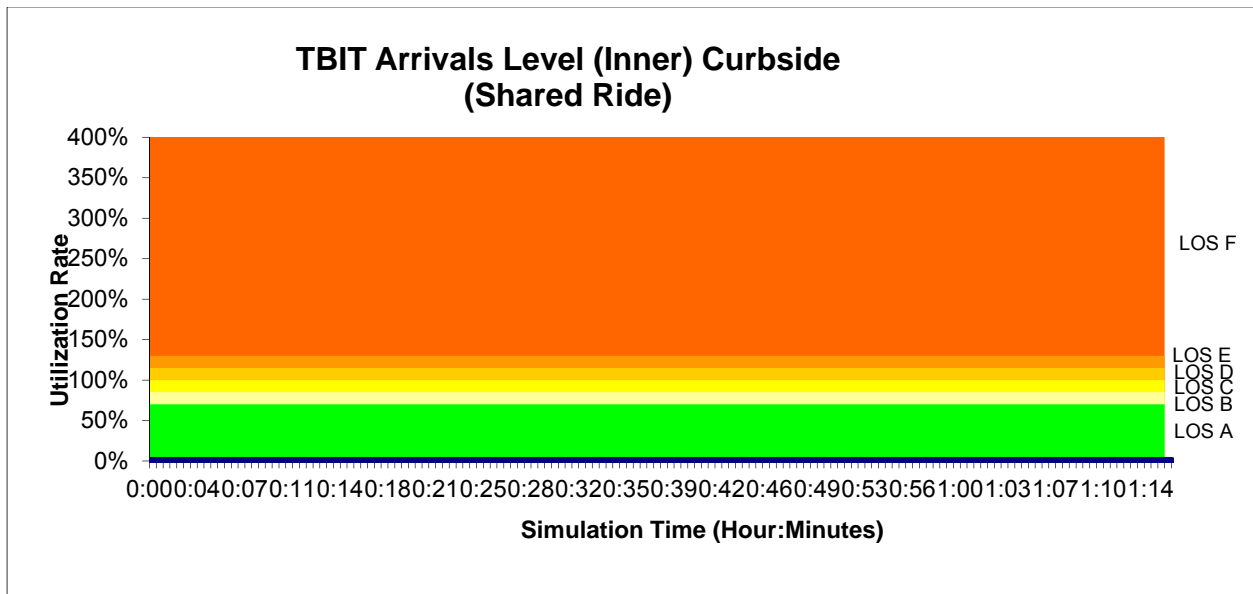


### Arrivals Level -Future Without Program

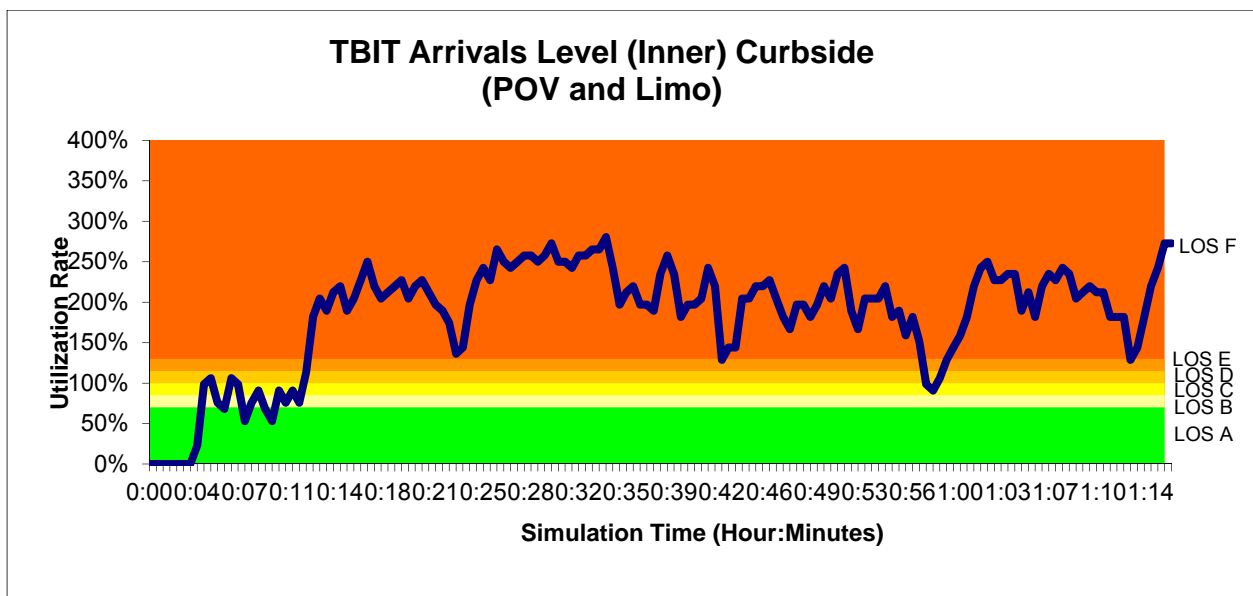




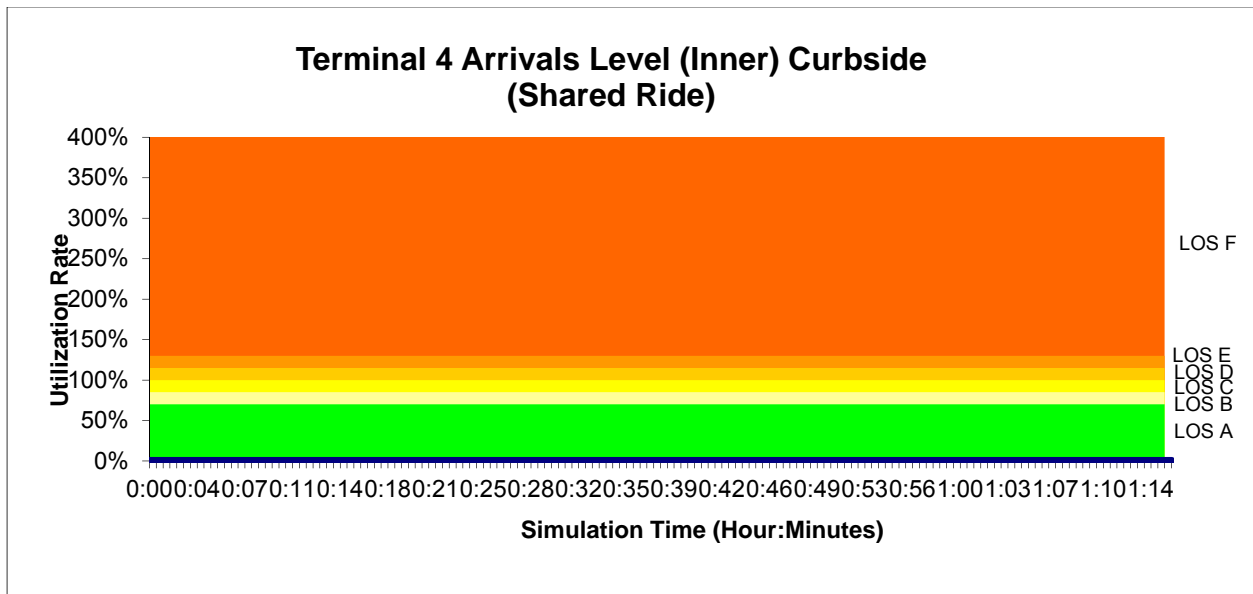
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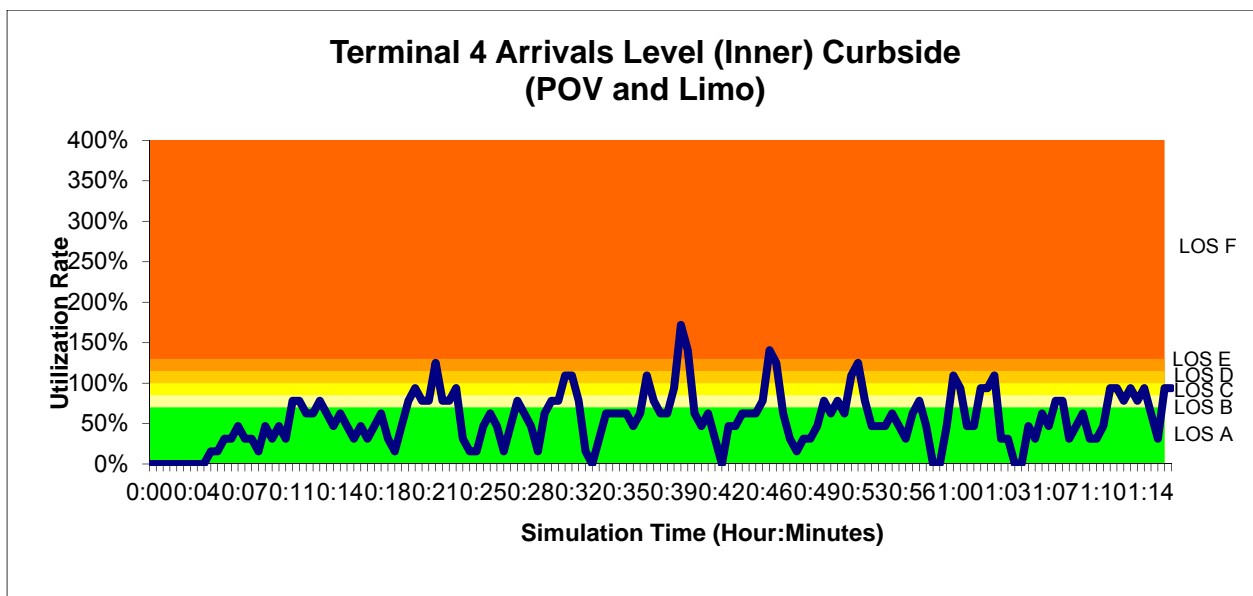
### Arrivals Level -Future Without Program



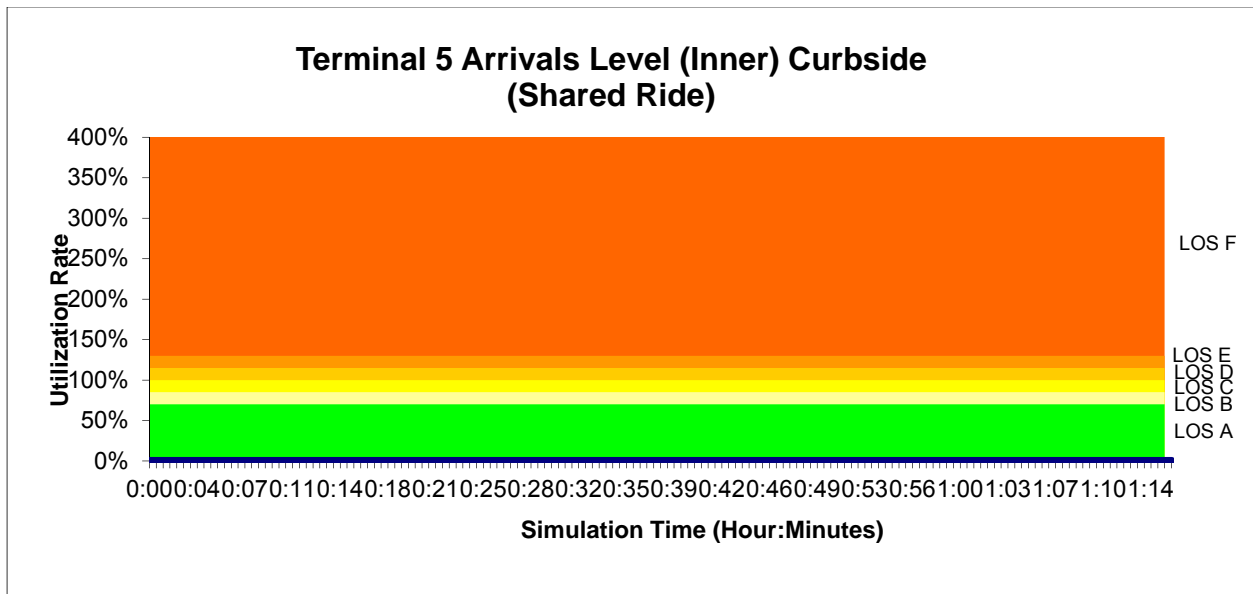
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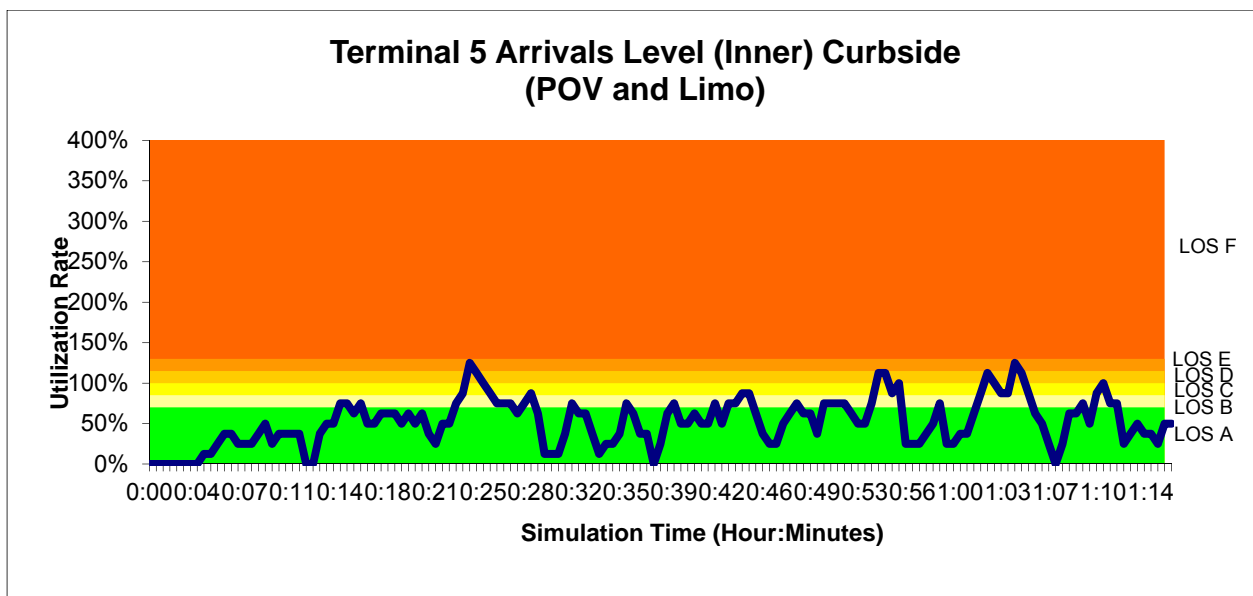
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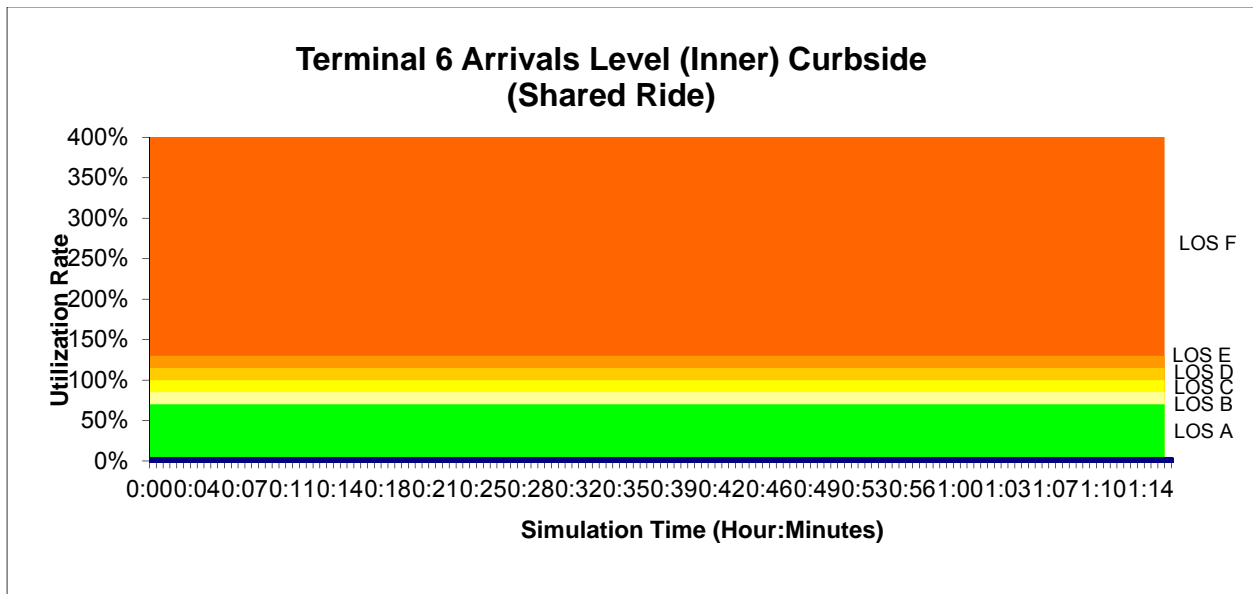
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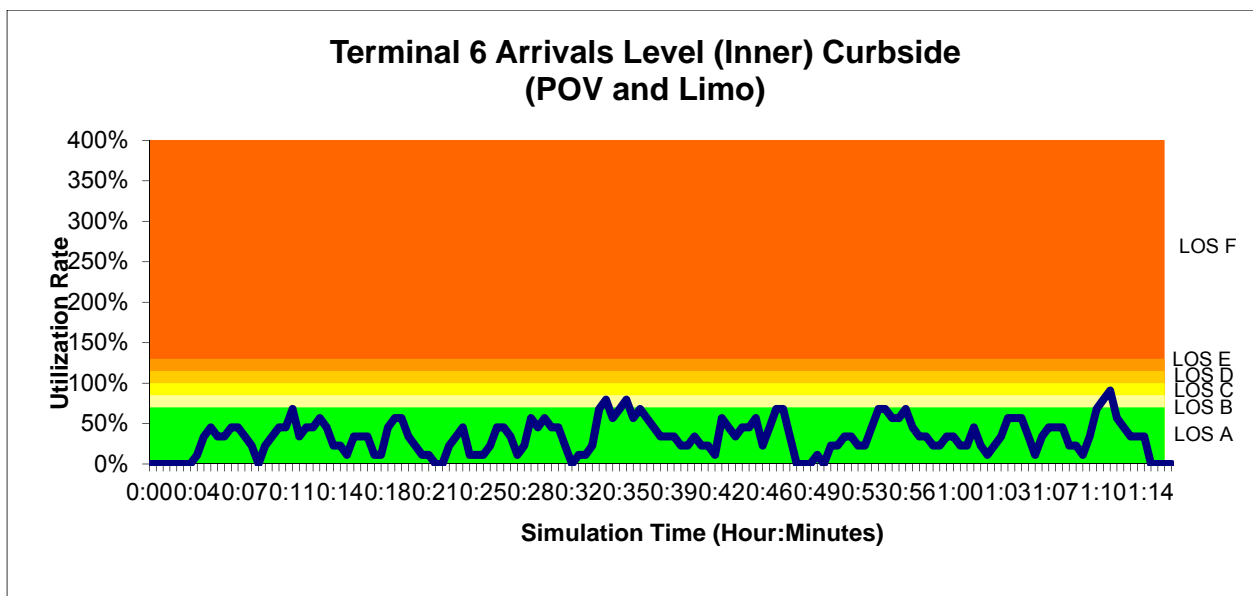
### Arrivals Level -Future Without Program



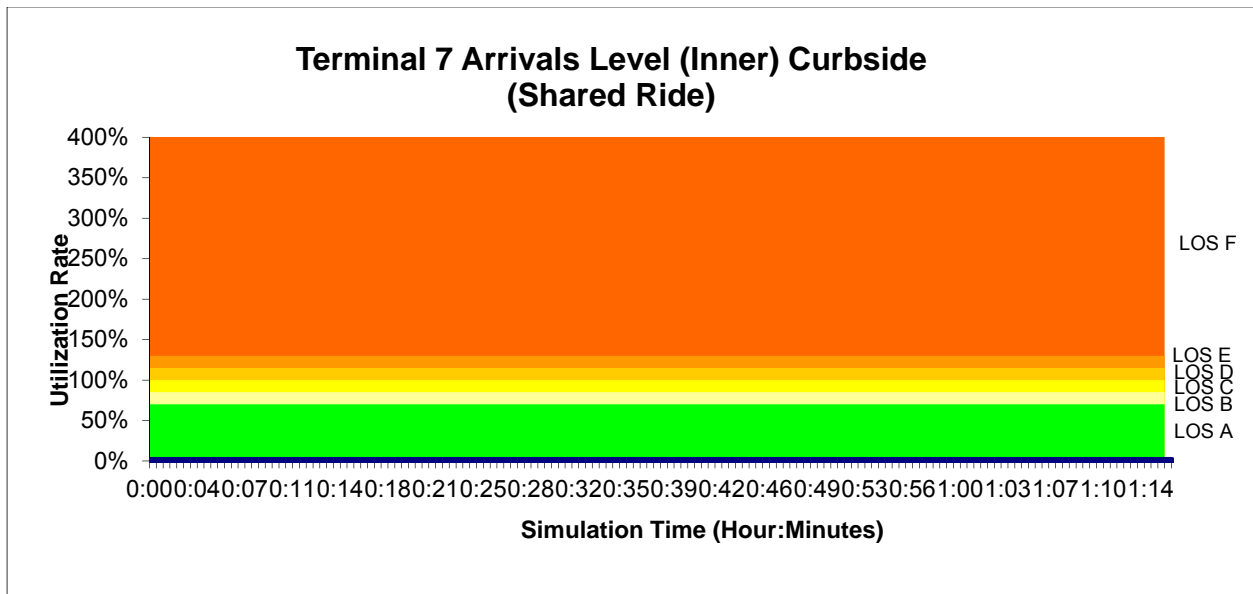
## Appendix E2- Curbside Utilization



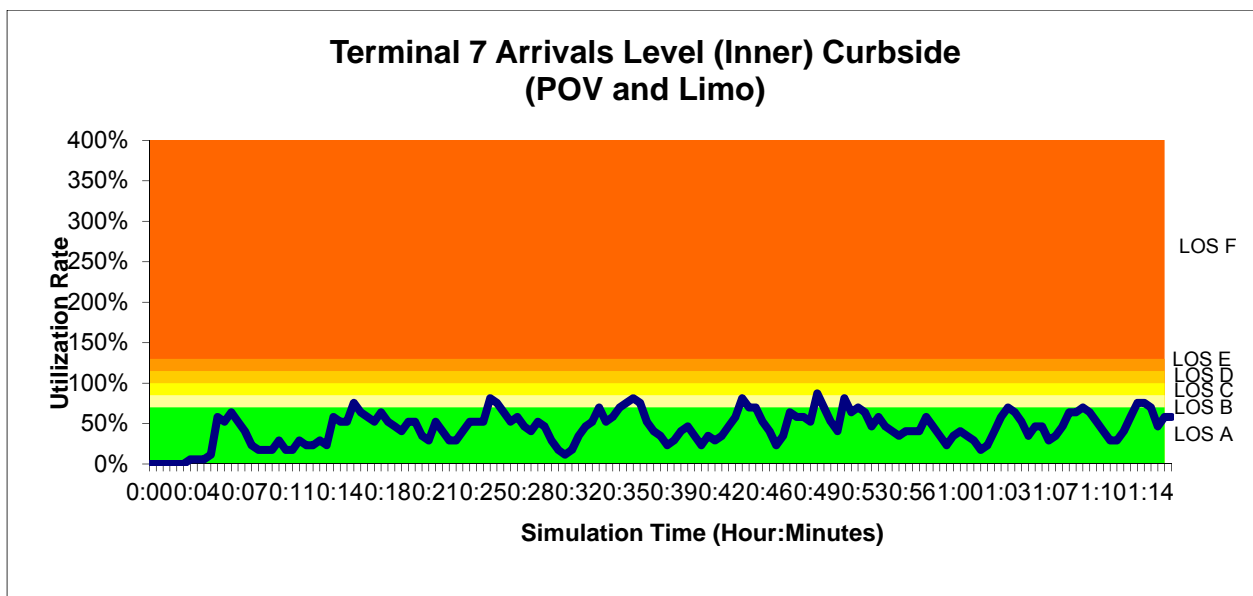
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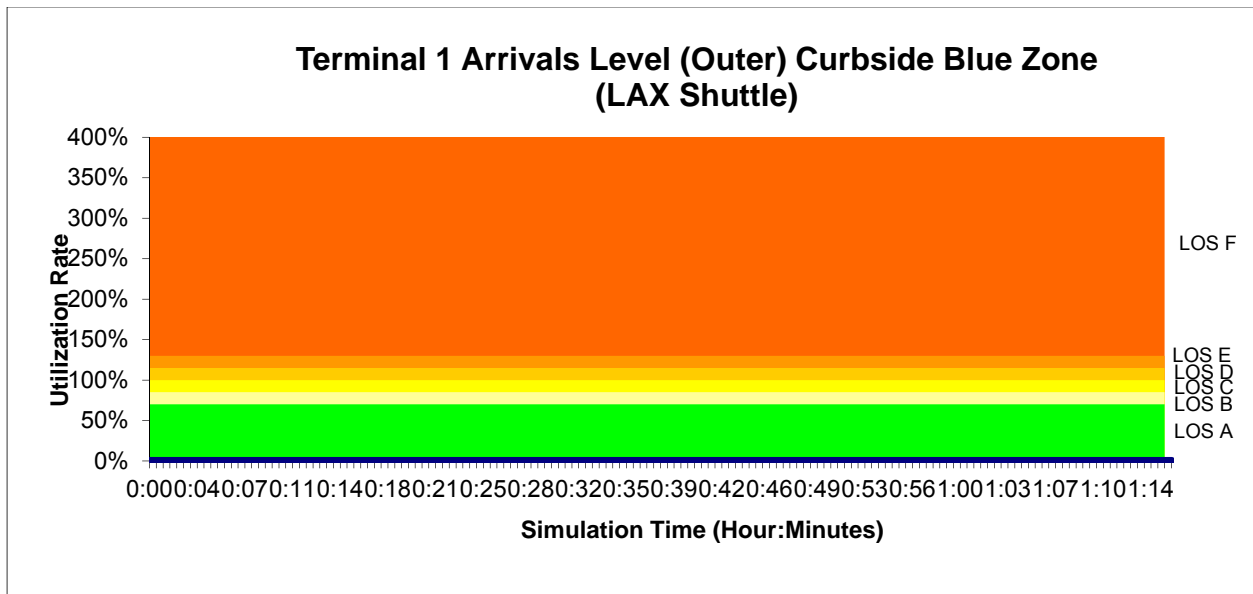
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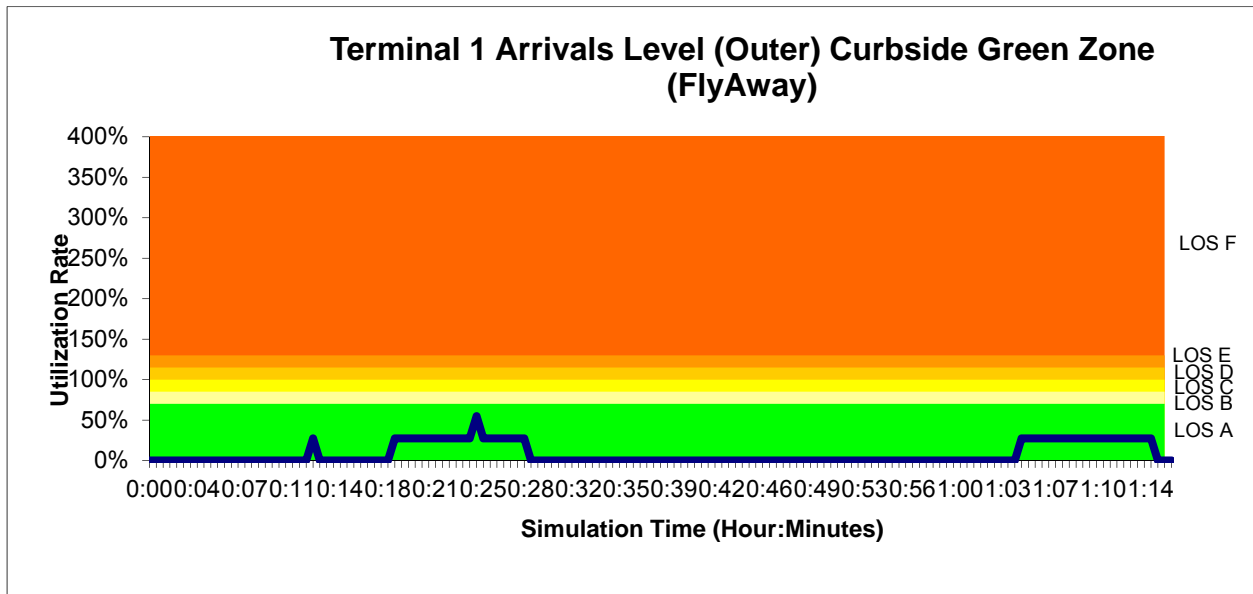
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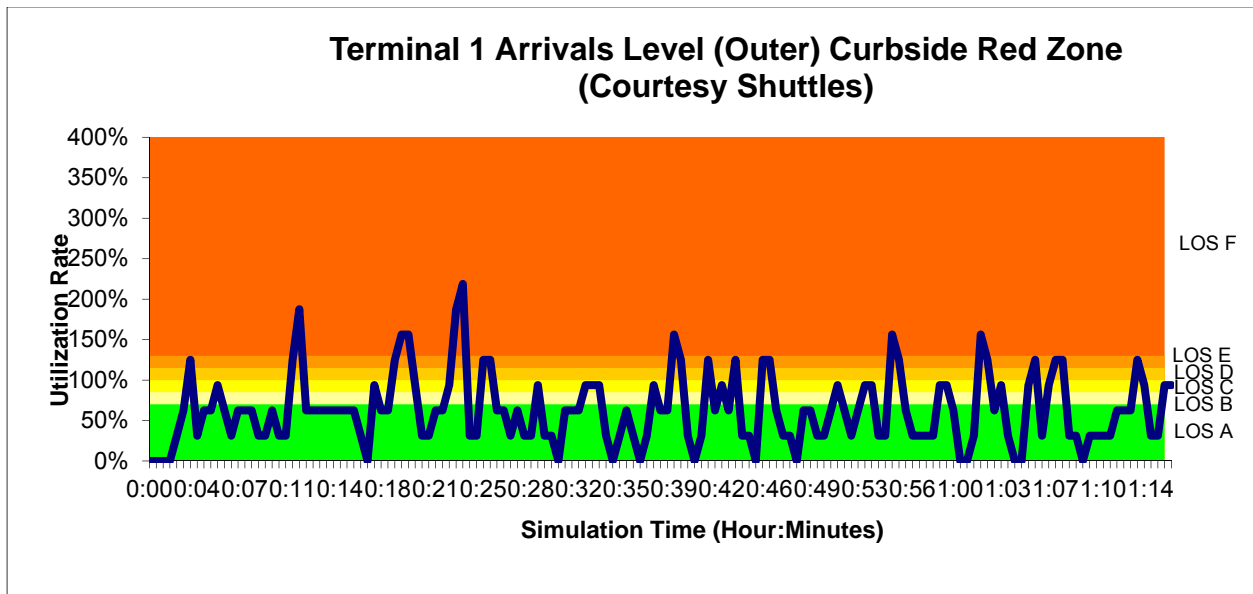
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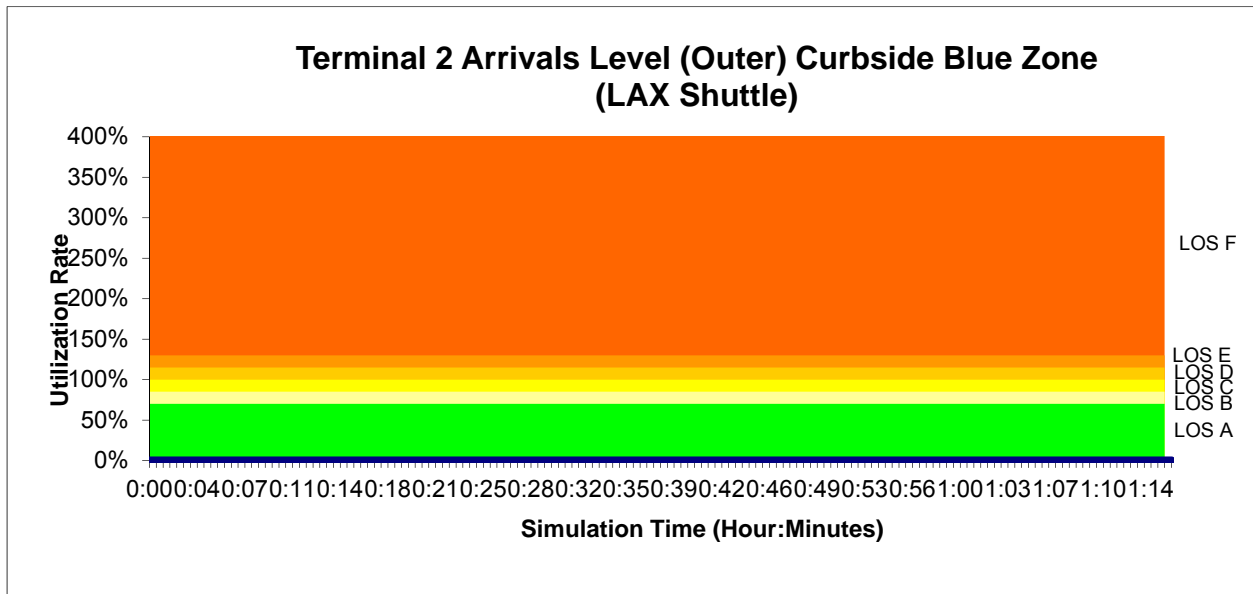
Arrivals Level -Future Without Program



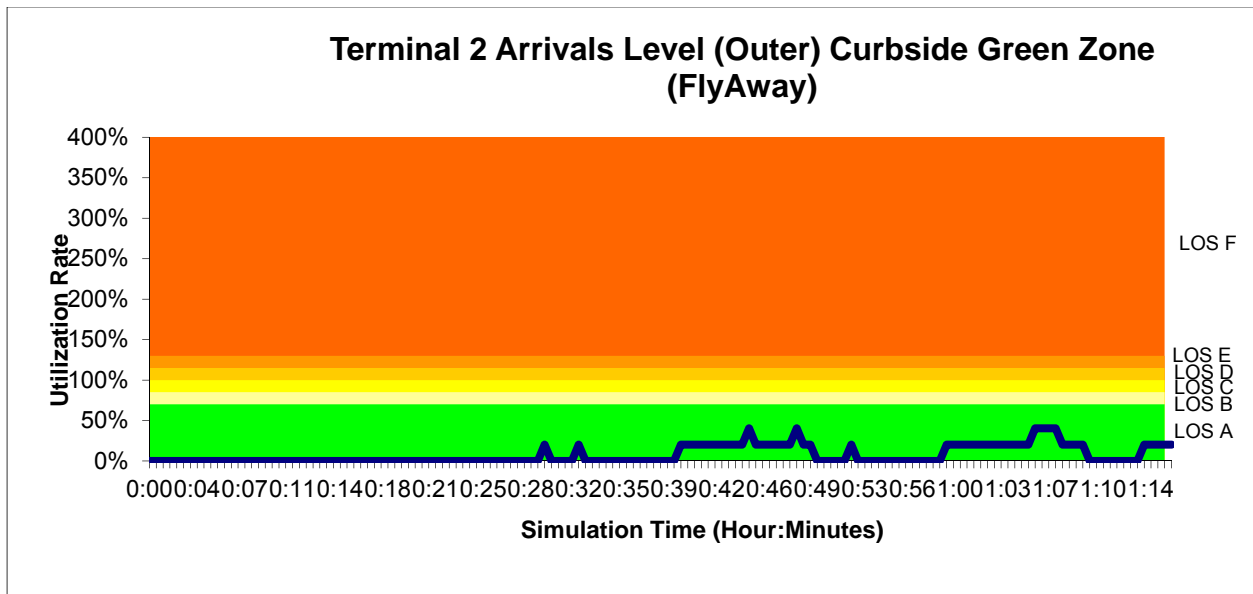
## Appendix E2- Curbside Utilization



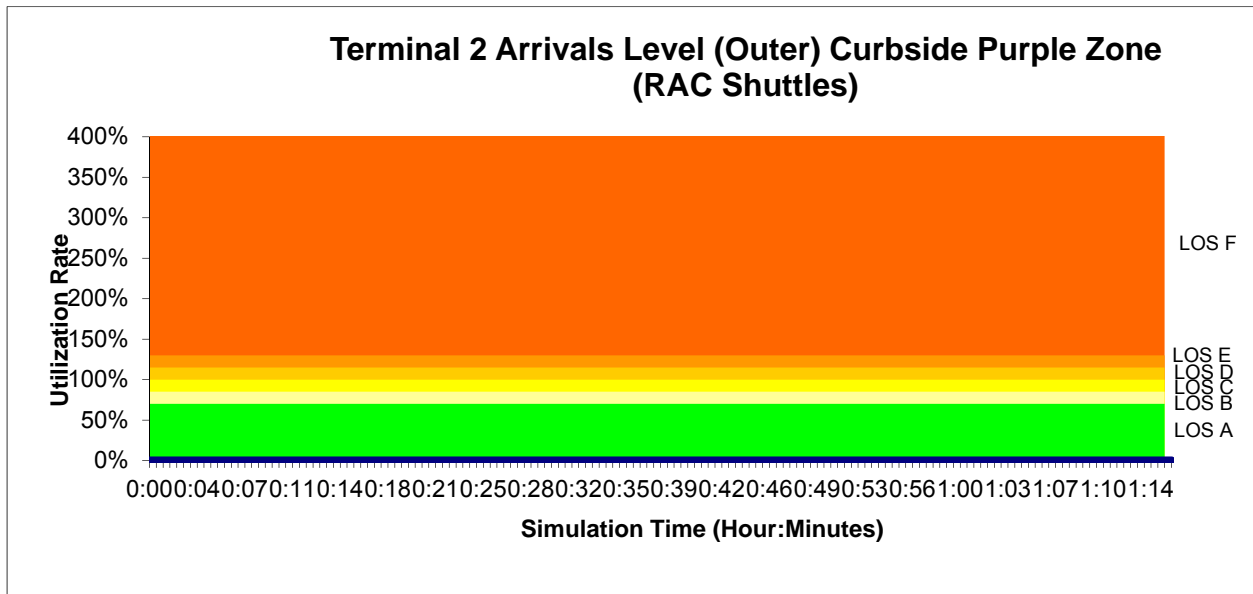
### Arrivals Level -Future Without Program



## Appendix E2- Curbside Utilization

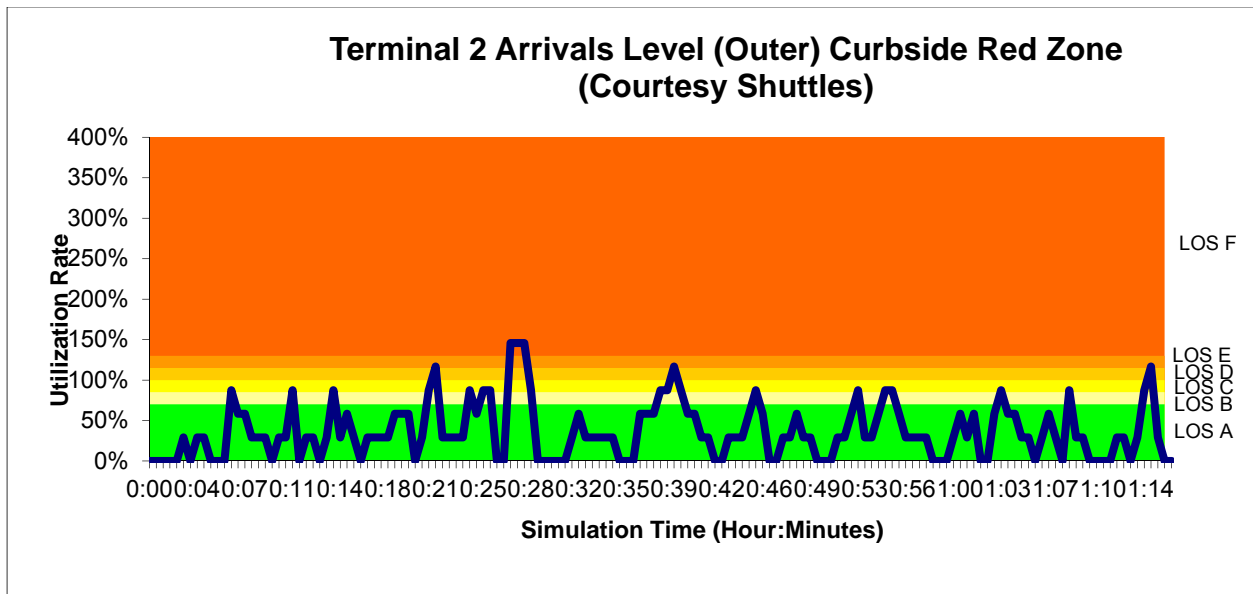


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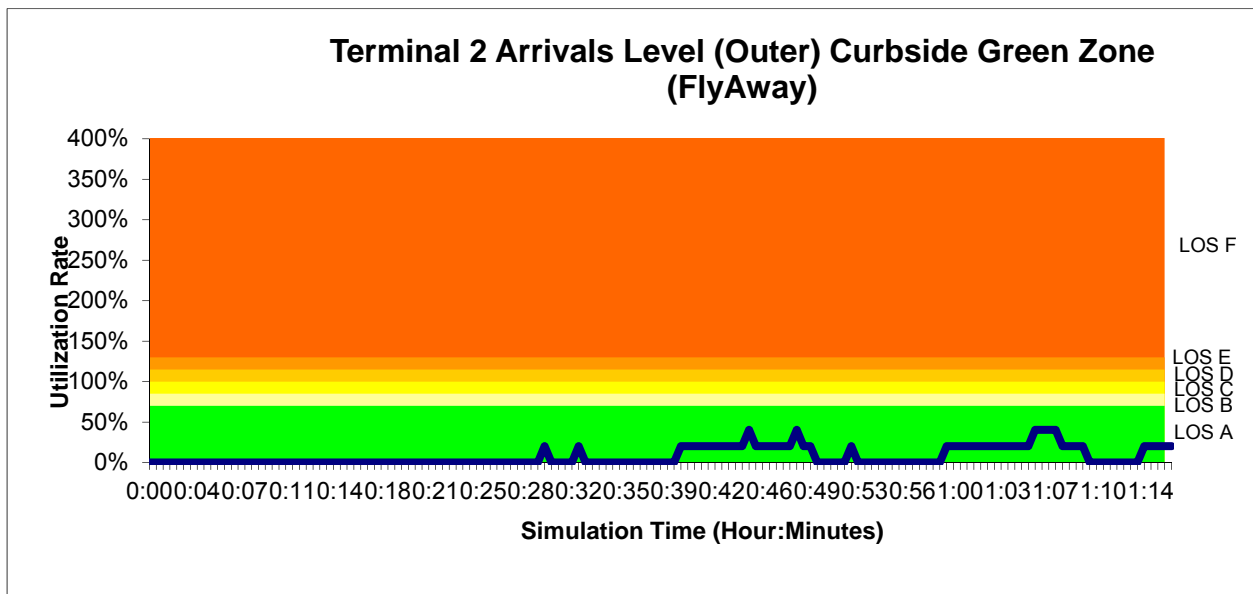




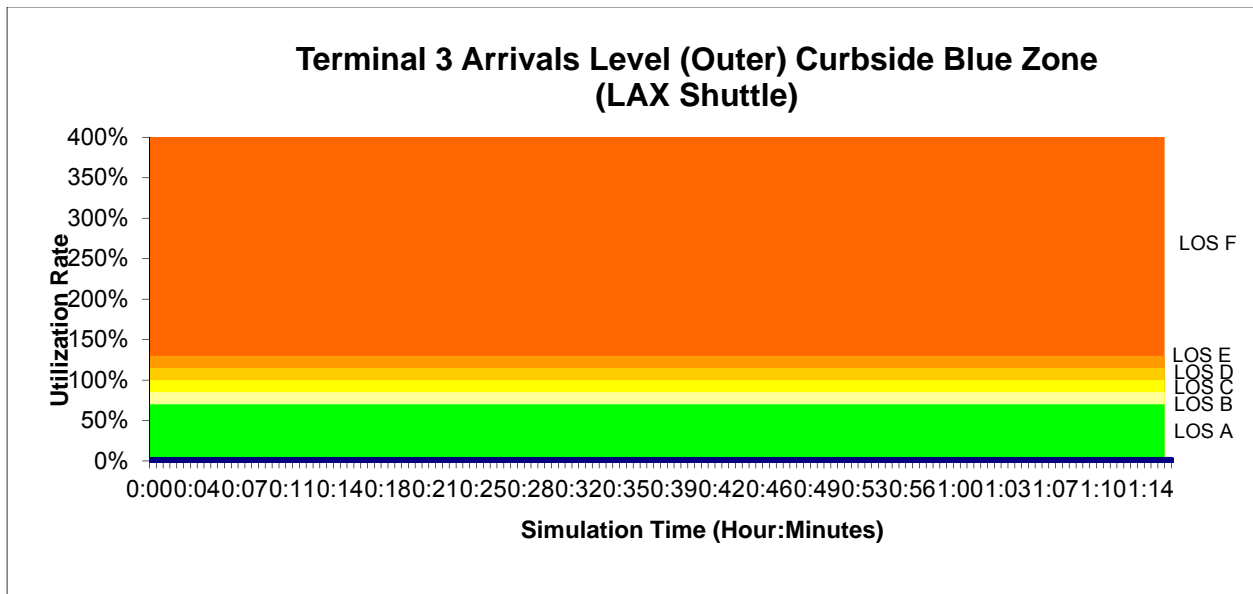
## Appendix E2- Curbside Utilization



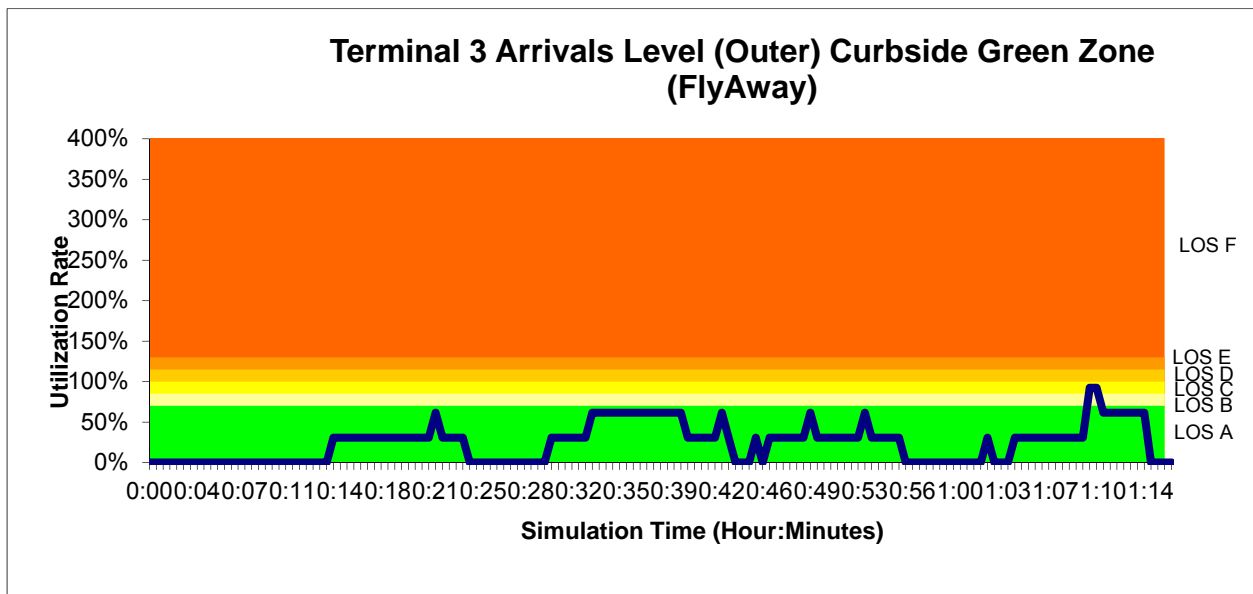
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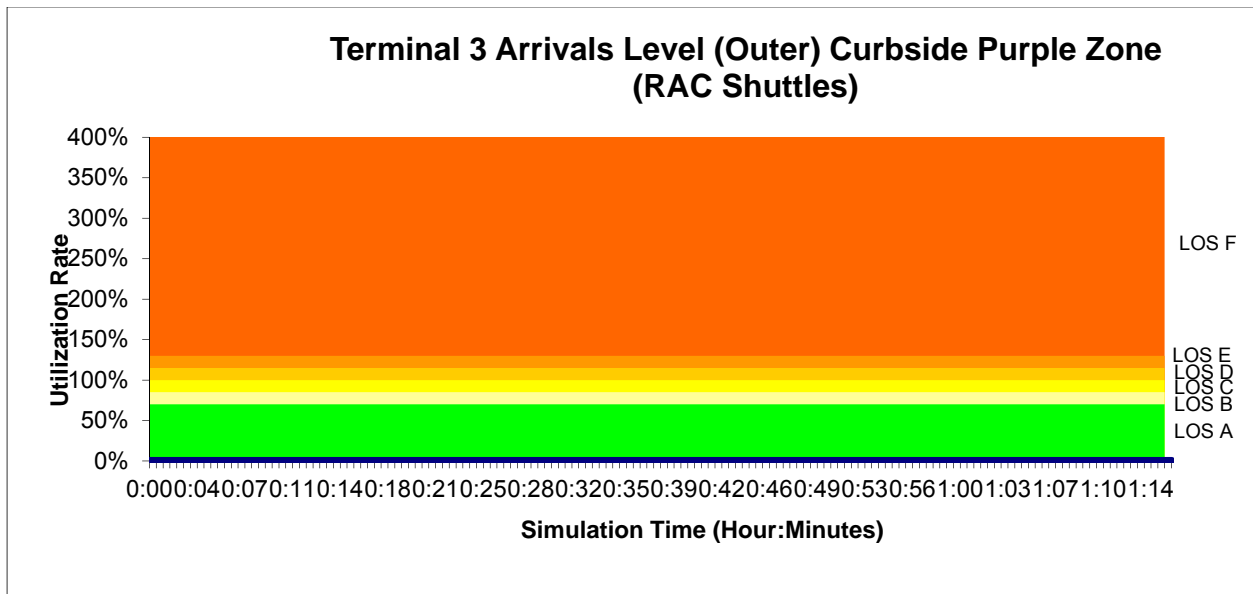
## Appendix E2- Curbside Utilization



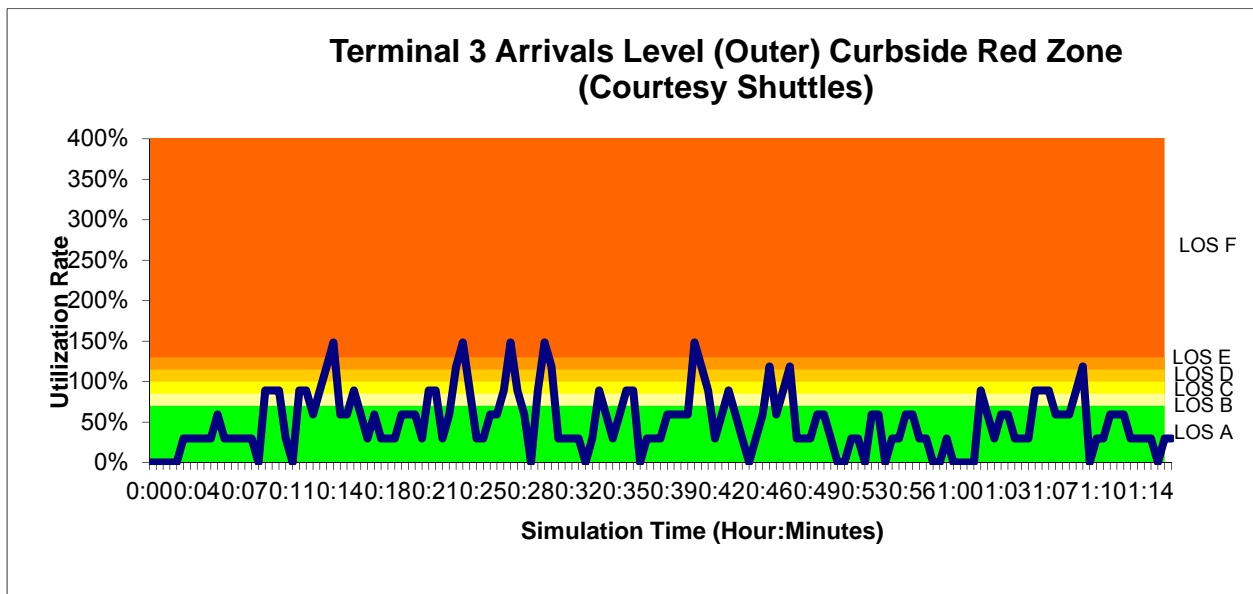
Arrivals Level -Future Without Program



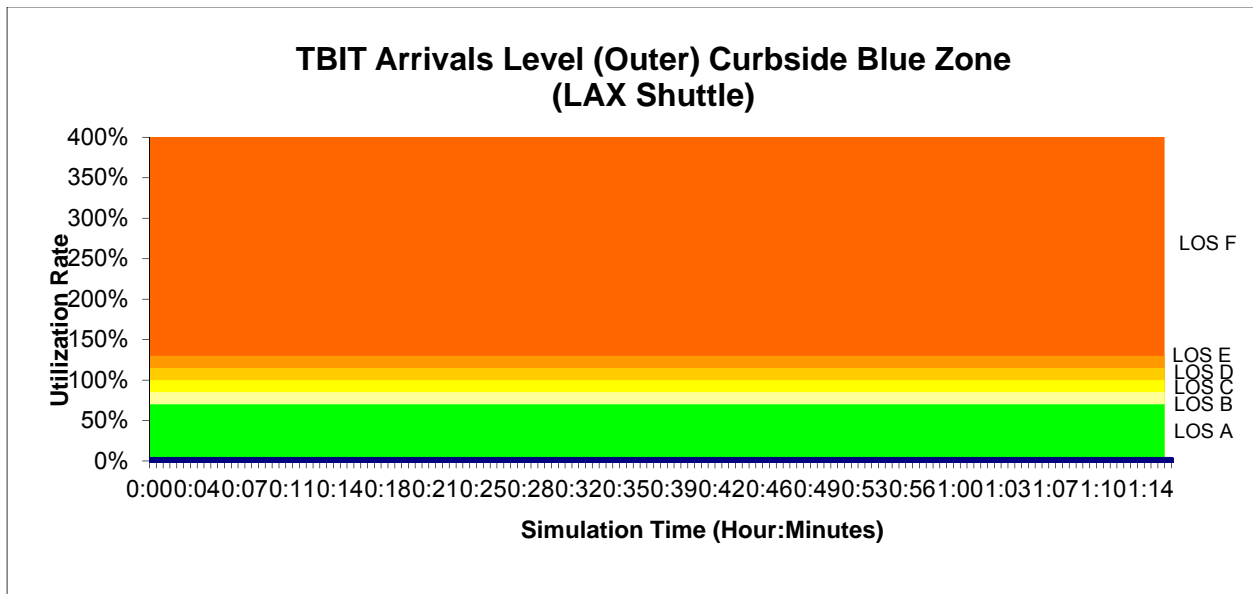
## Appendix E2- Curbside Utilization



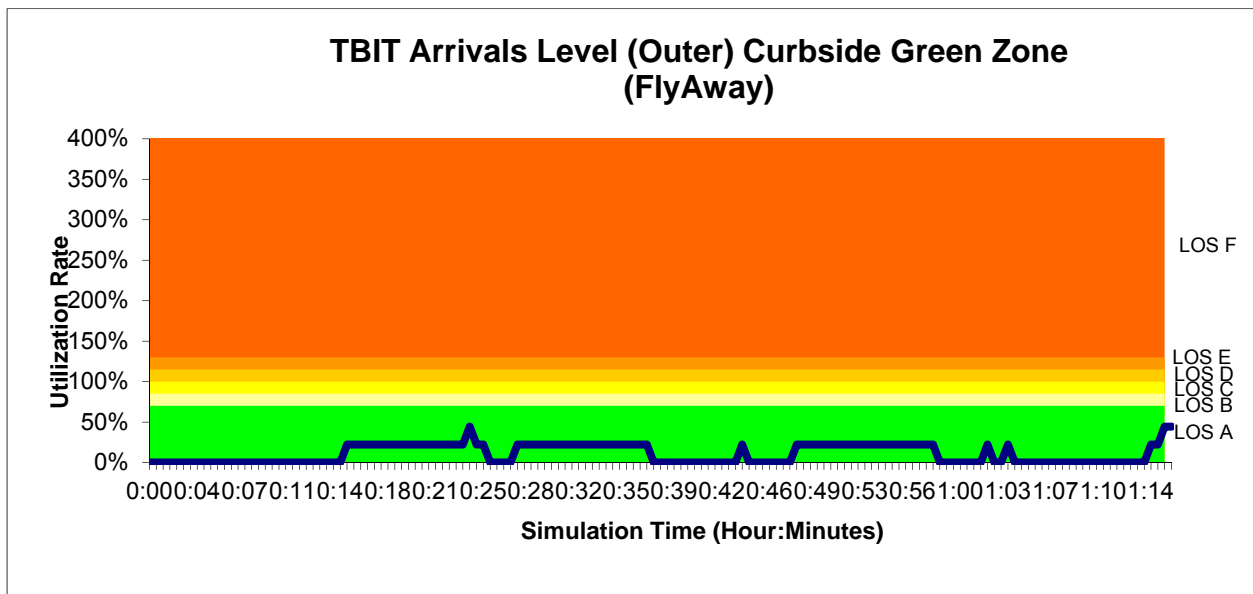
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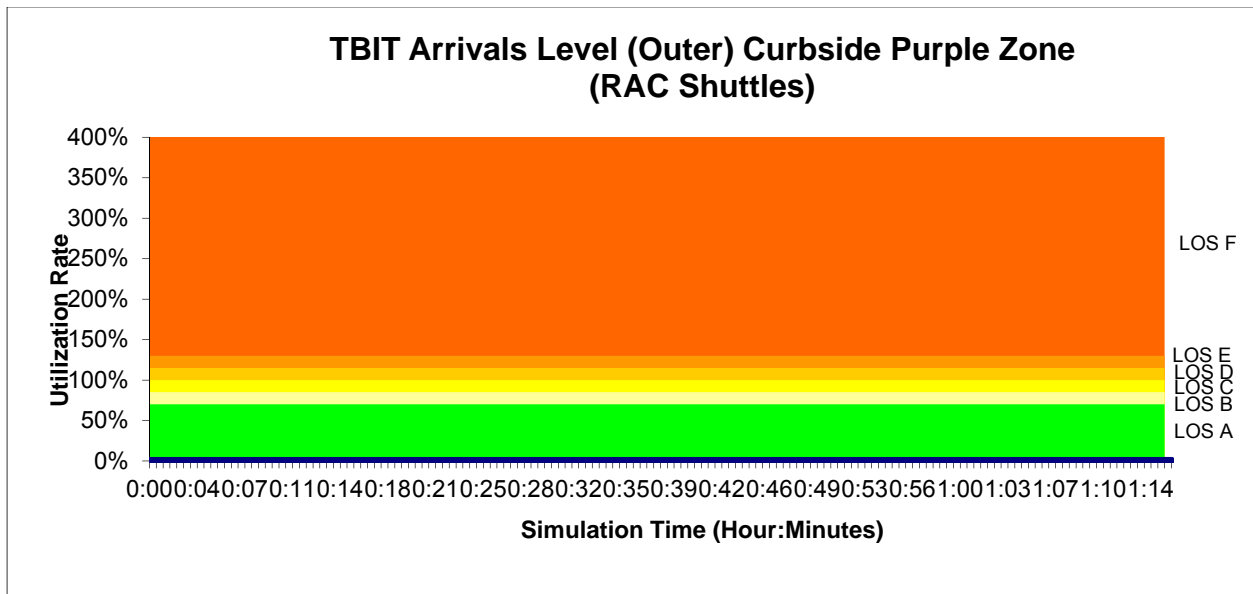
## Appendix E2- Curbside Utilization



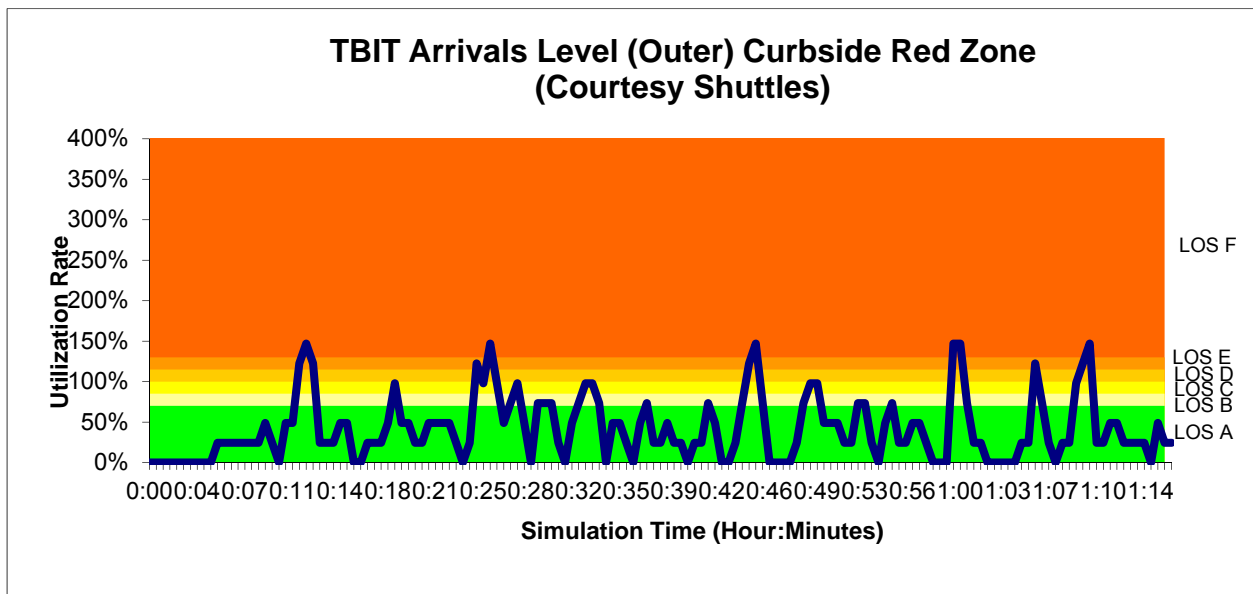
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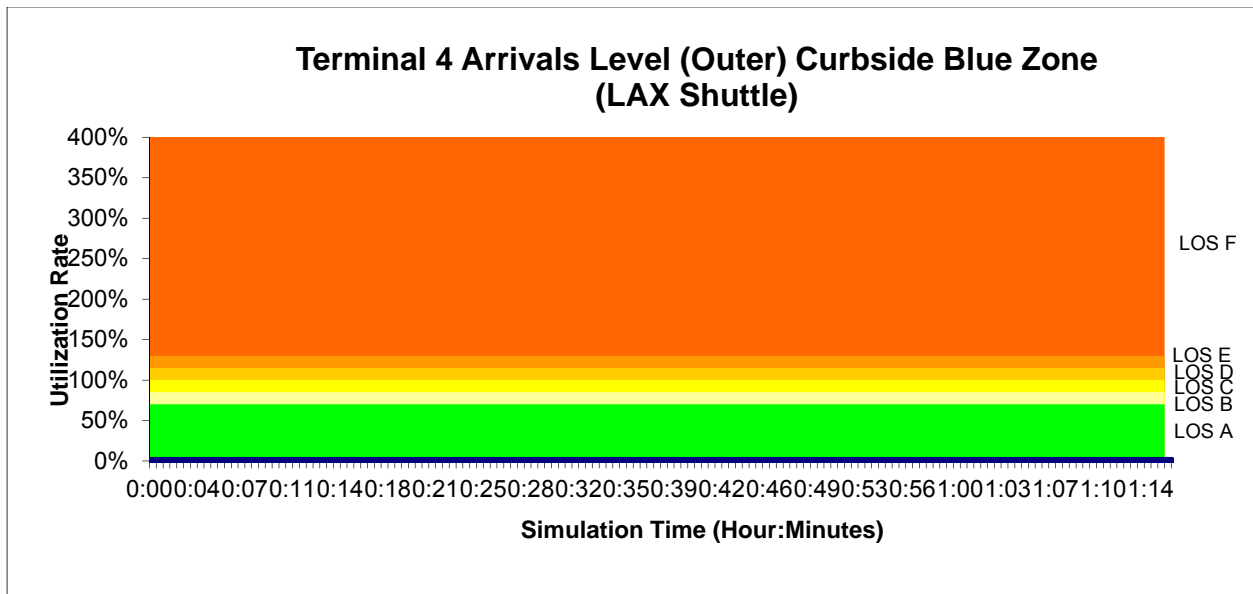
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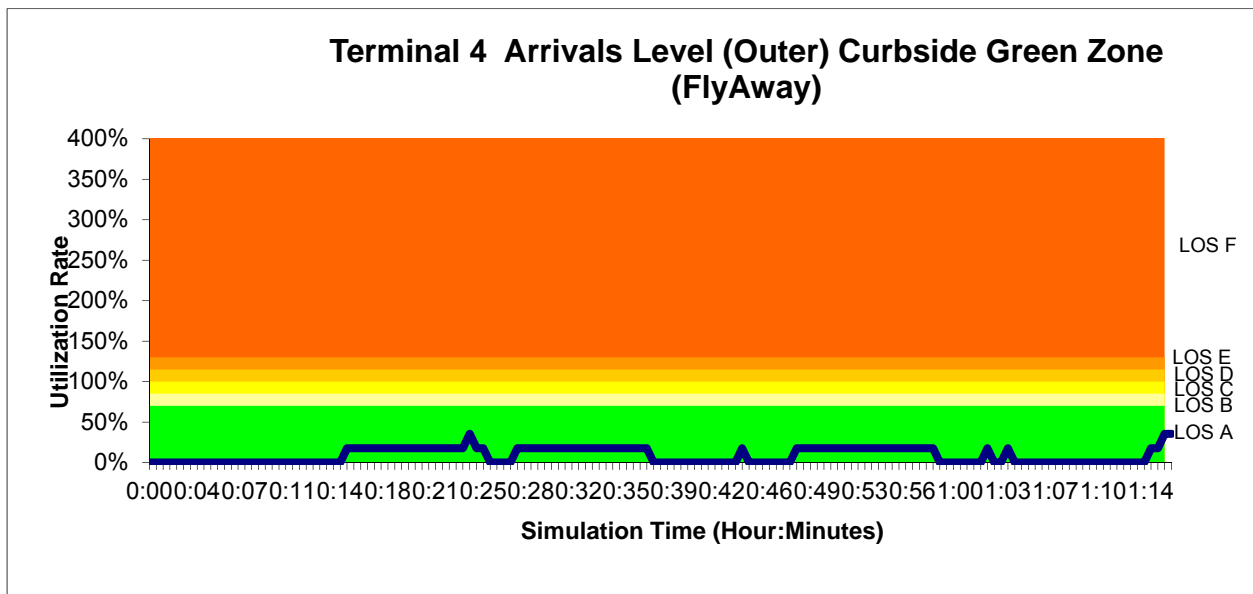
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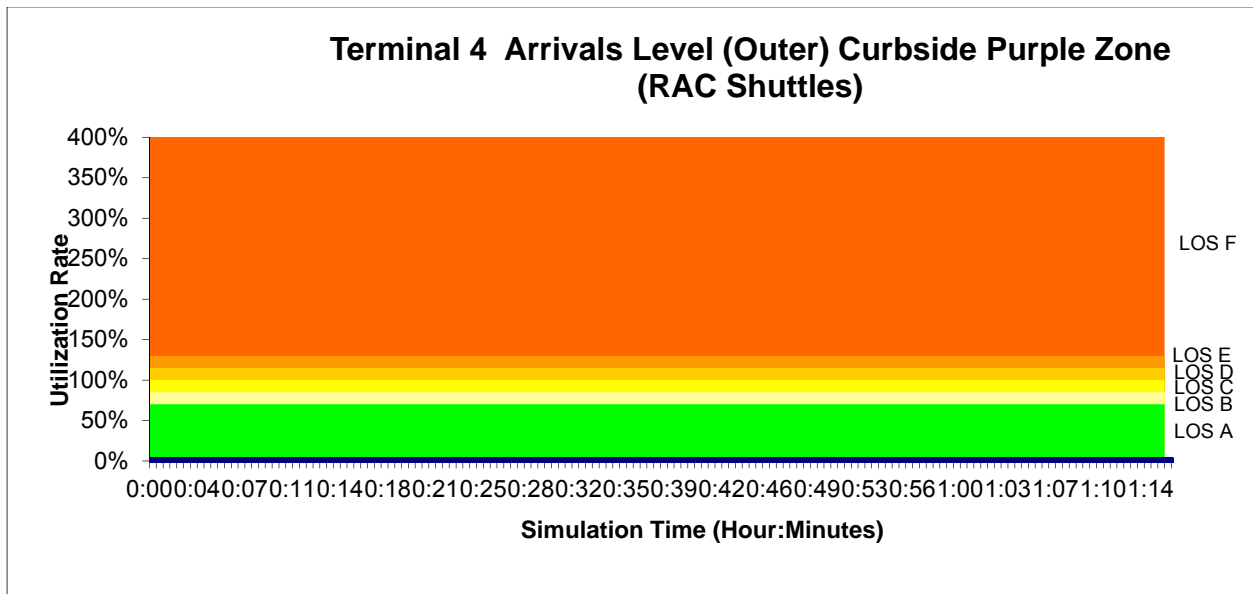
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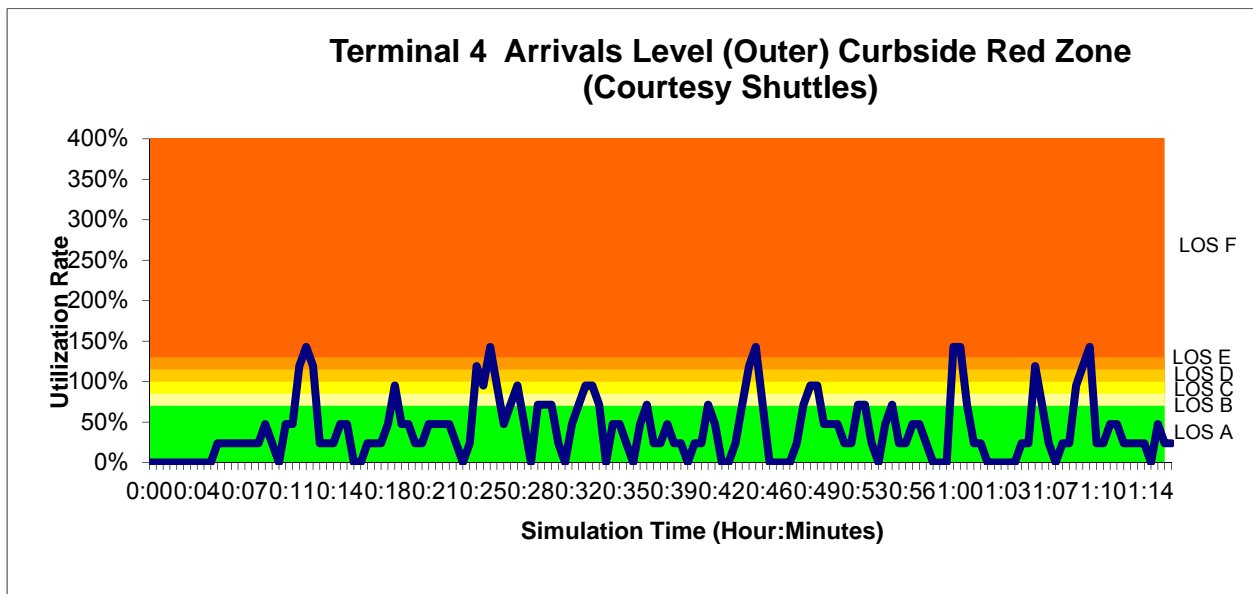
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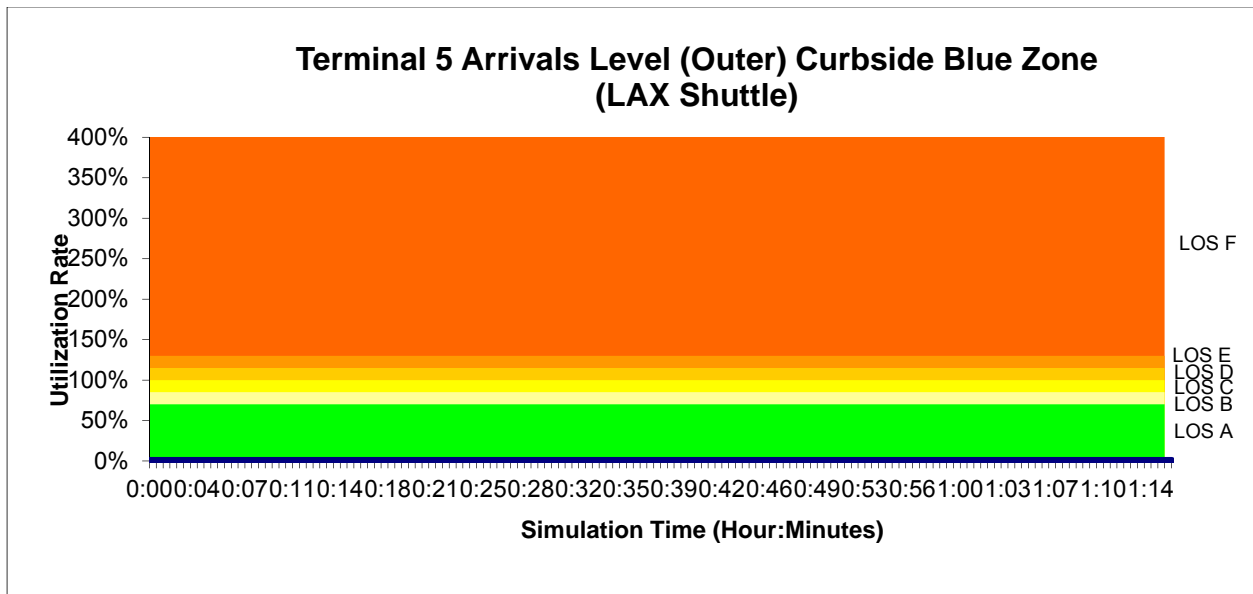
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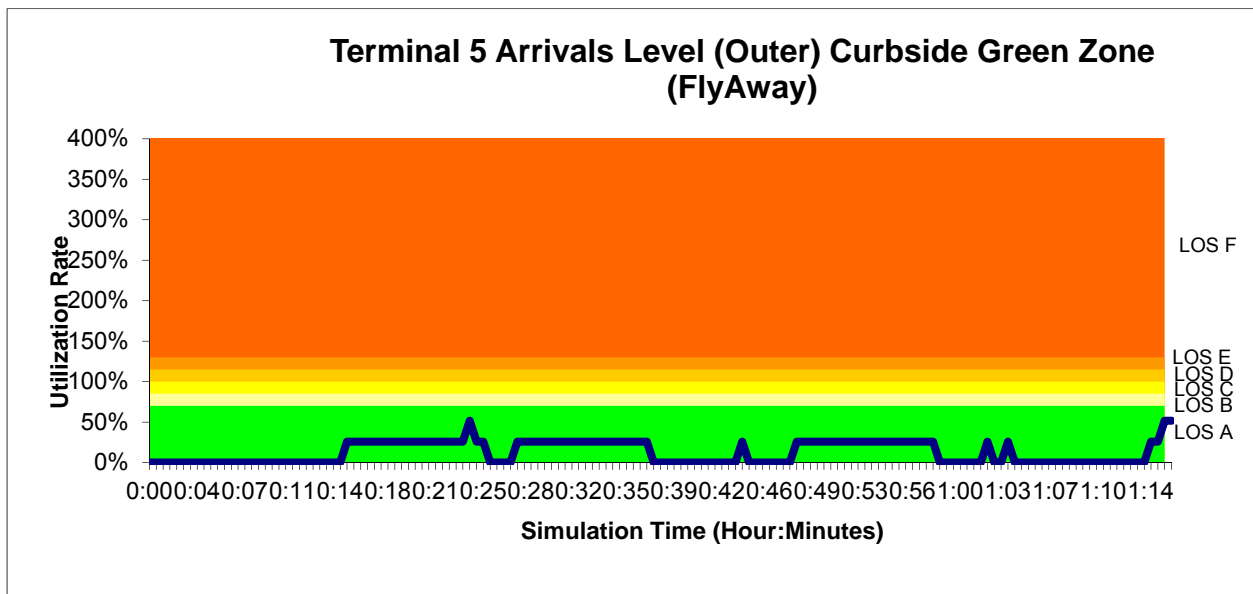
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## Appendix E2- Curbside Utilization

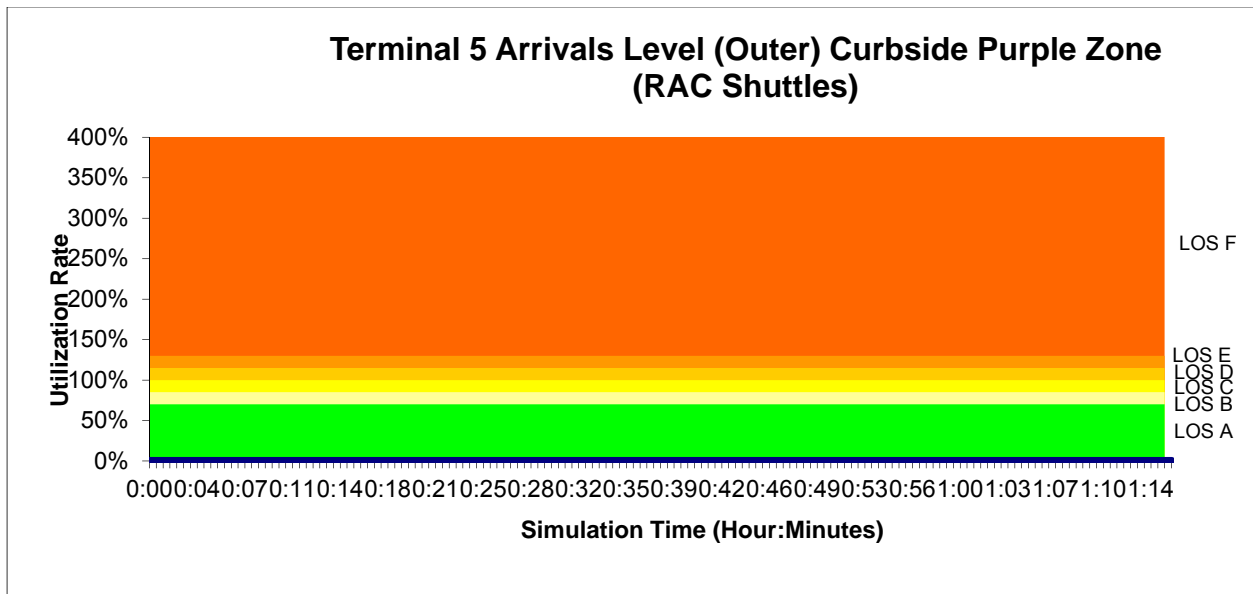


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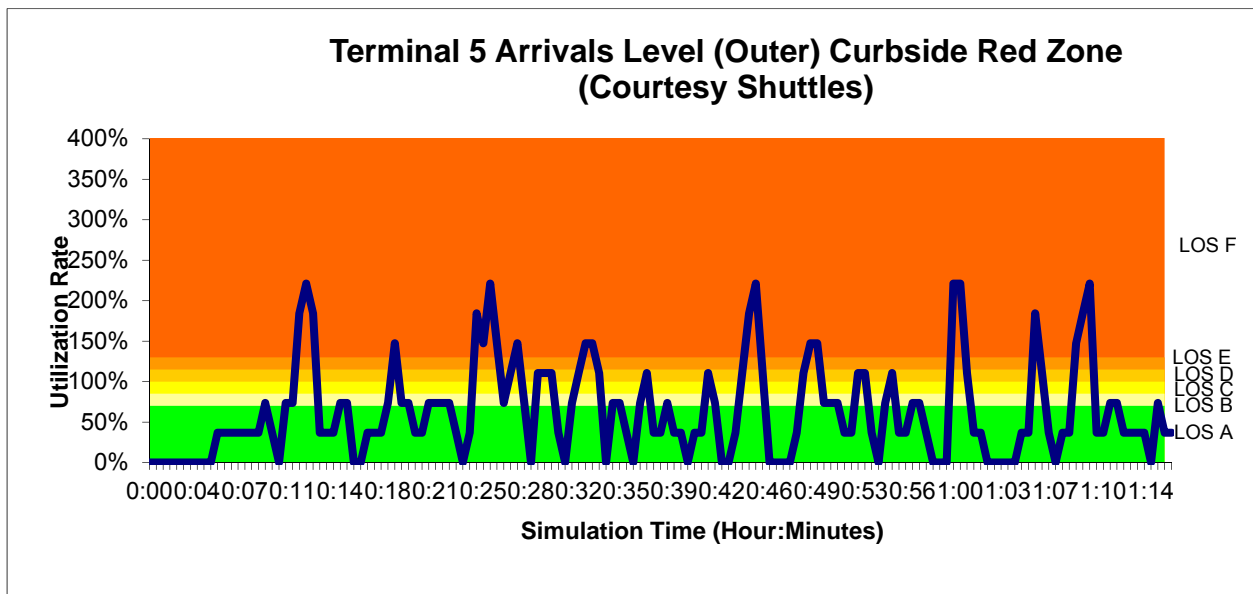




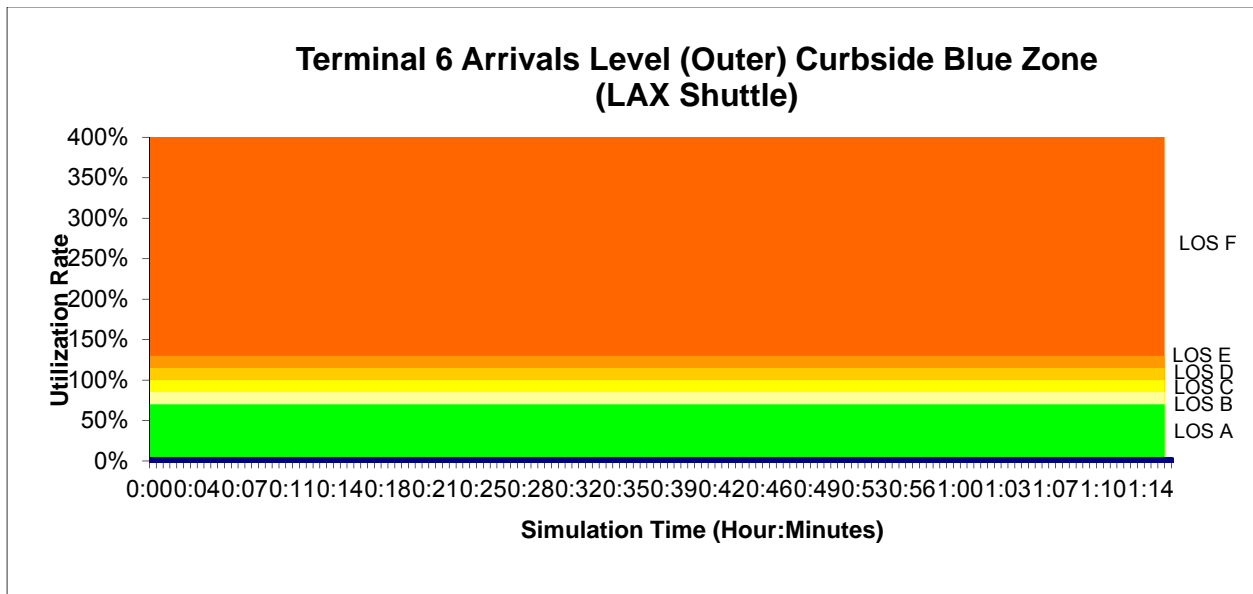
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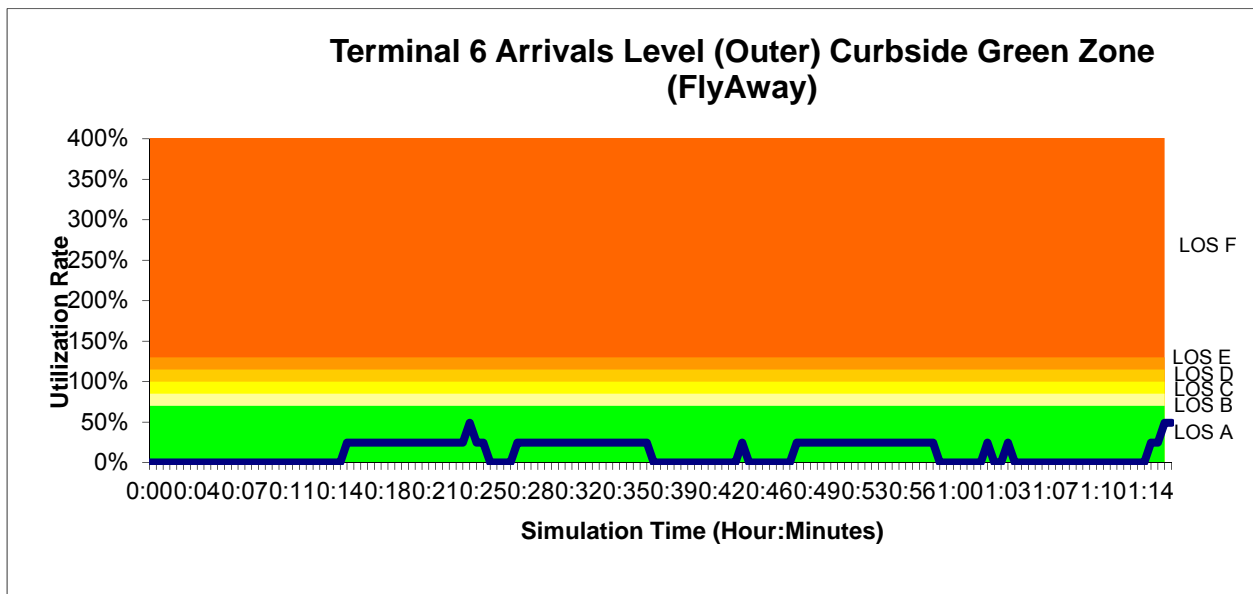
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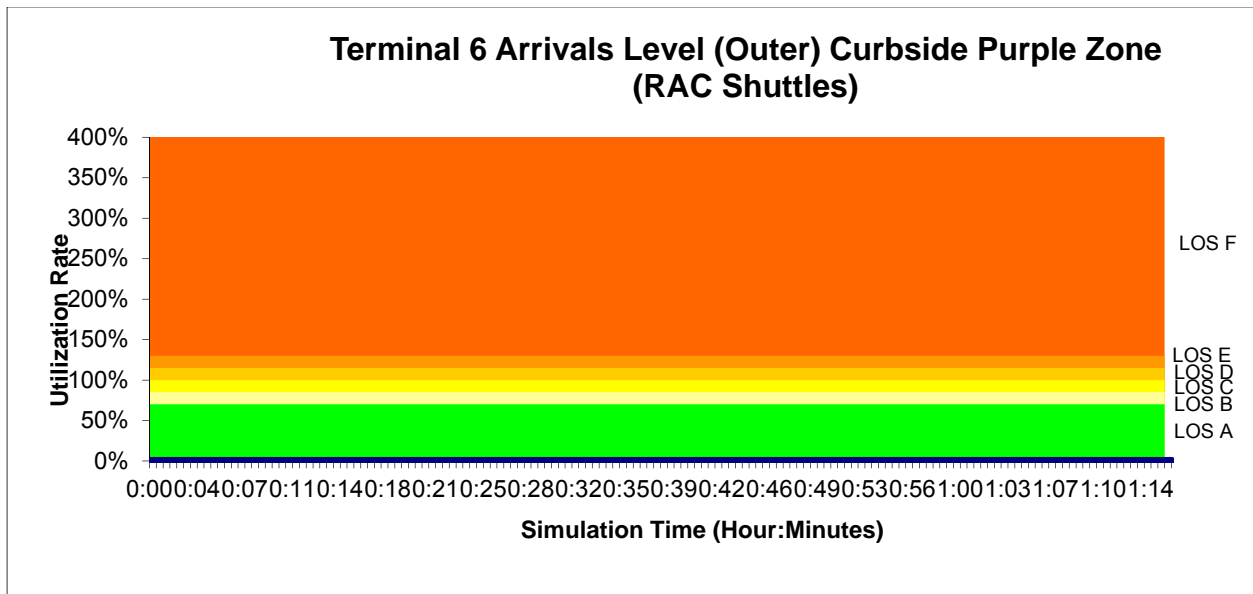
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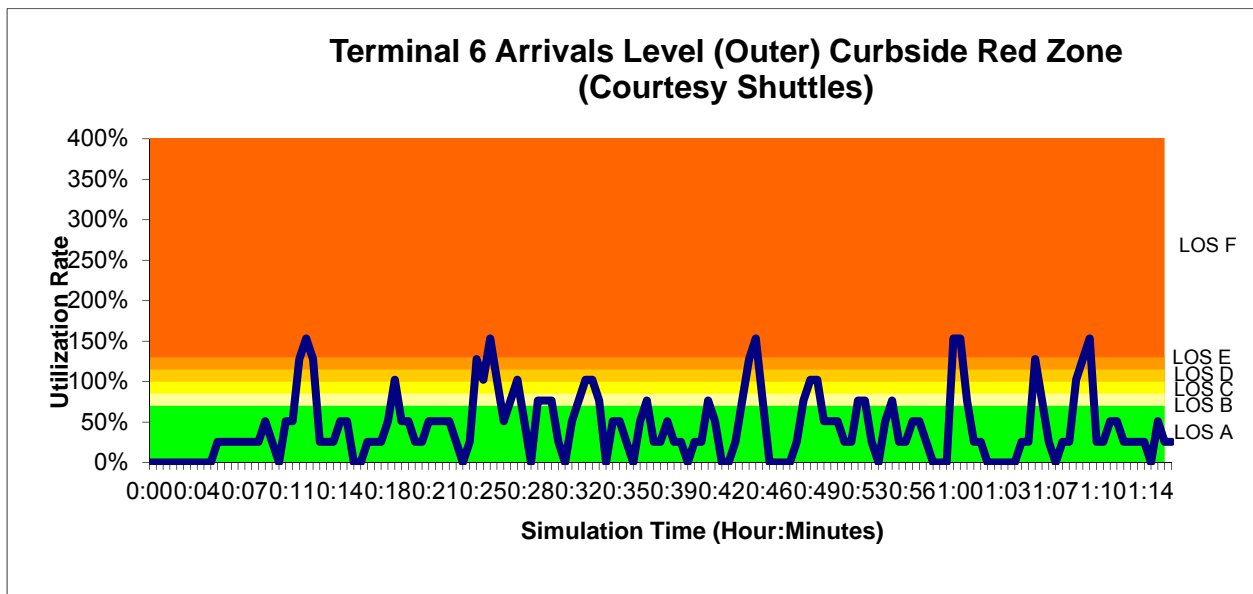
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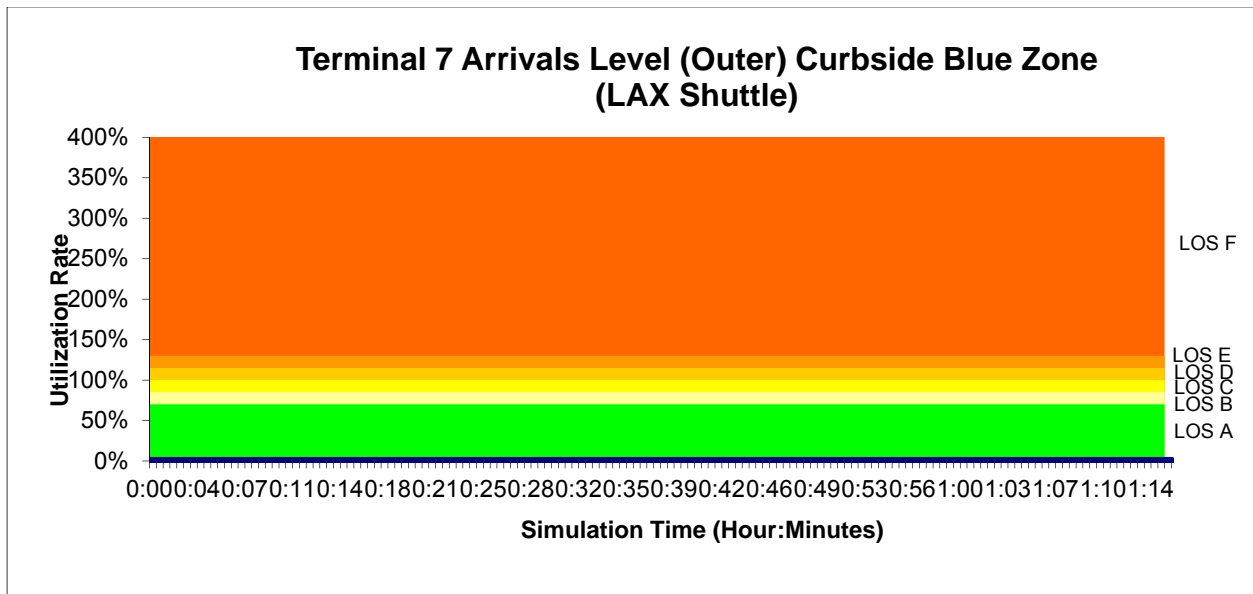
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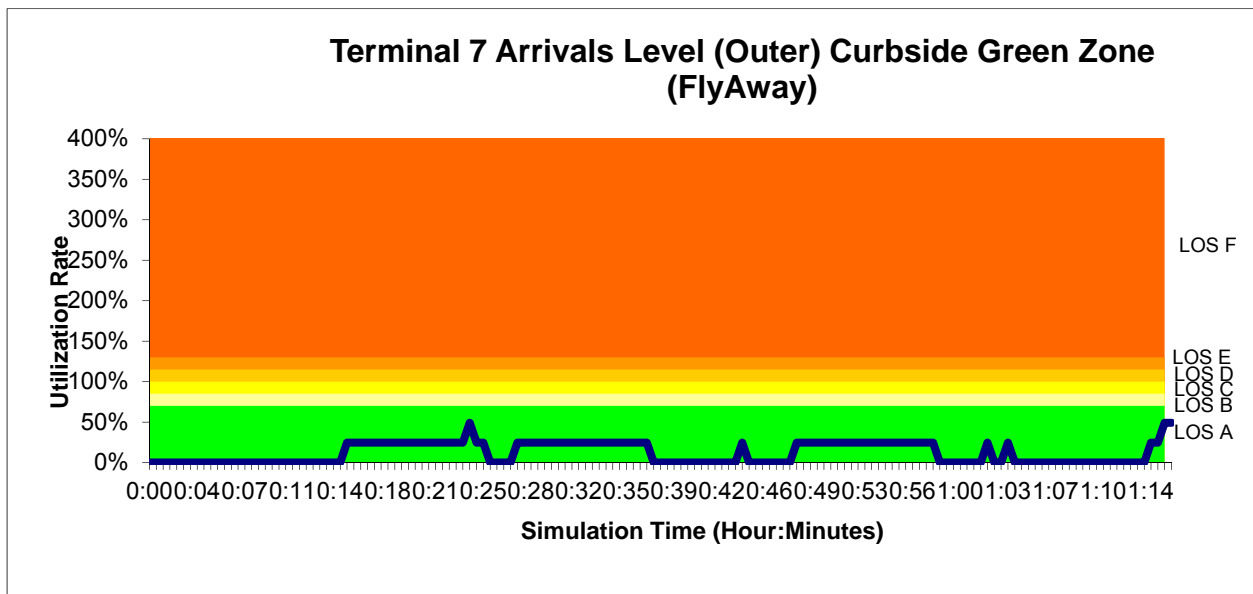
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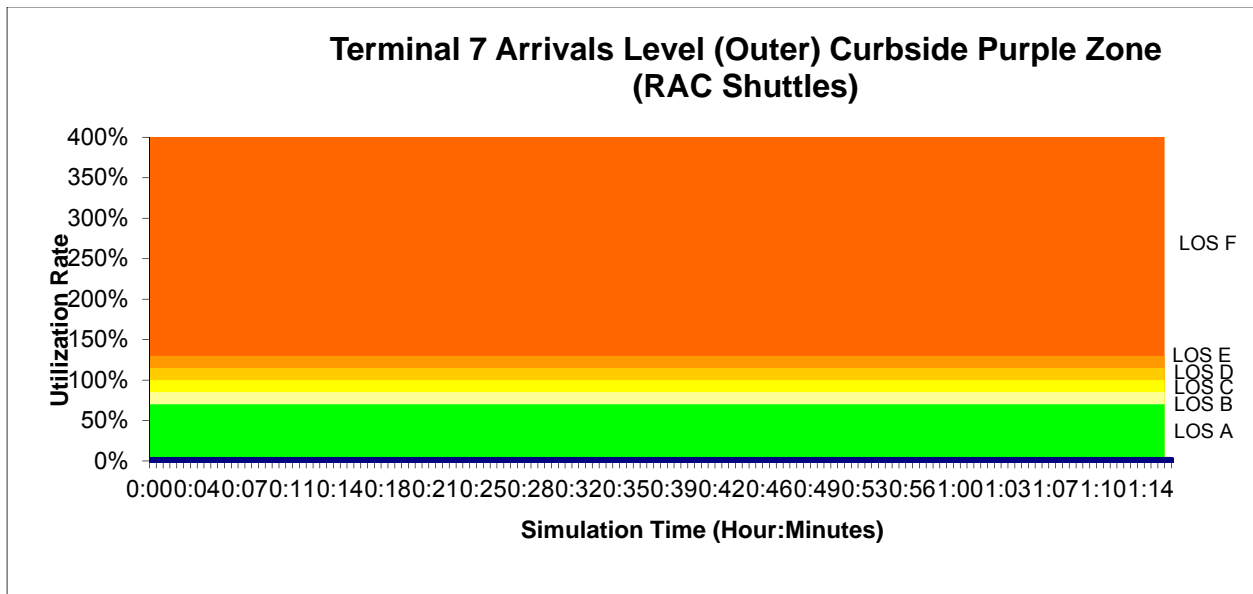
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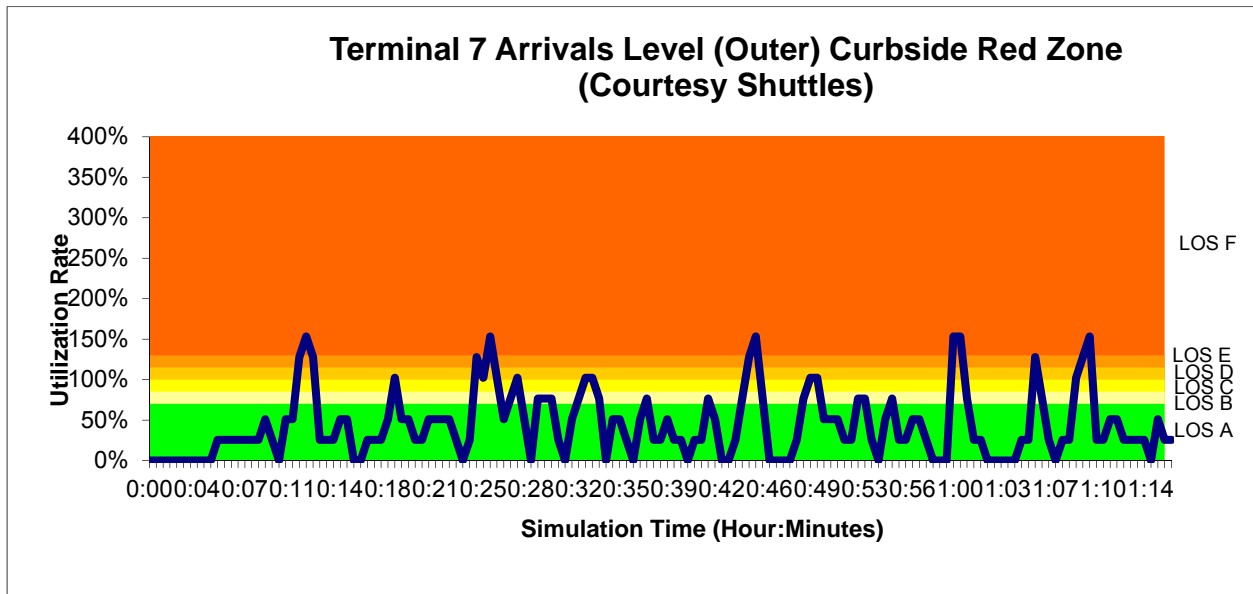
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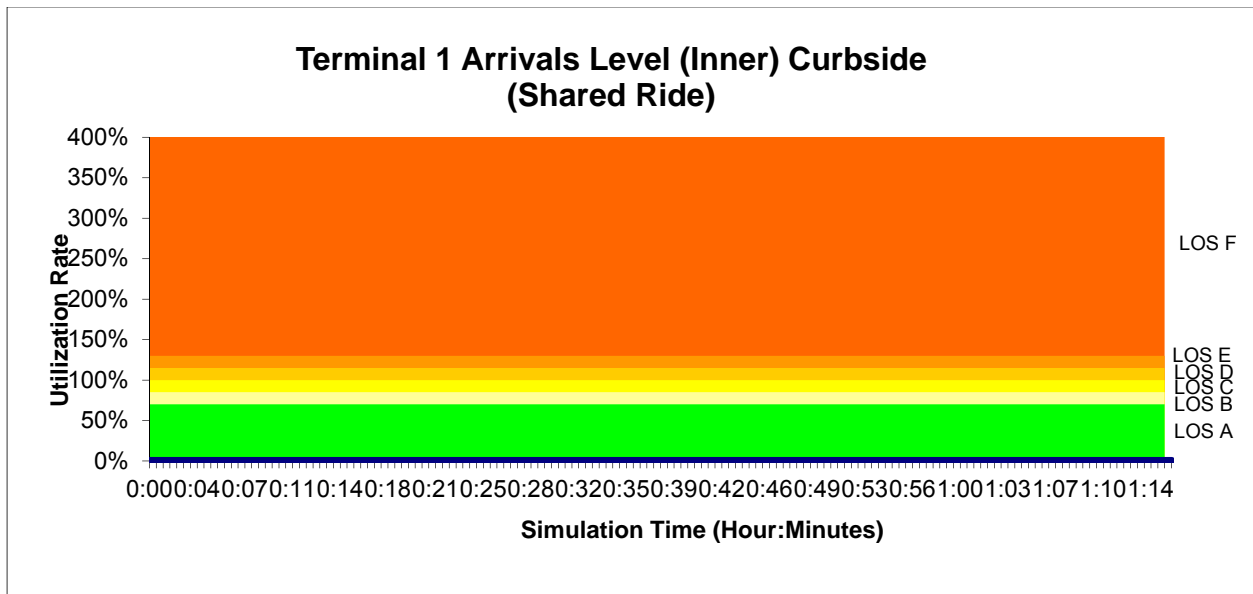
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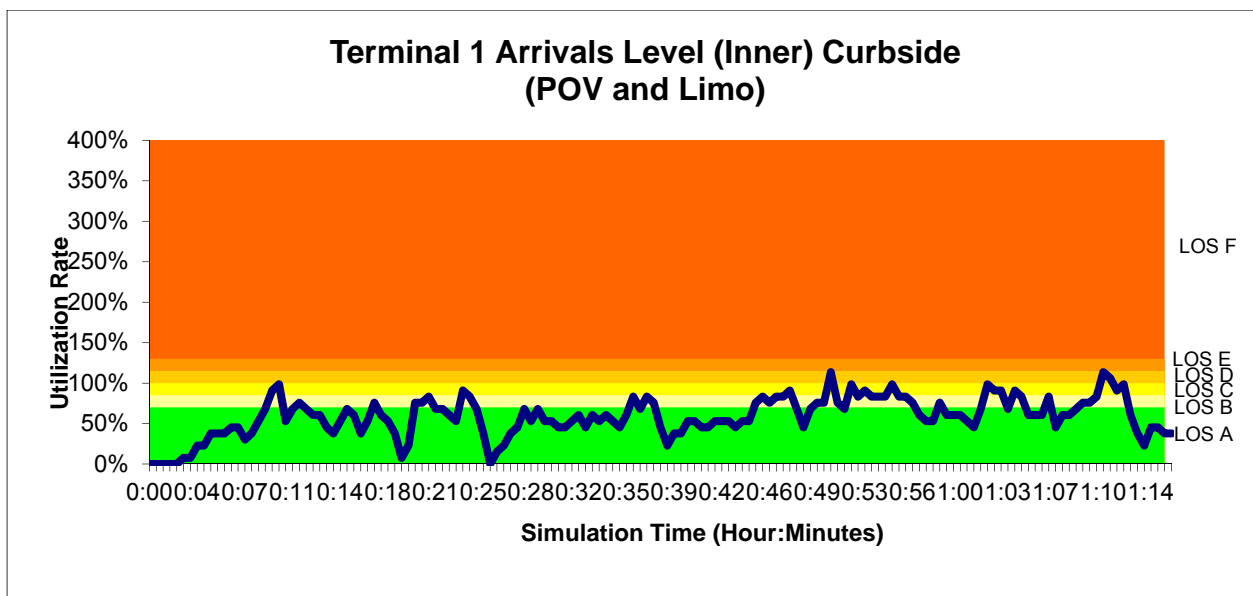
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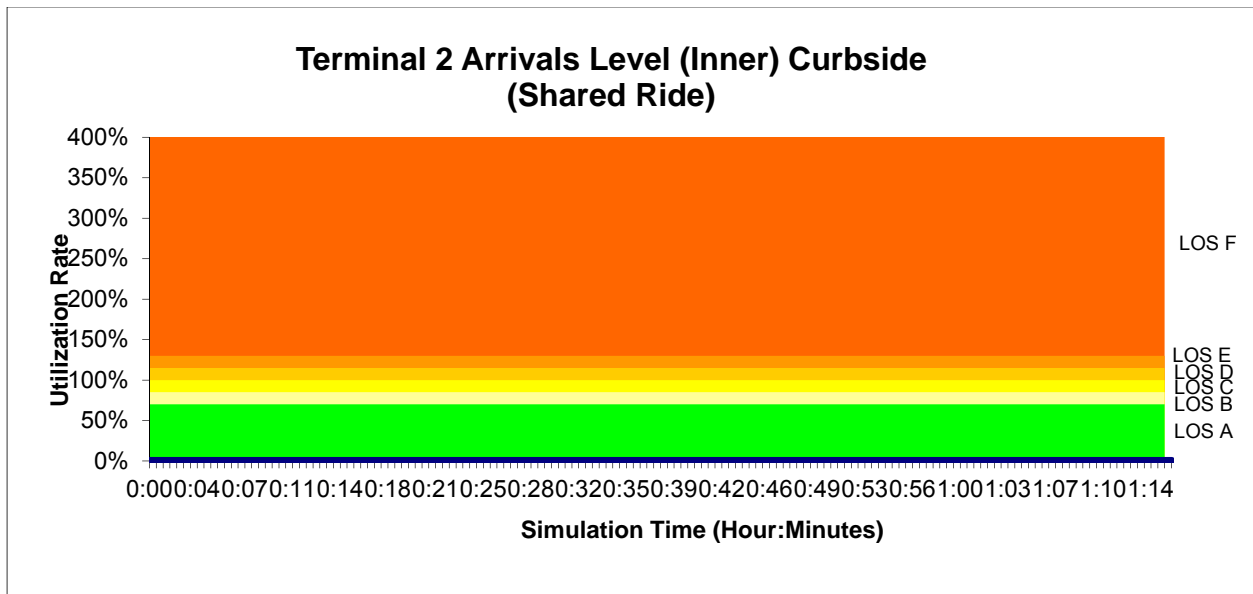
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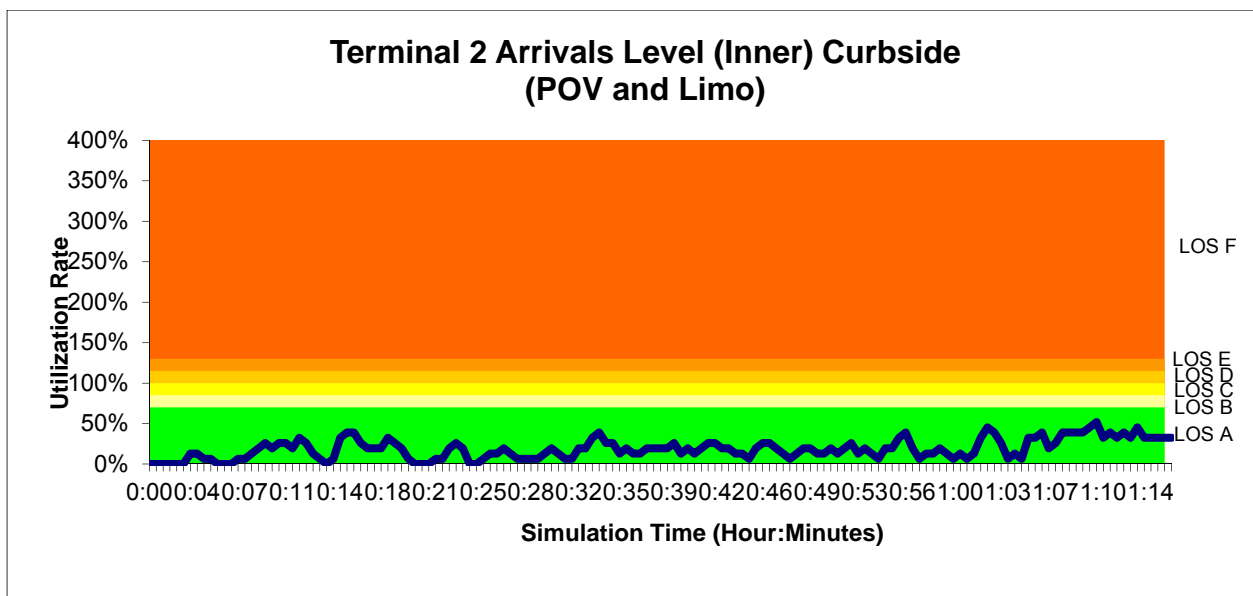
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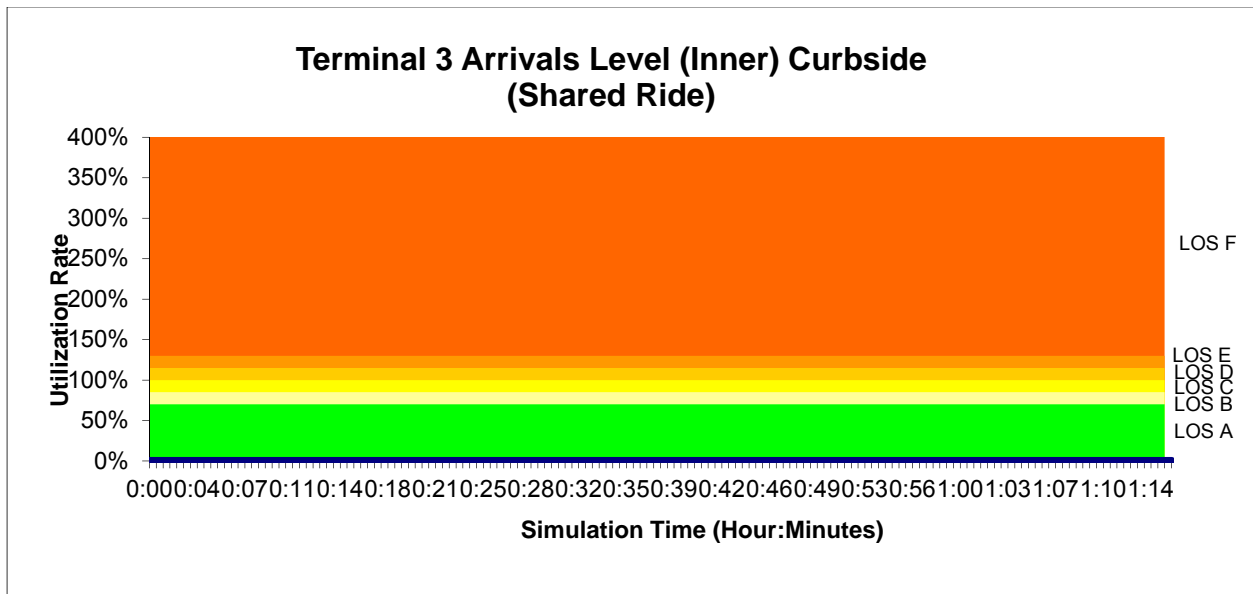
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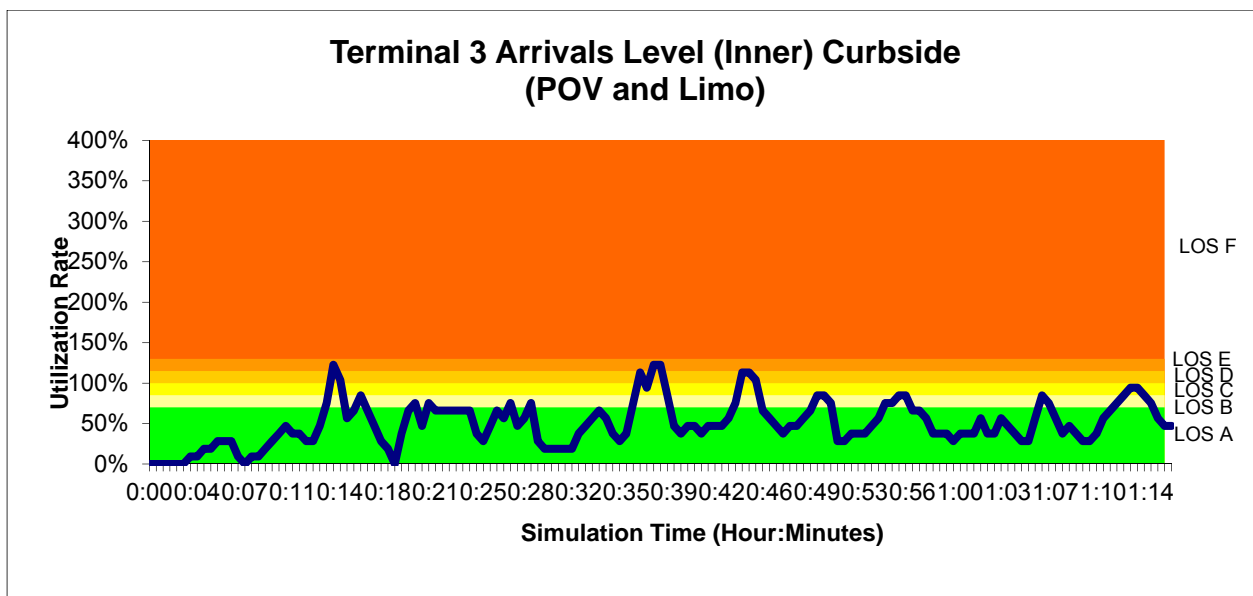
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## Appendix E2- Curbside Utilization

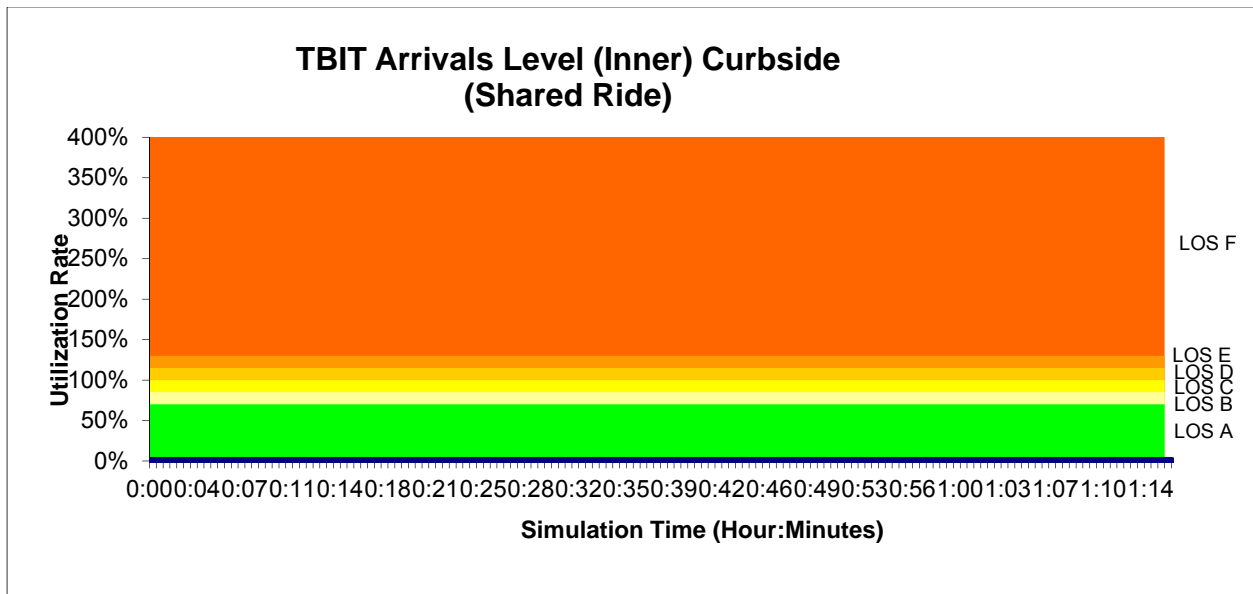


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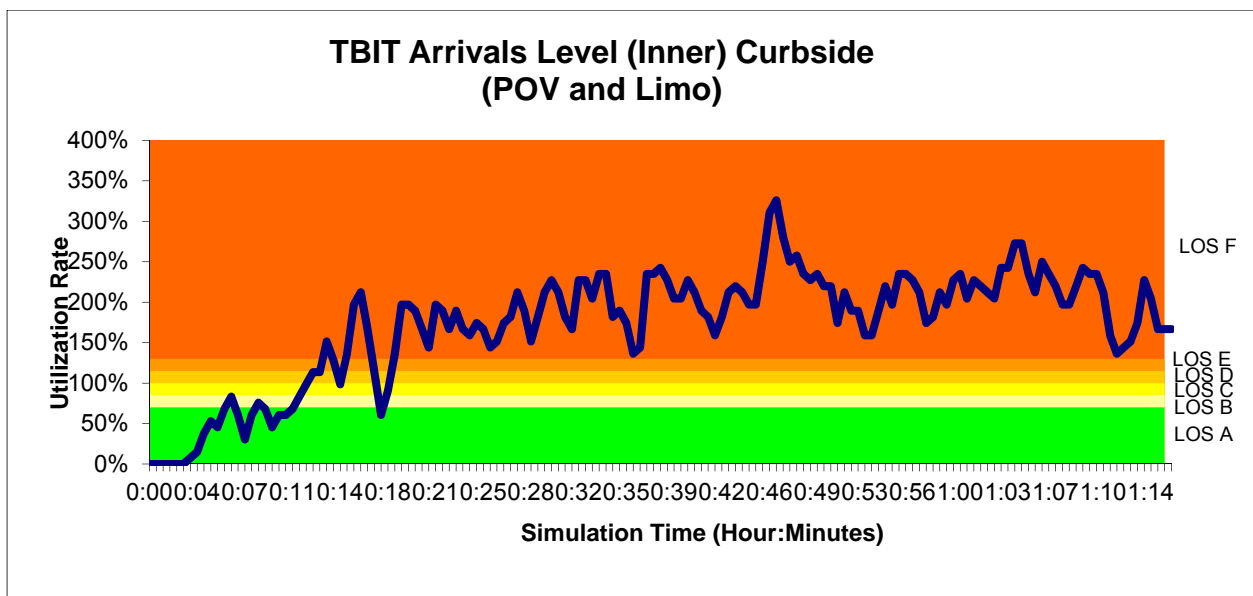




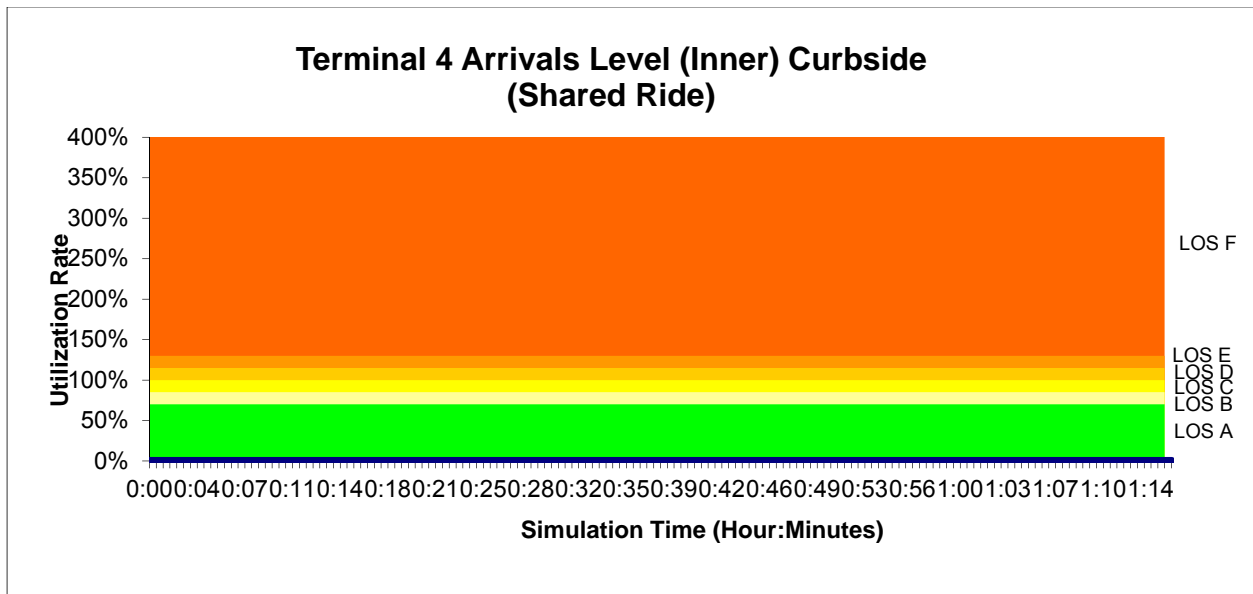
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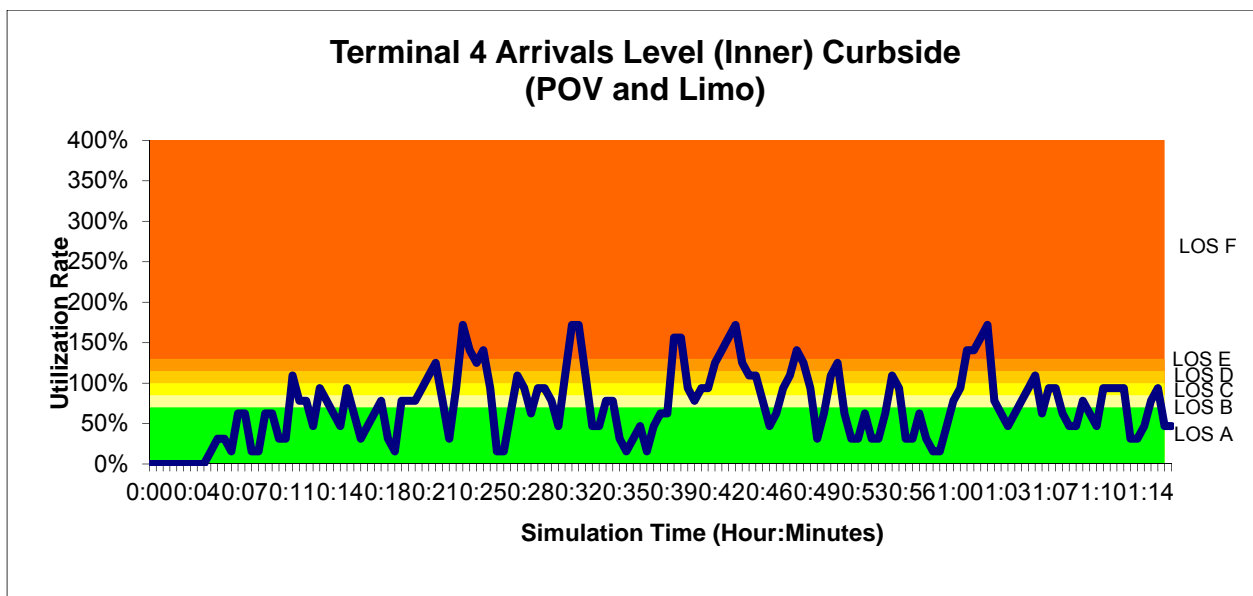
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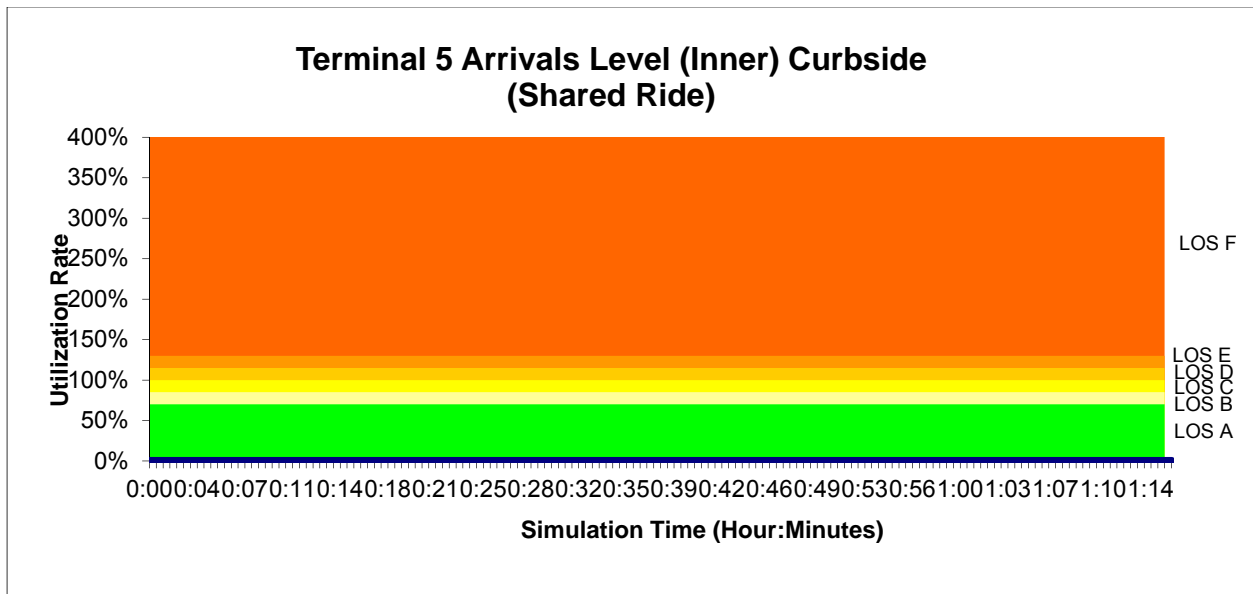
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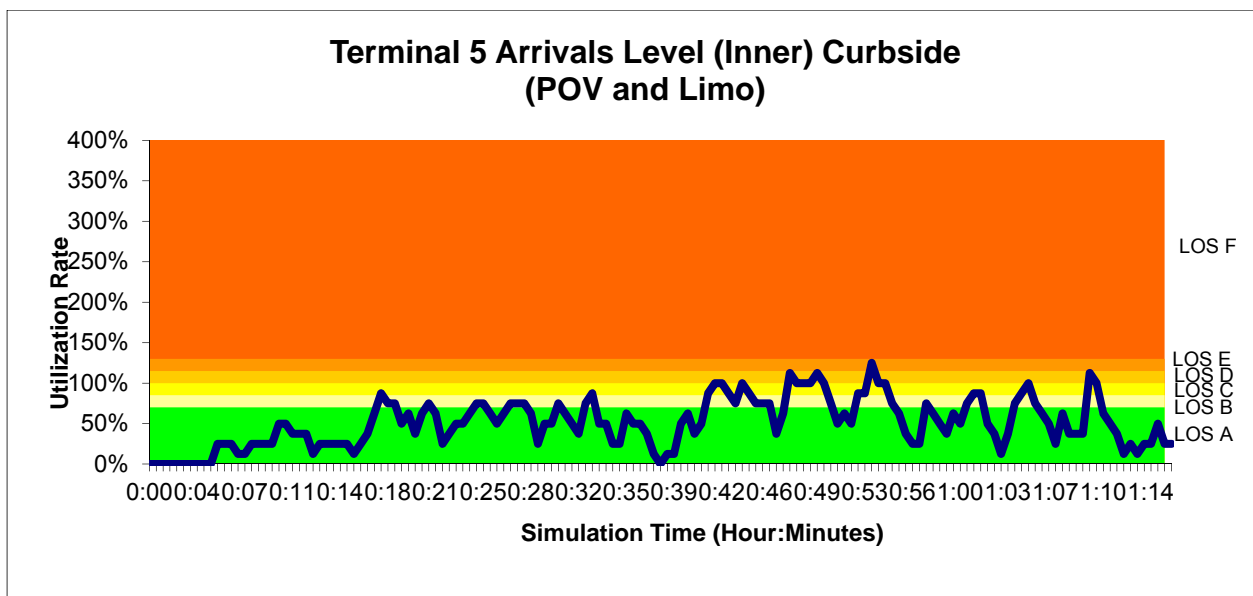
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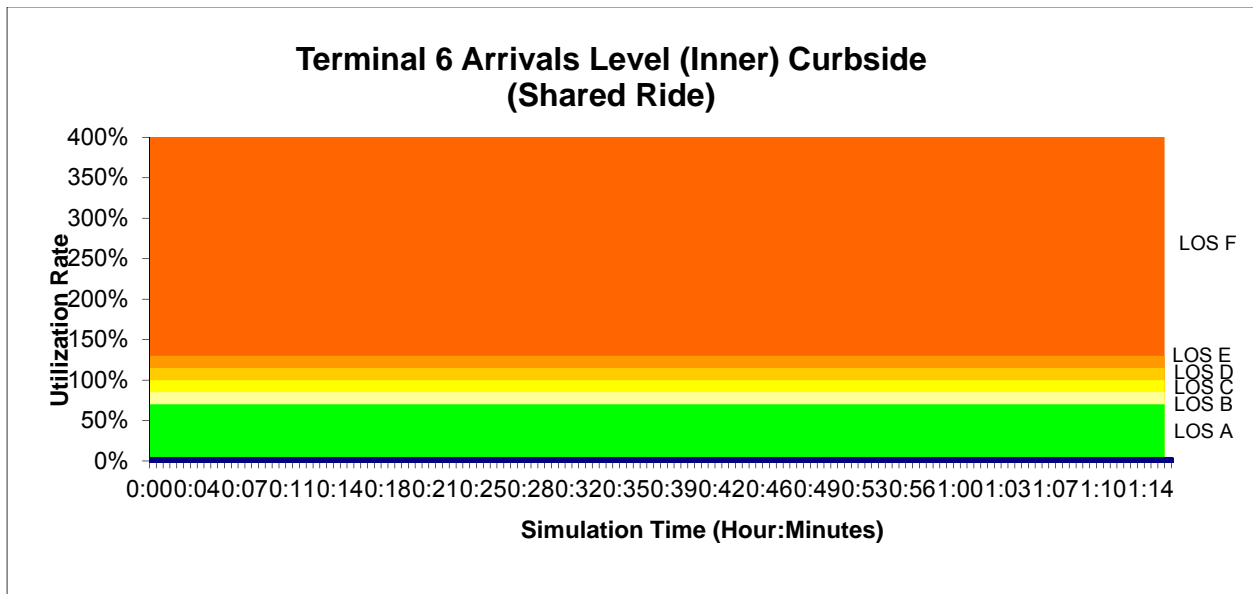
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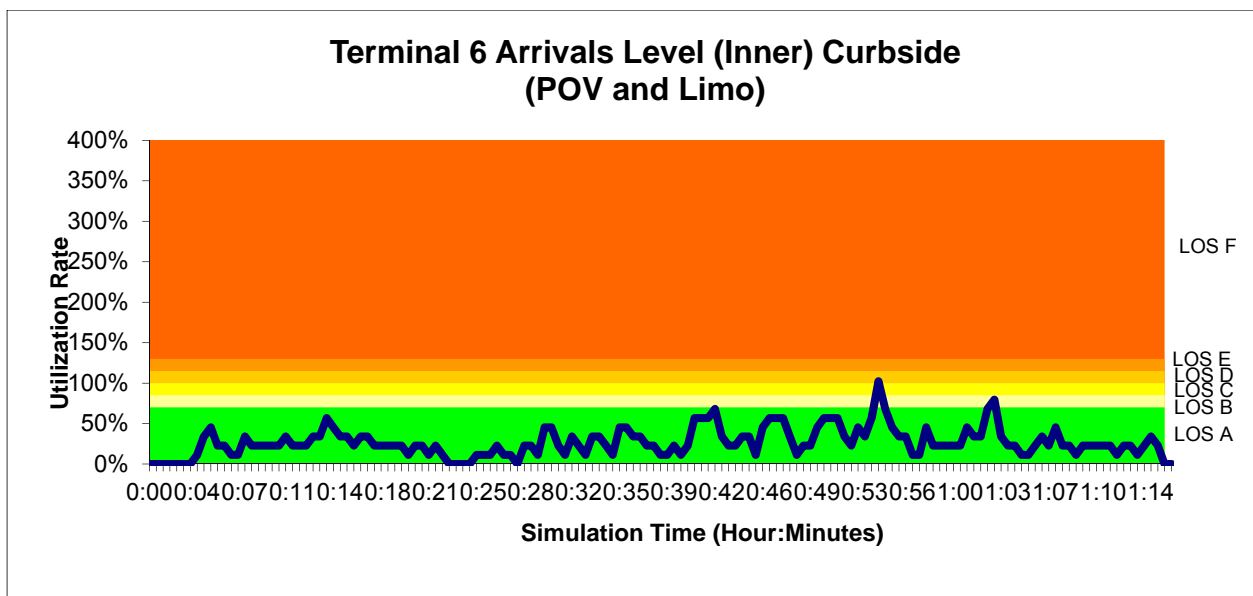
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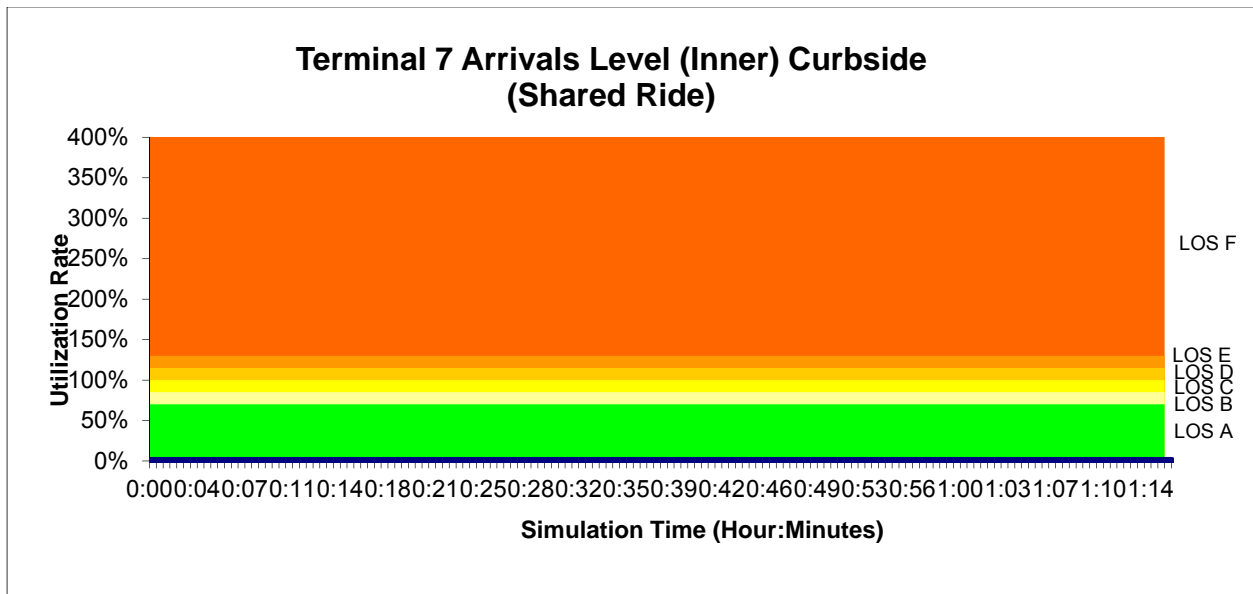
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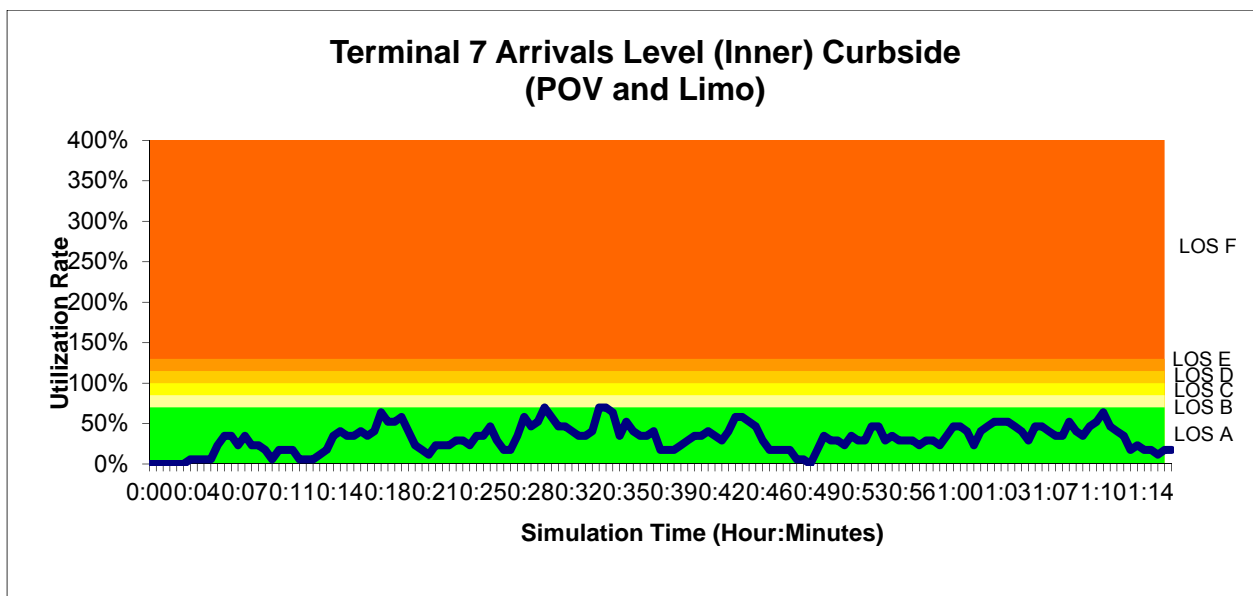
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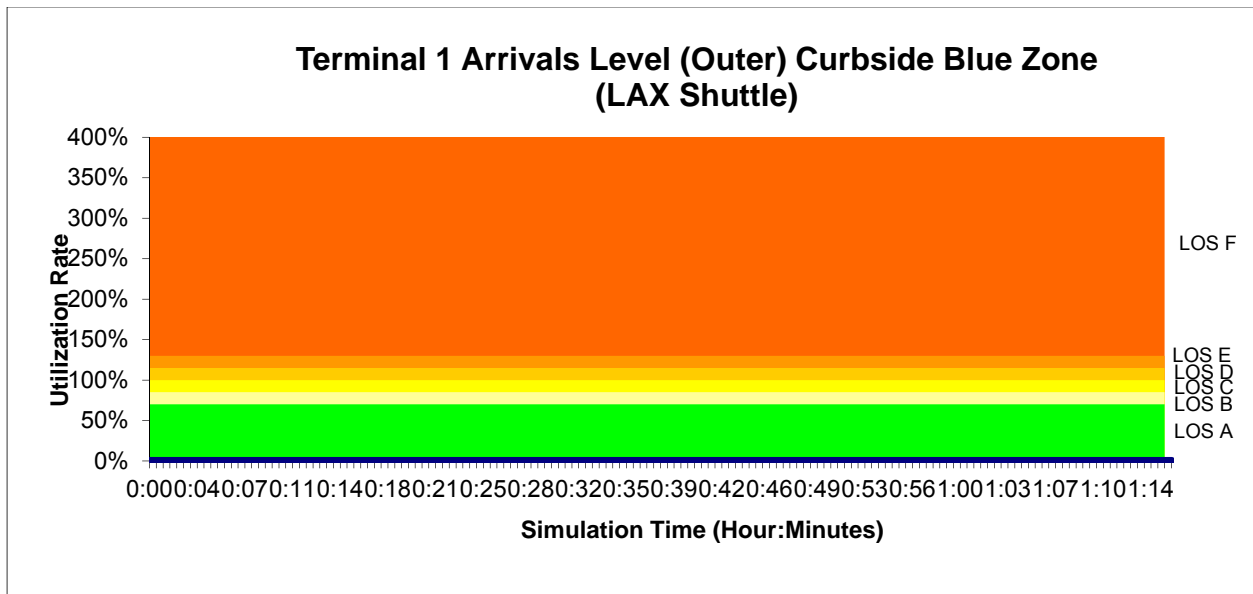
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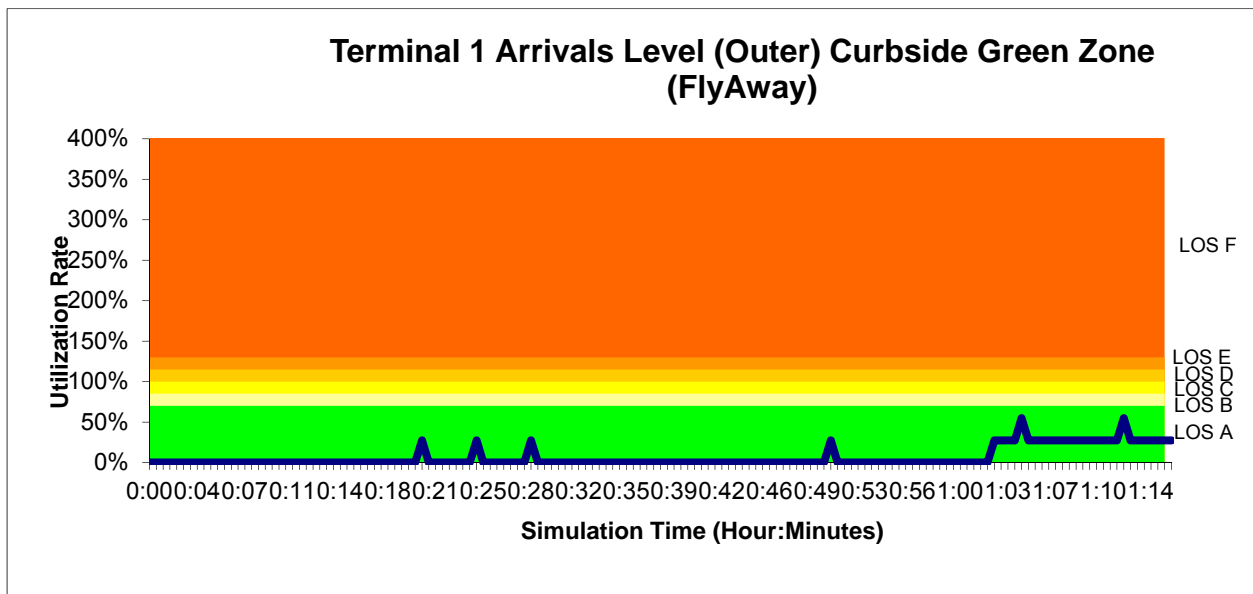
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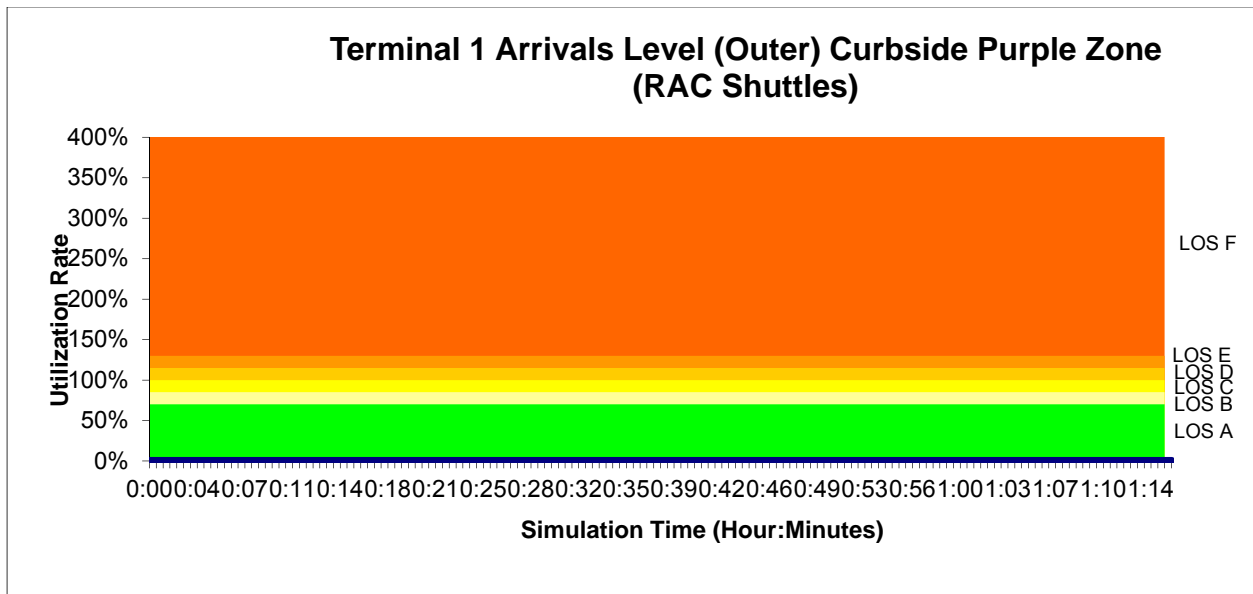
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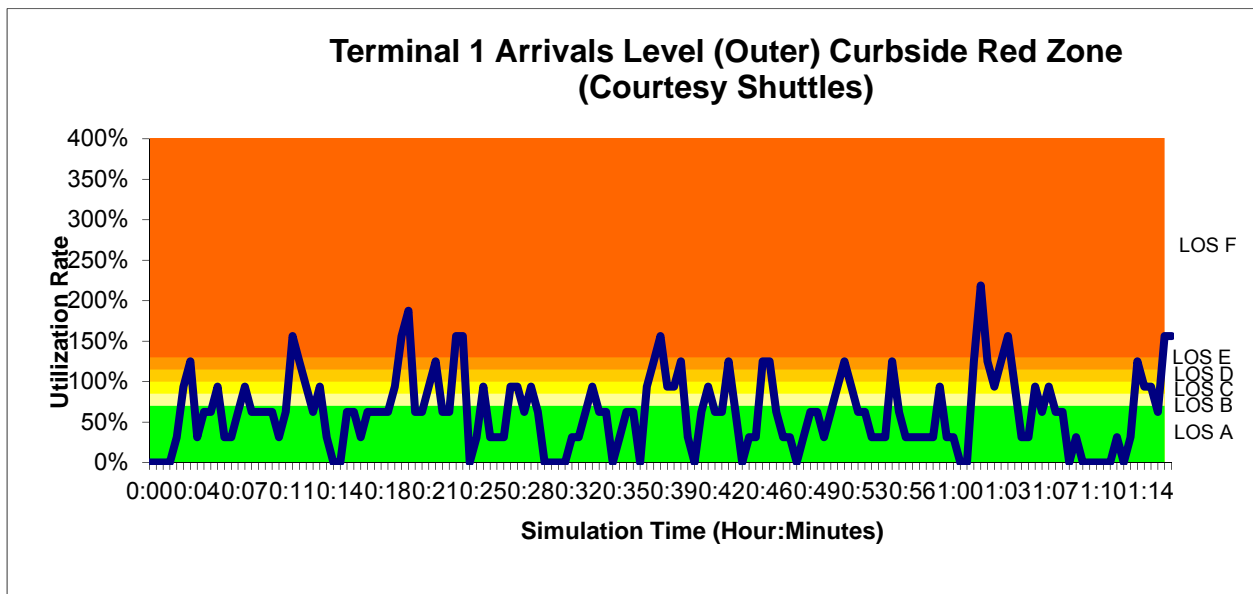
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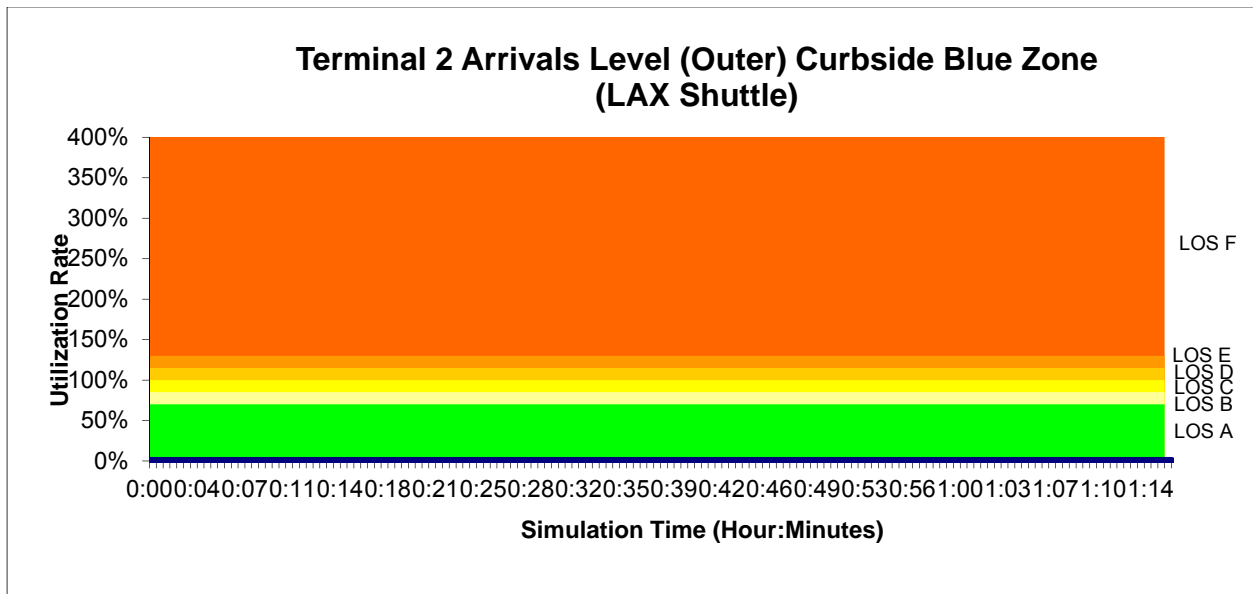
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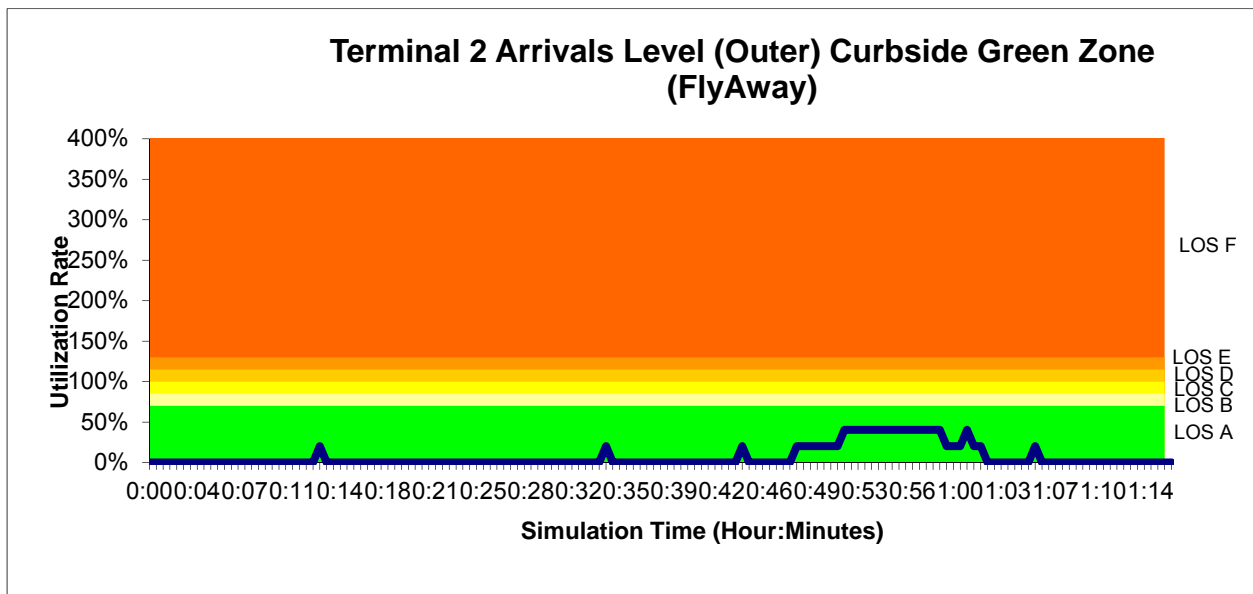
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## Appendix E2- Curbside Utilization

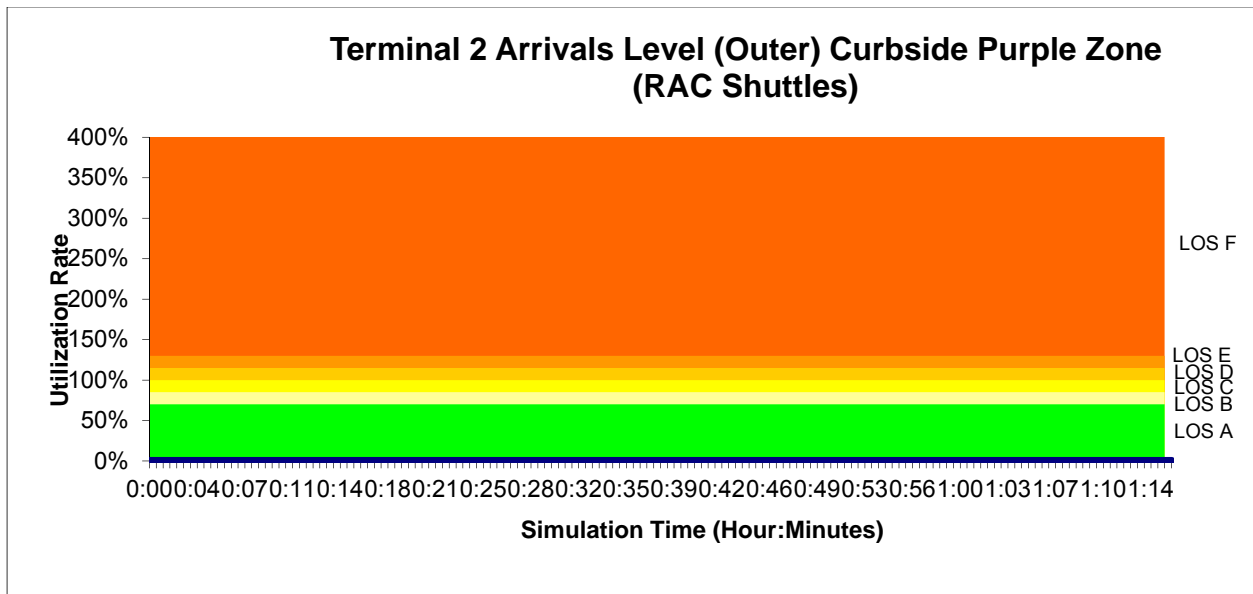


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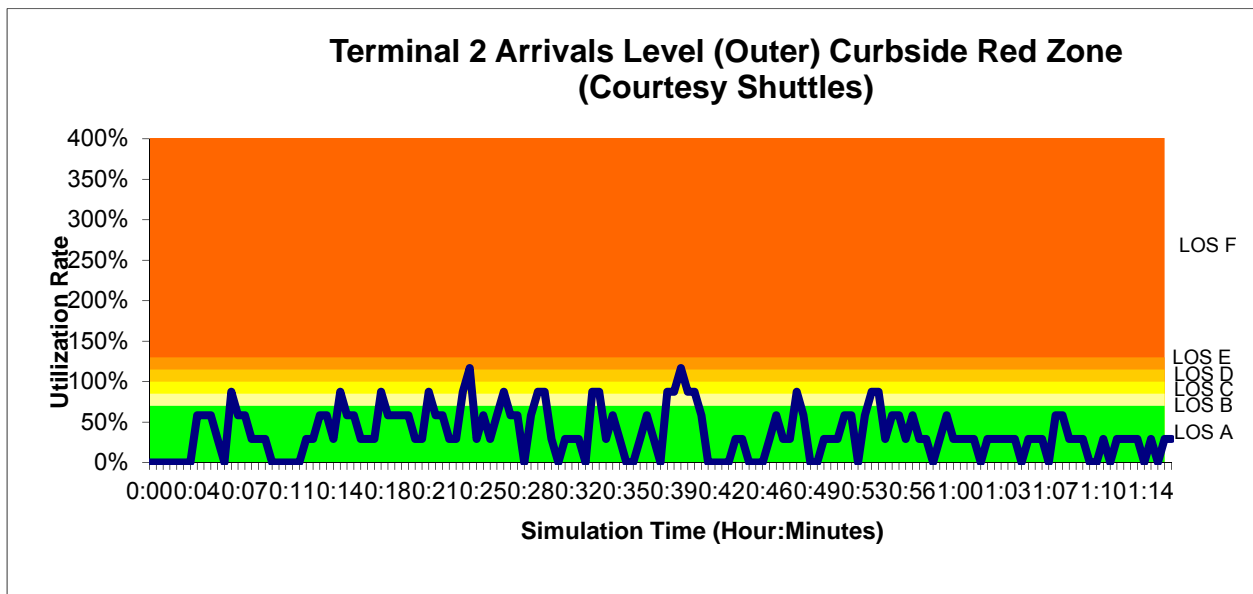




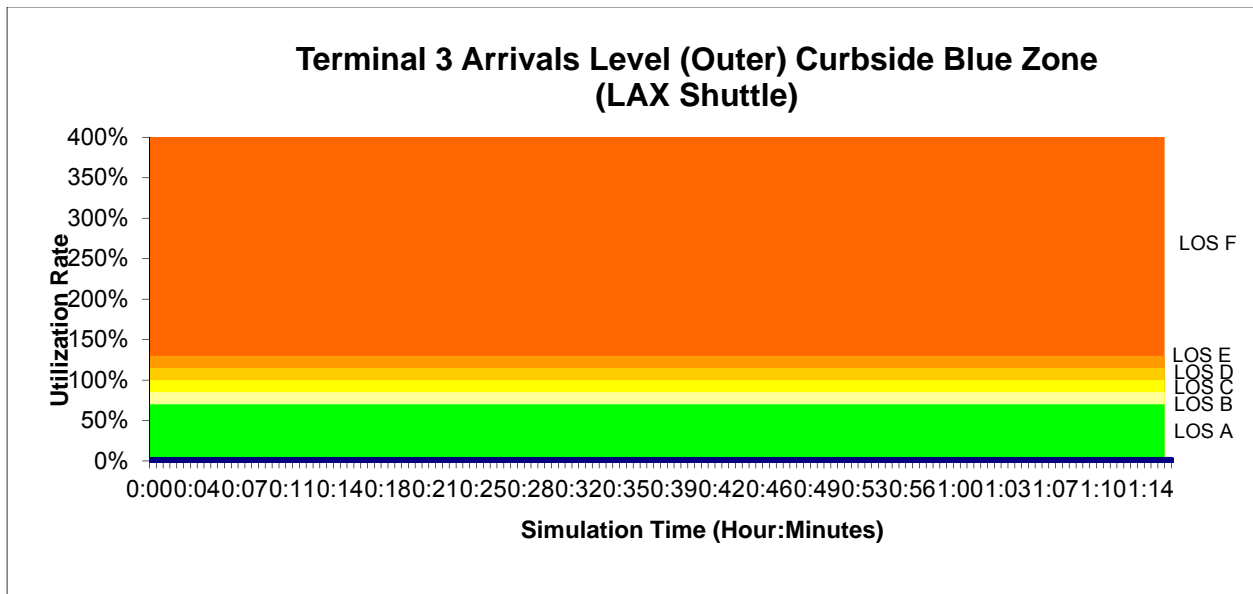
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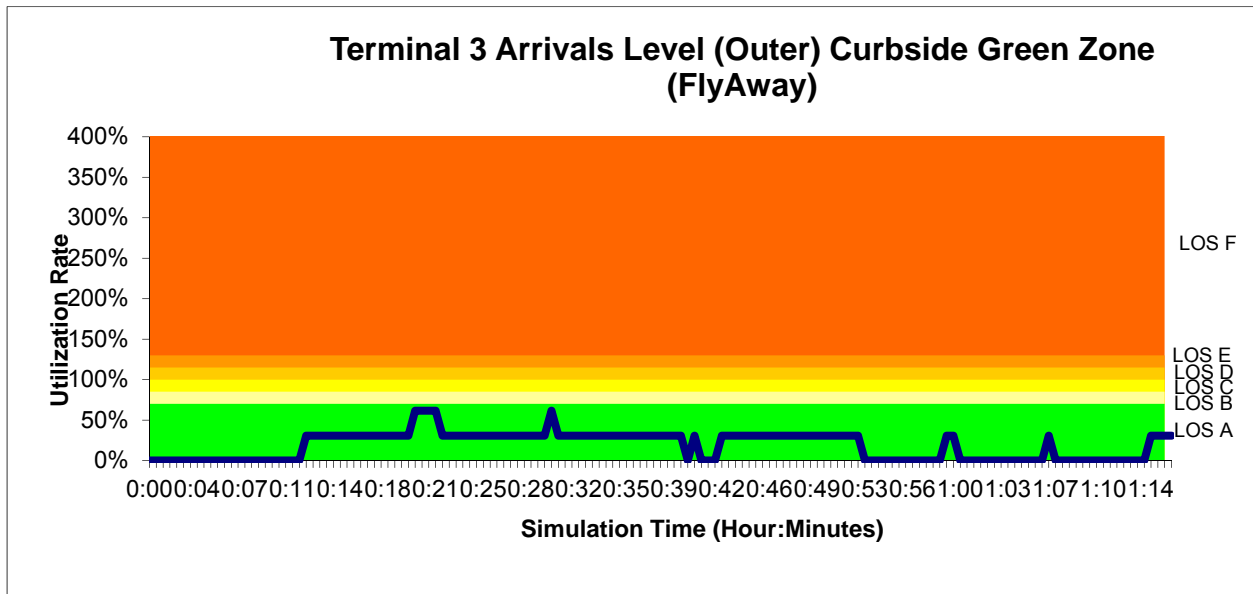
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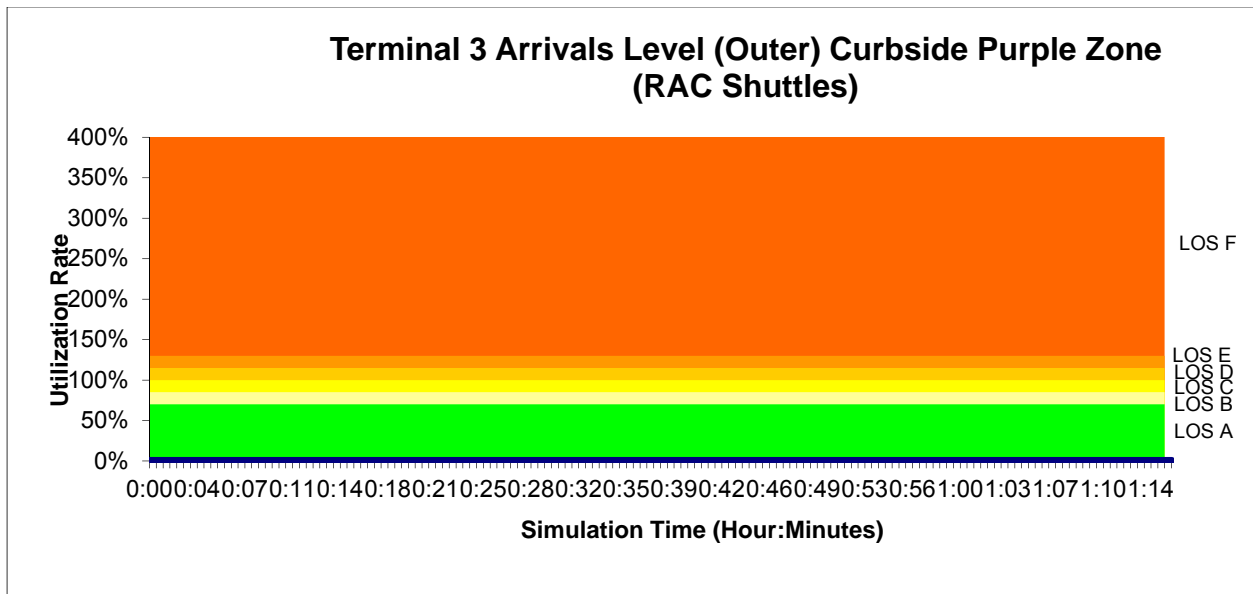
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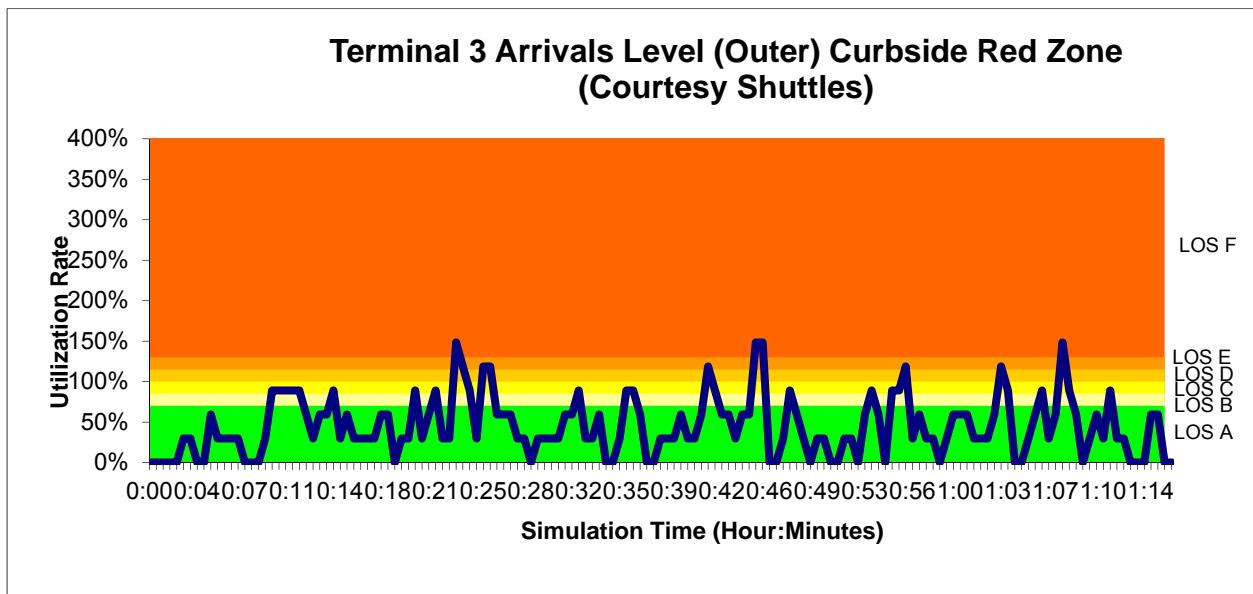
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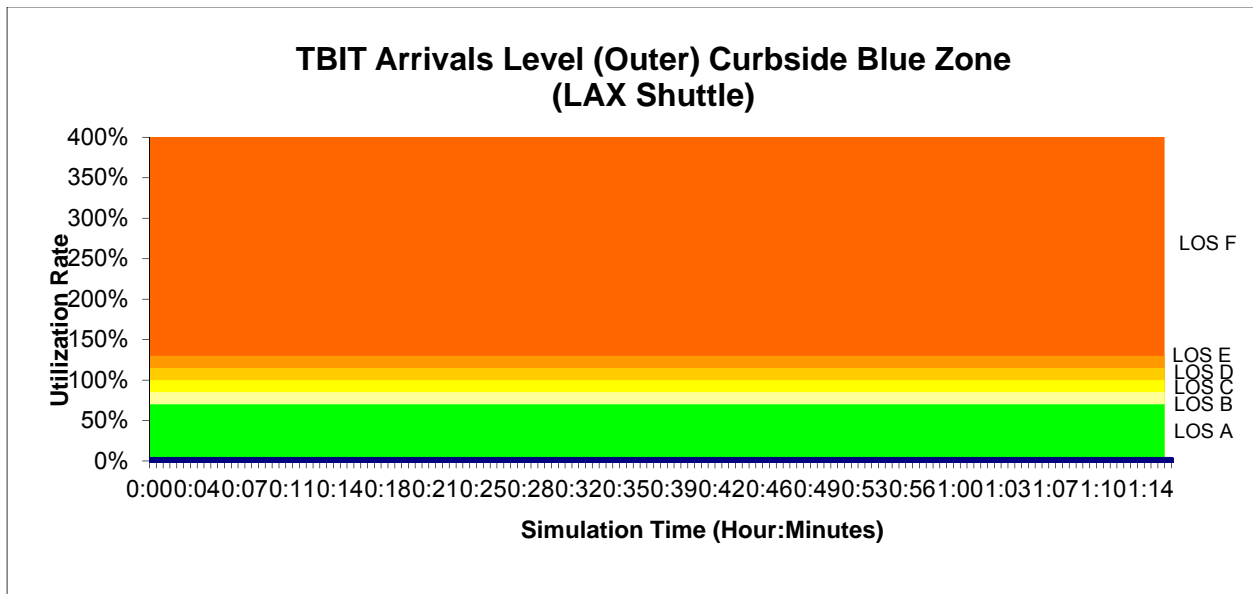
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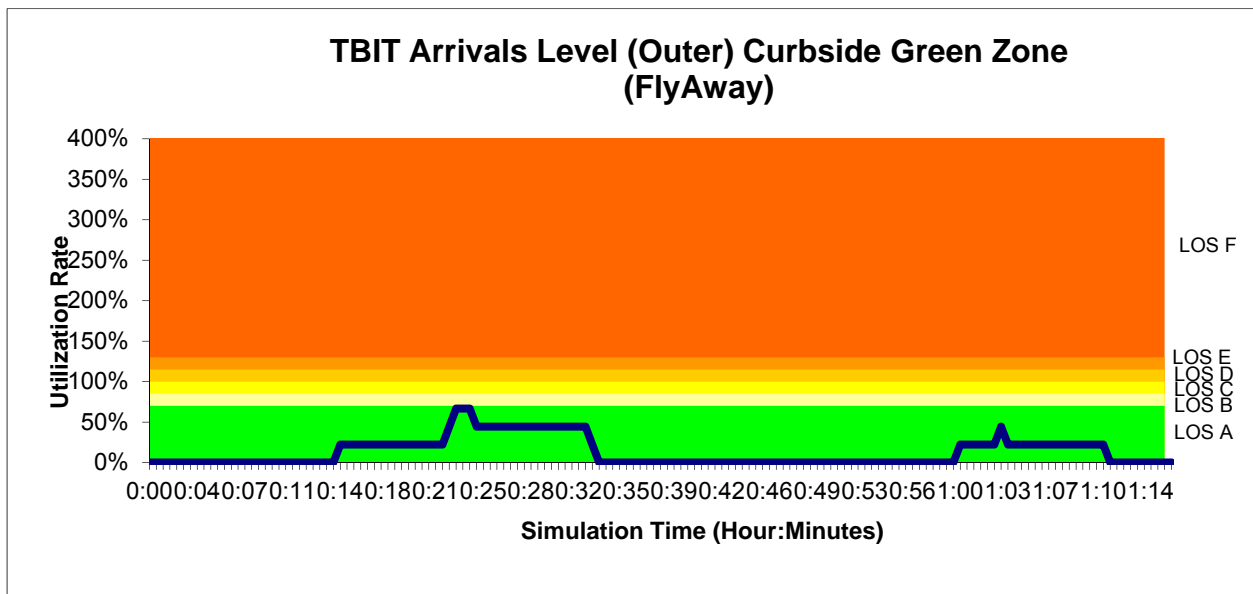
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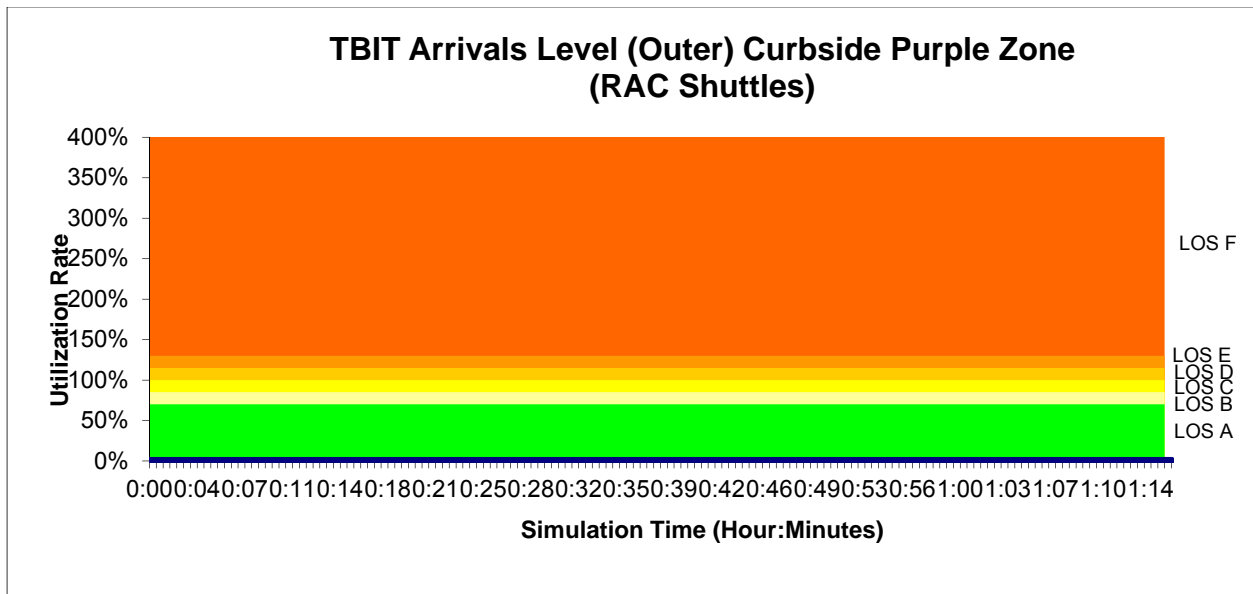
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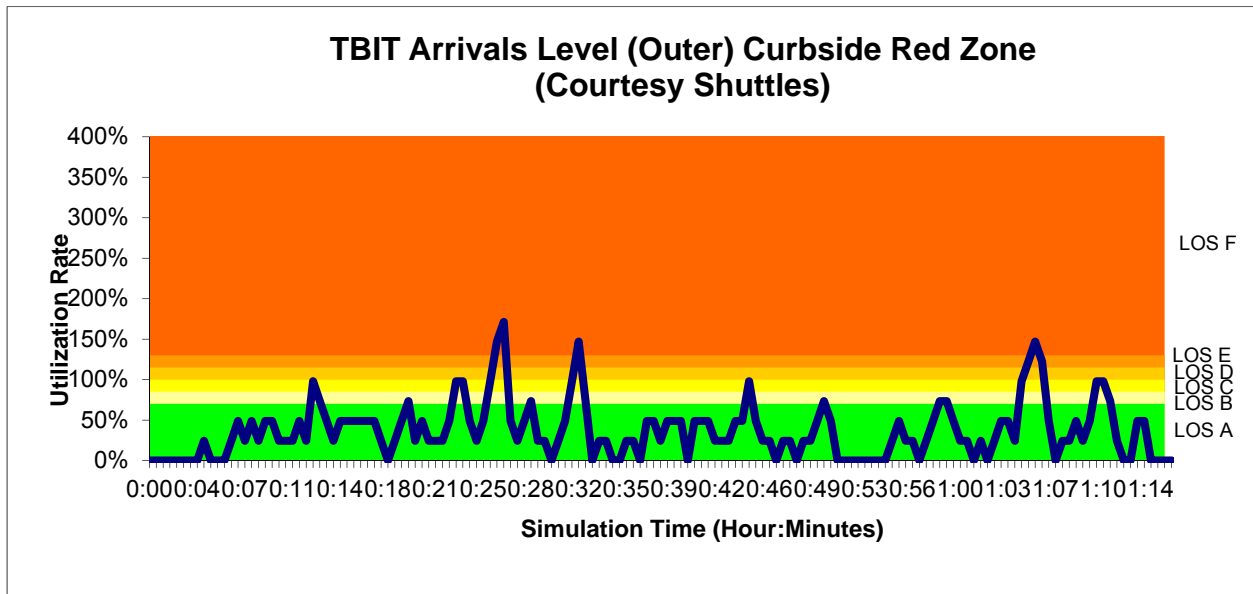
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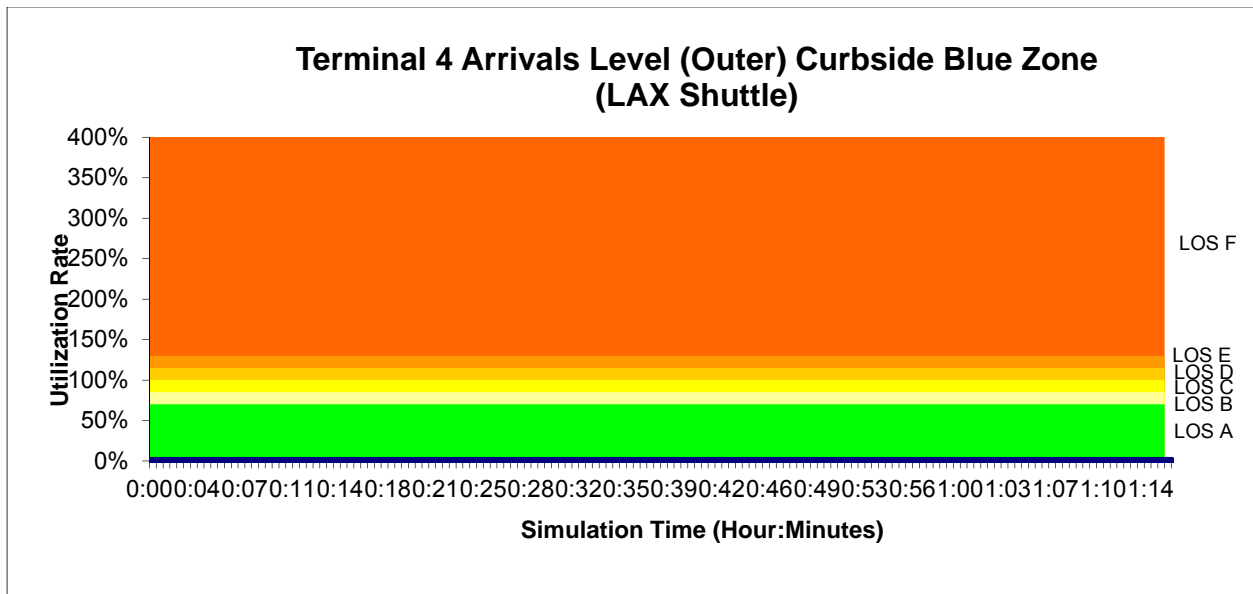
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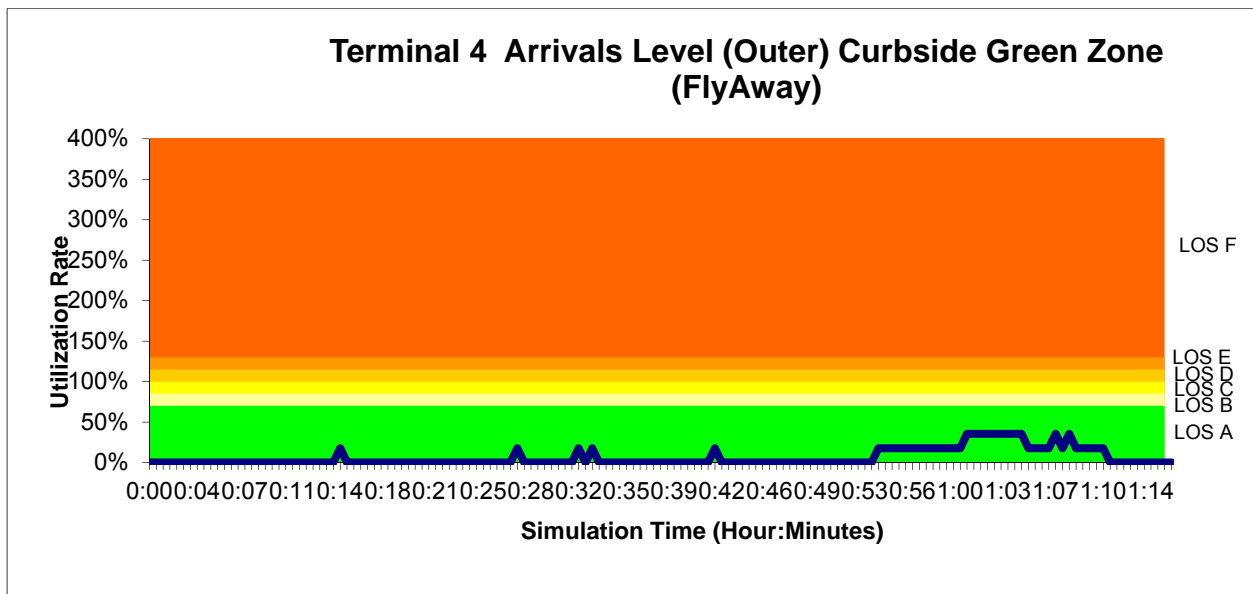
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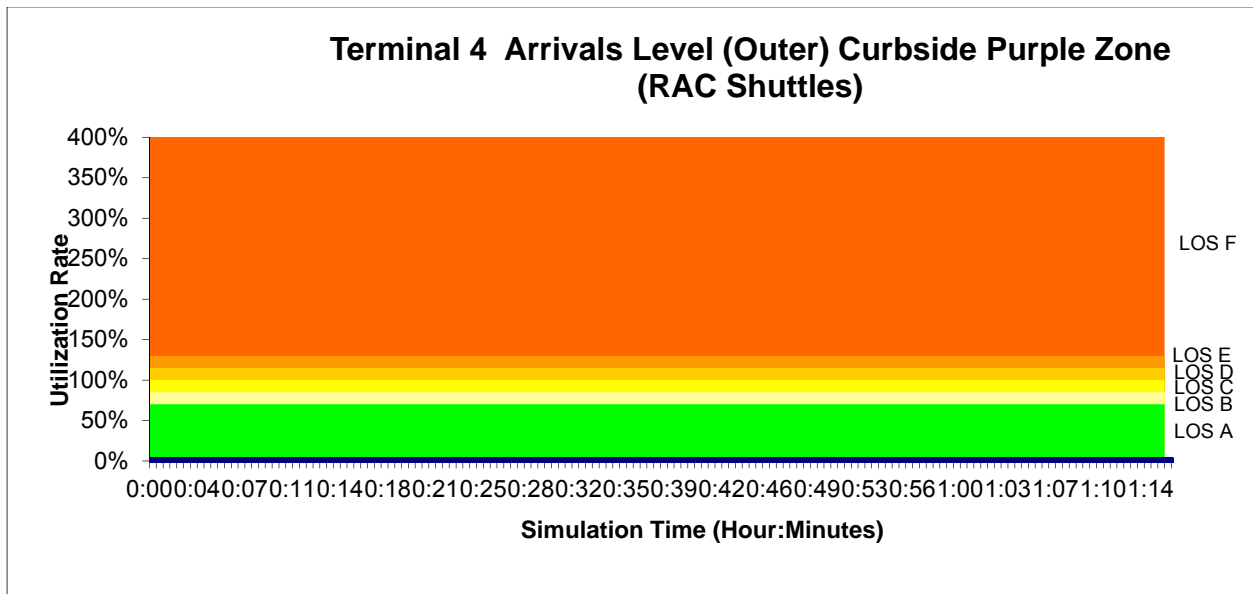
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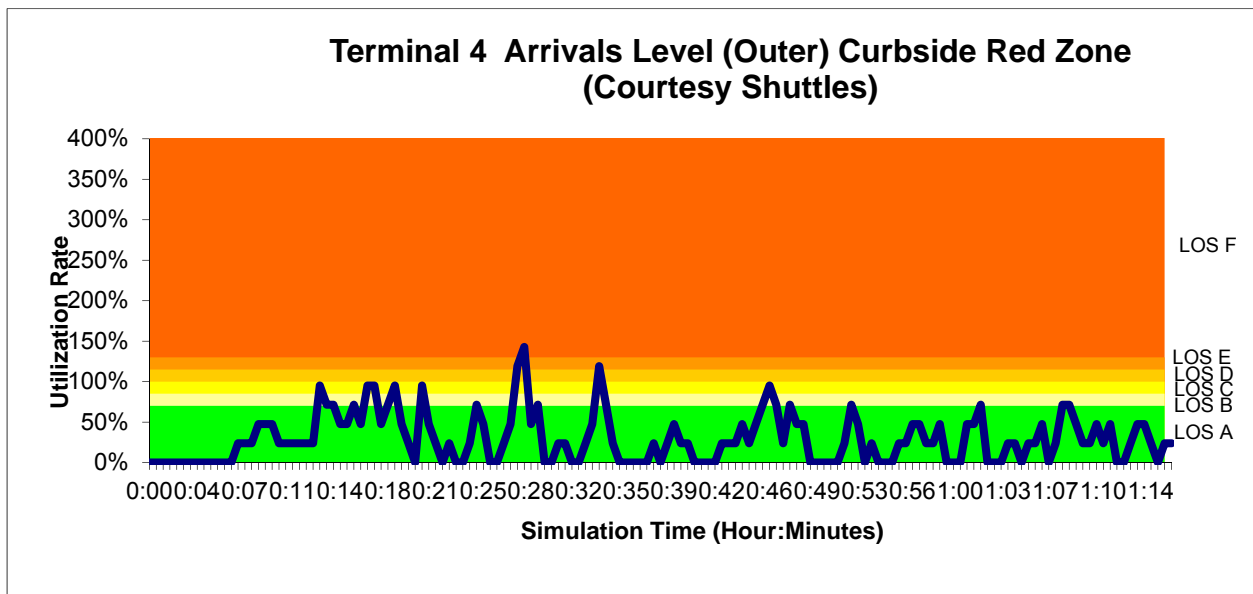
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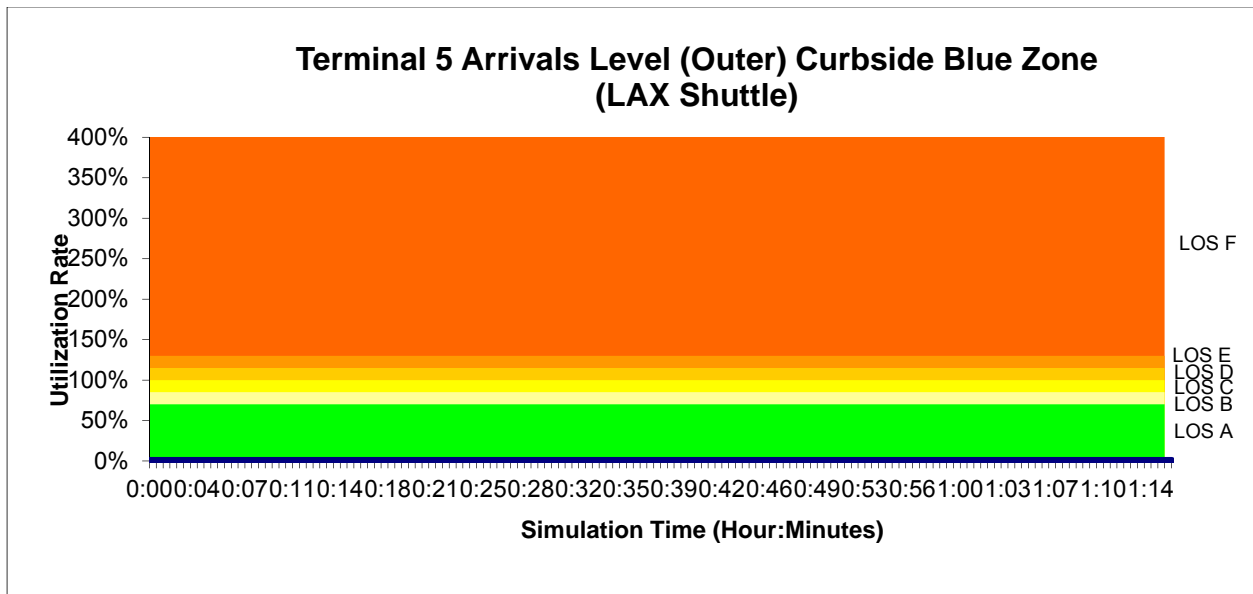
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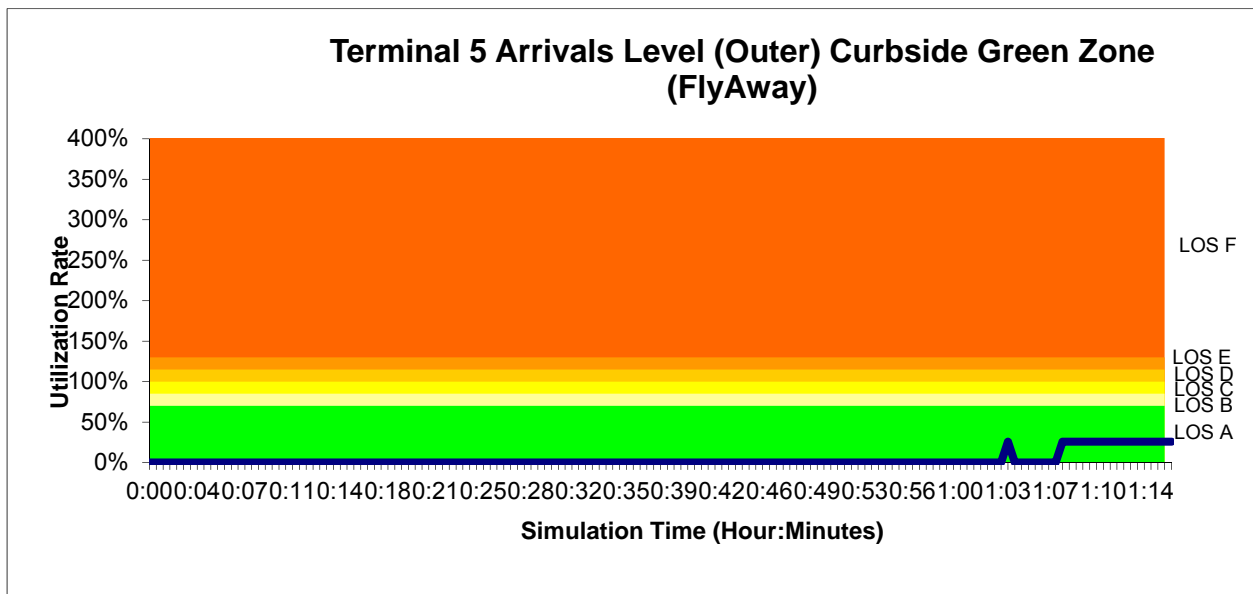
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## Appendix E2- Curbside Utilization

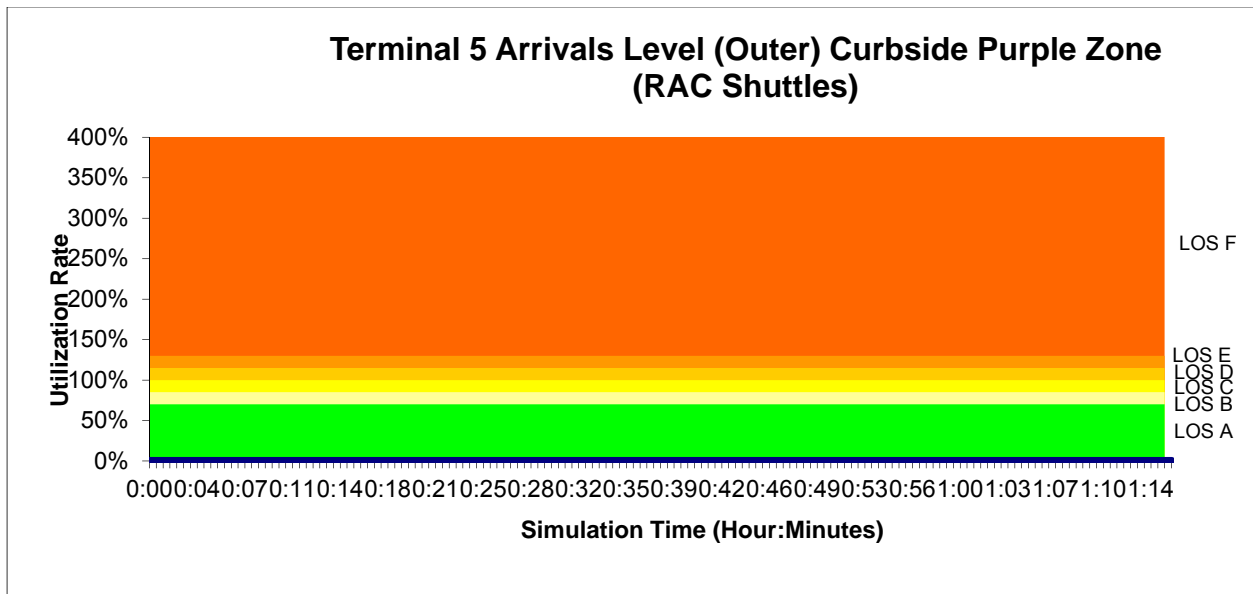


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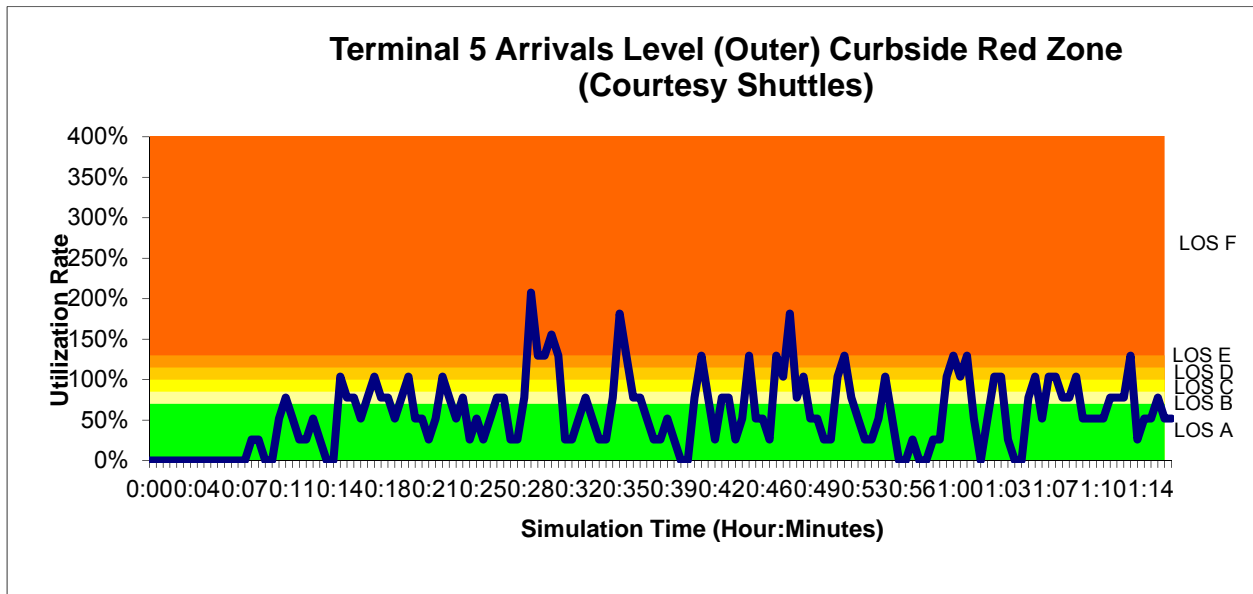




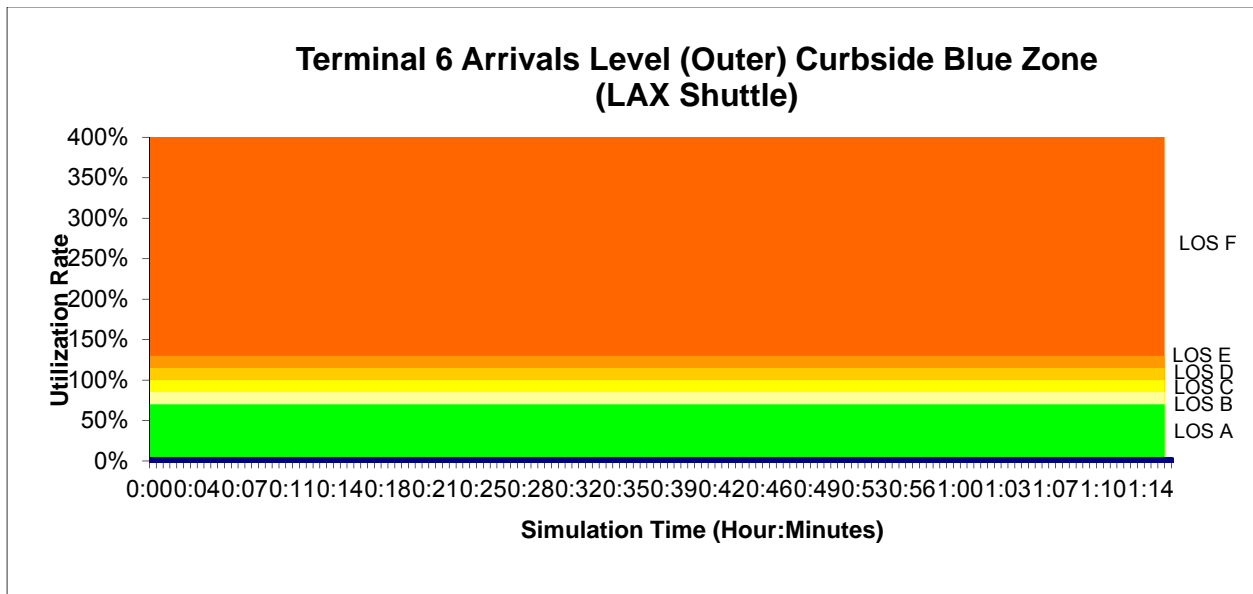
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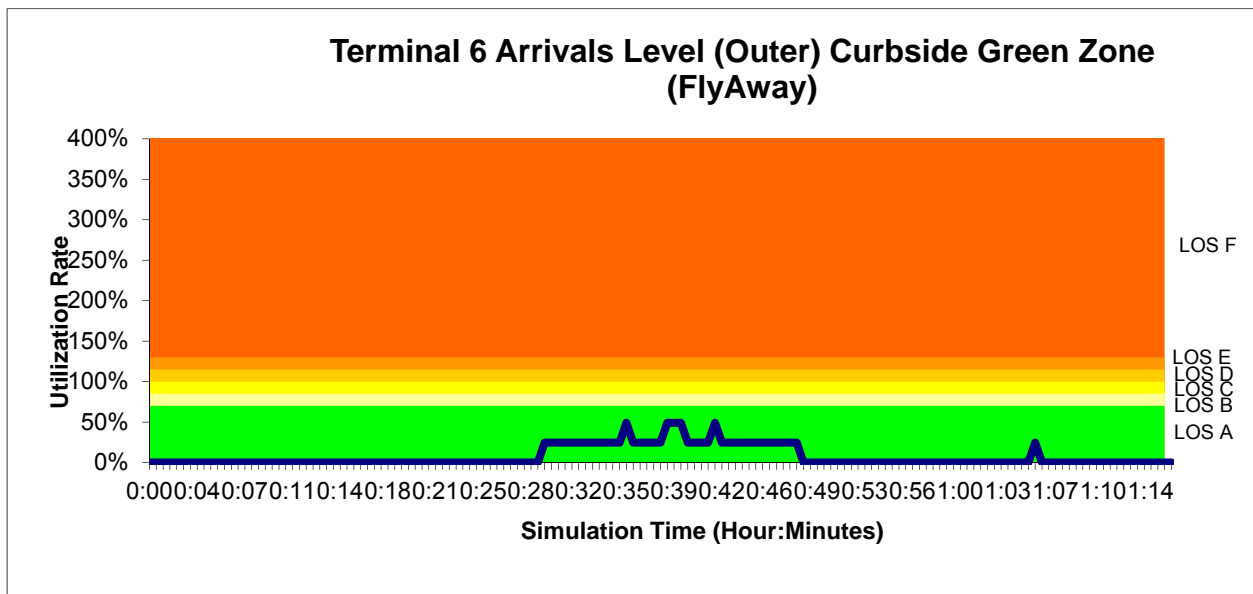
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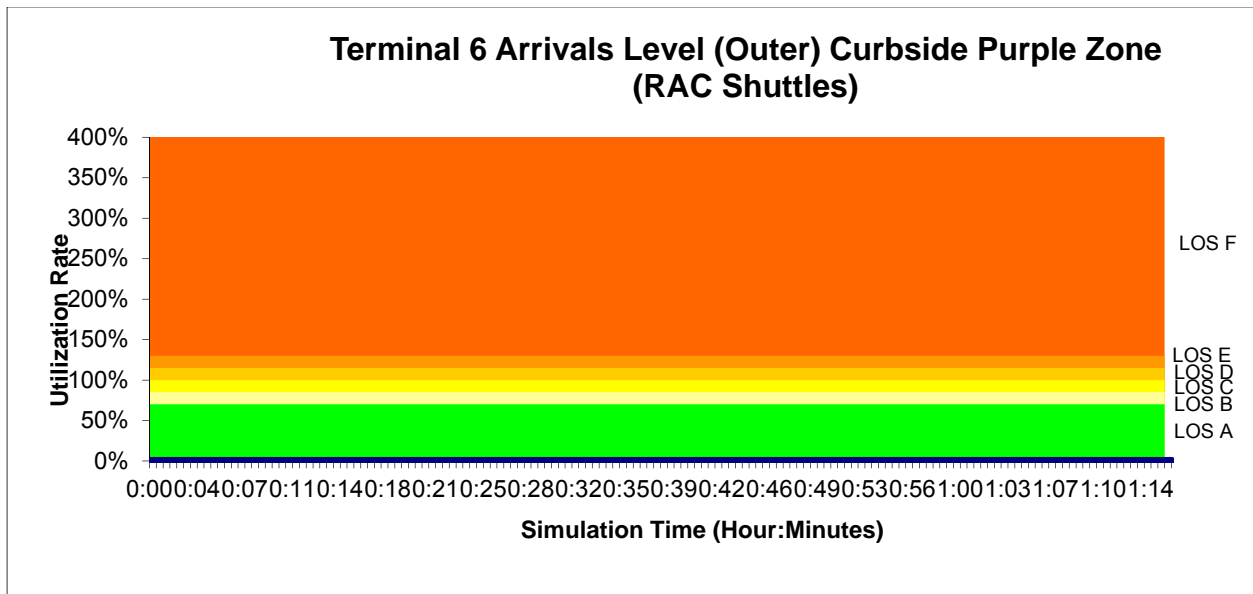
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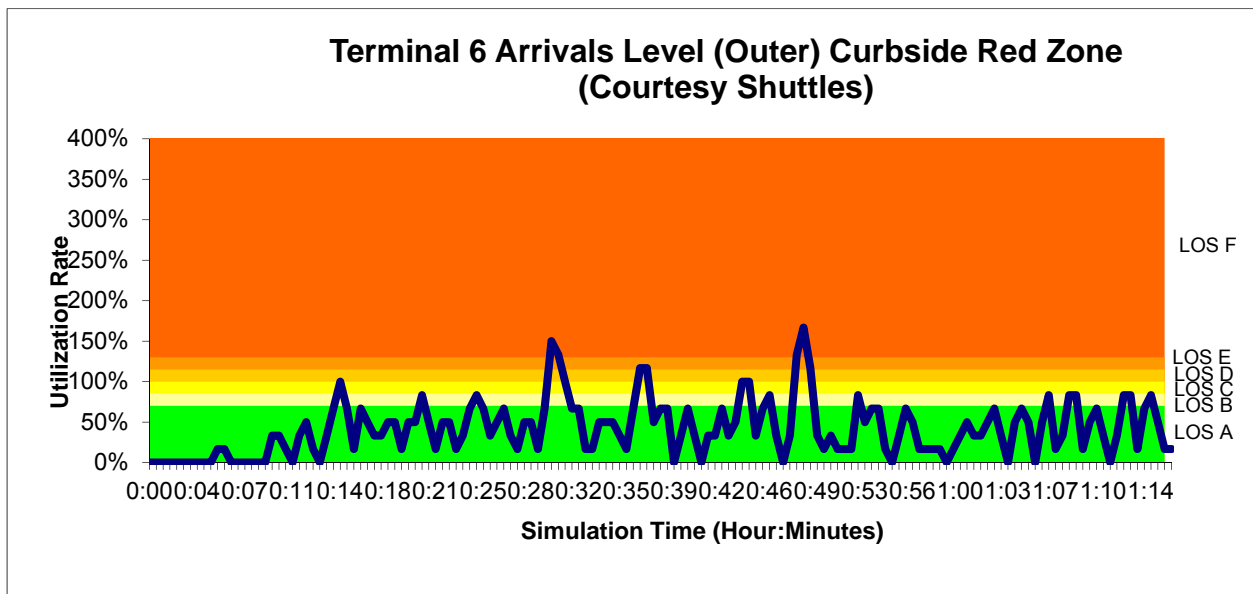
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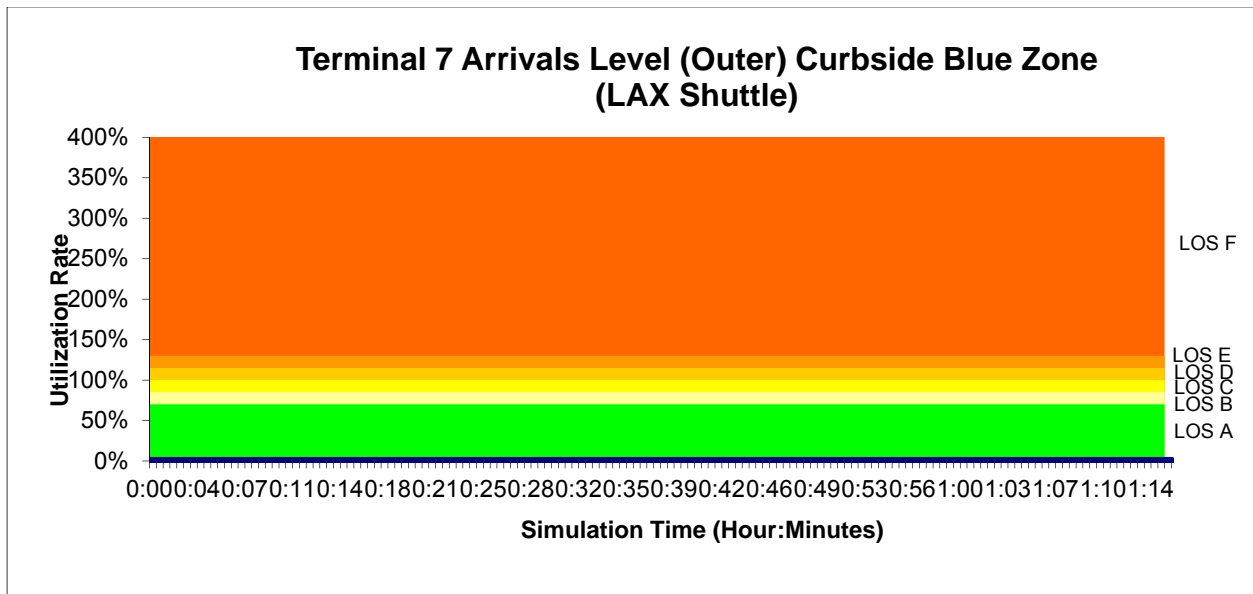
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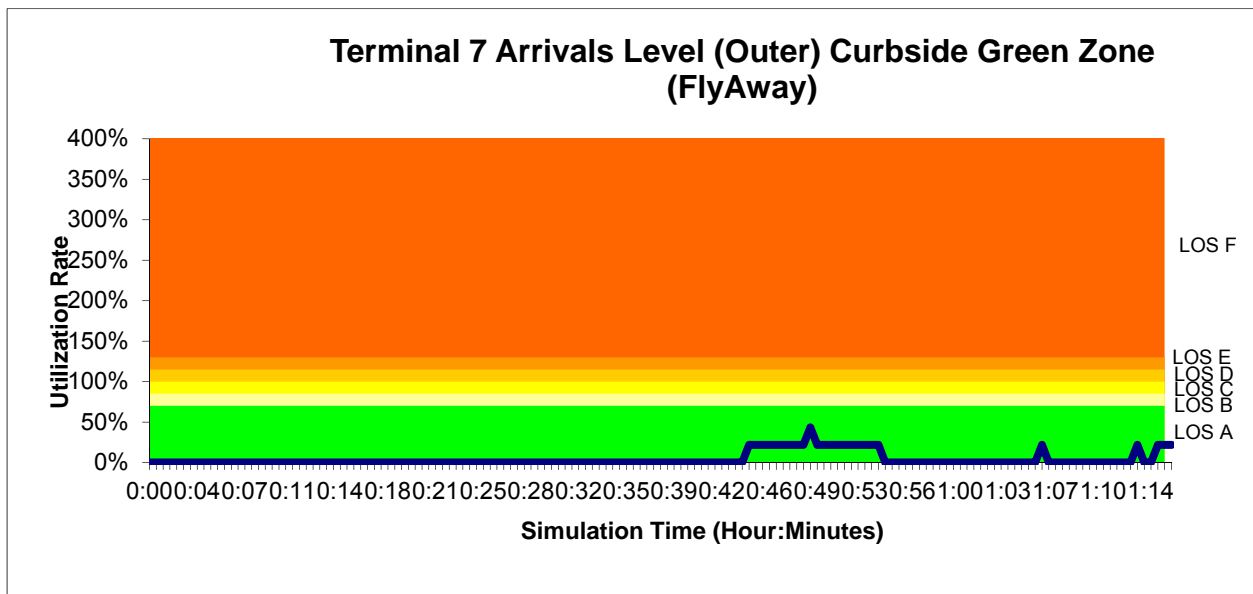
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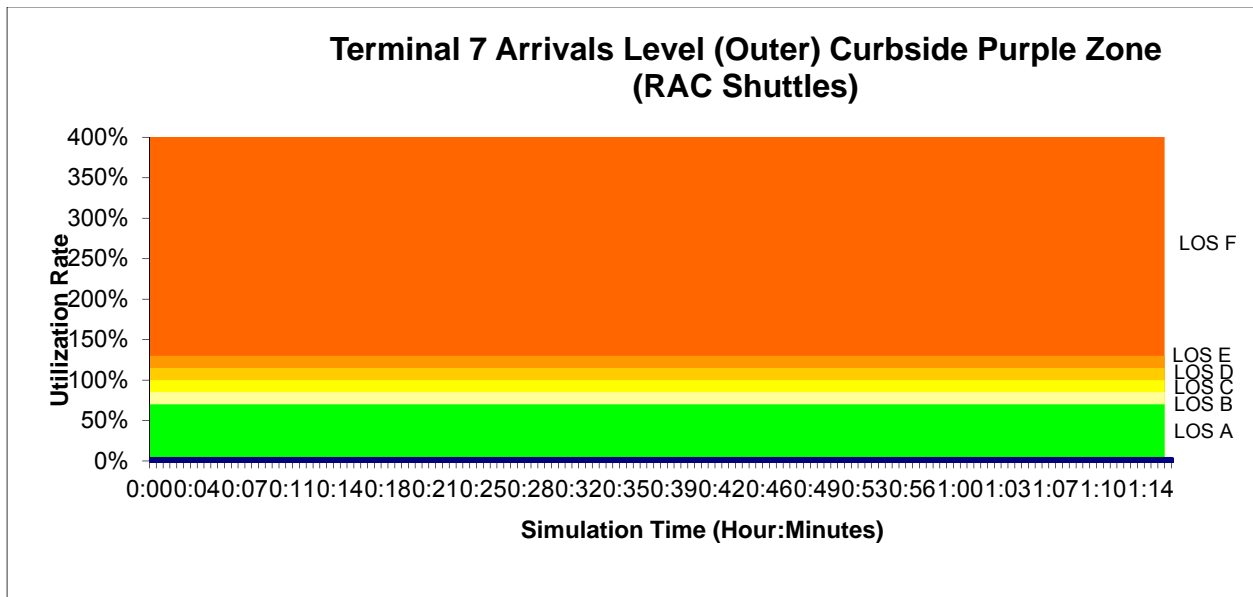
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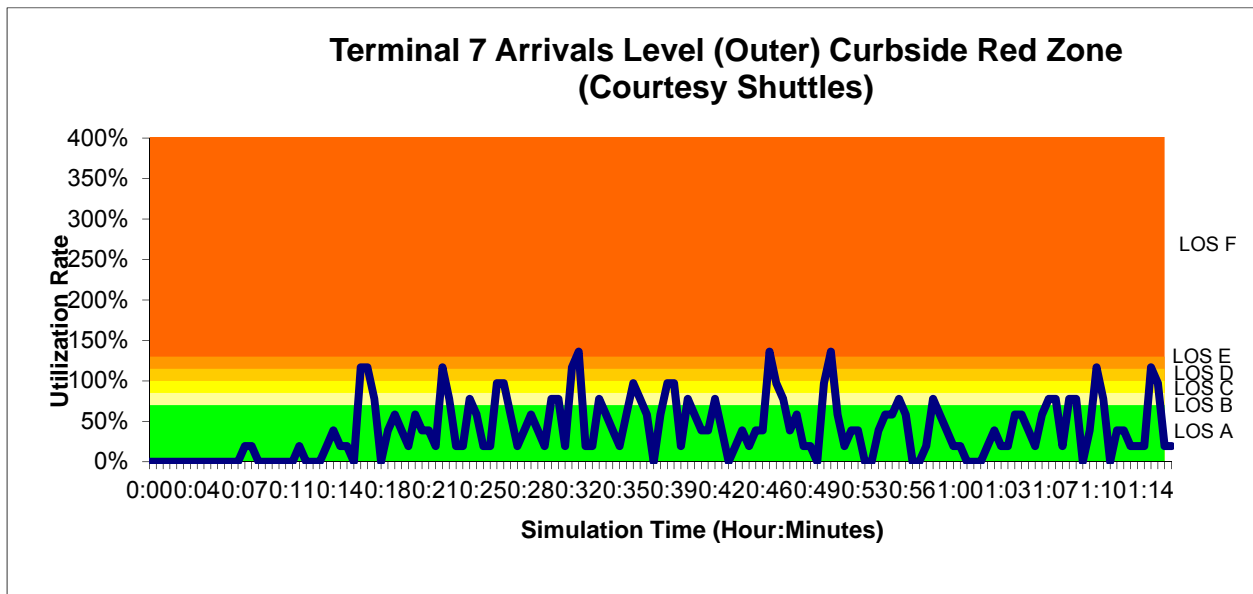
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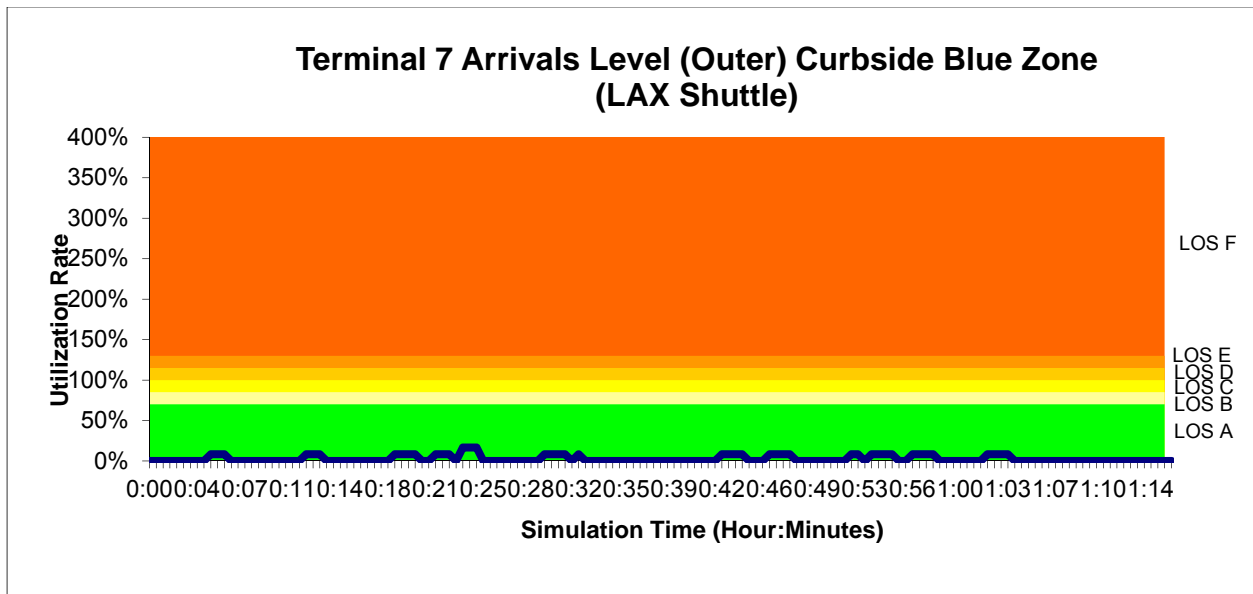
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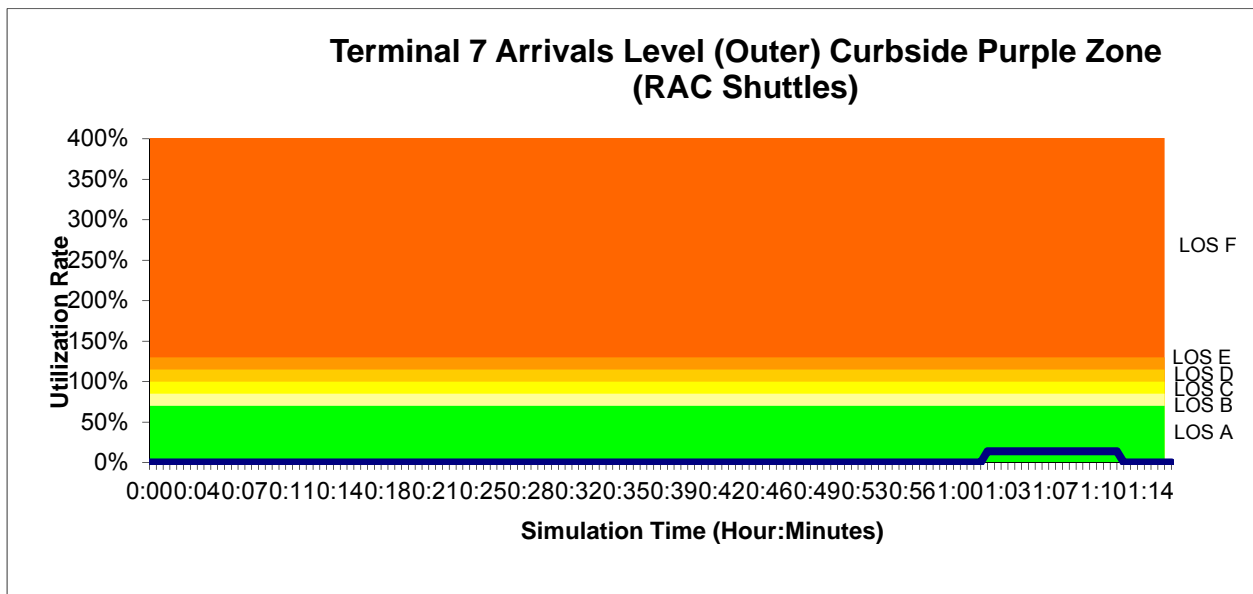
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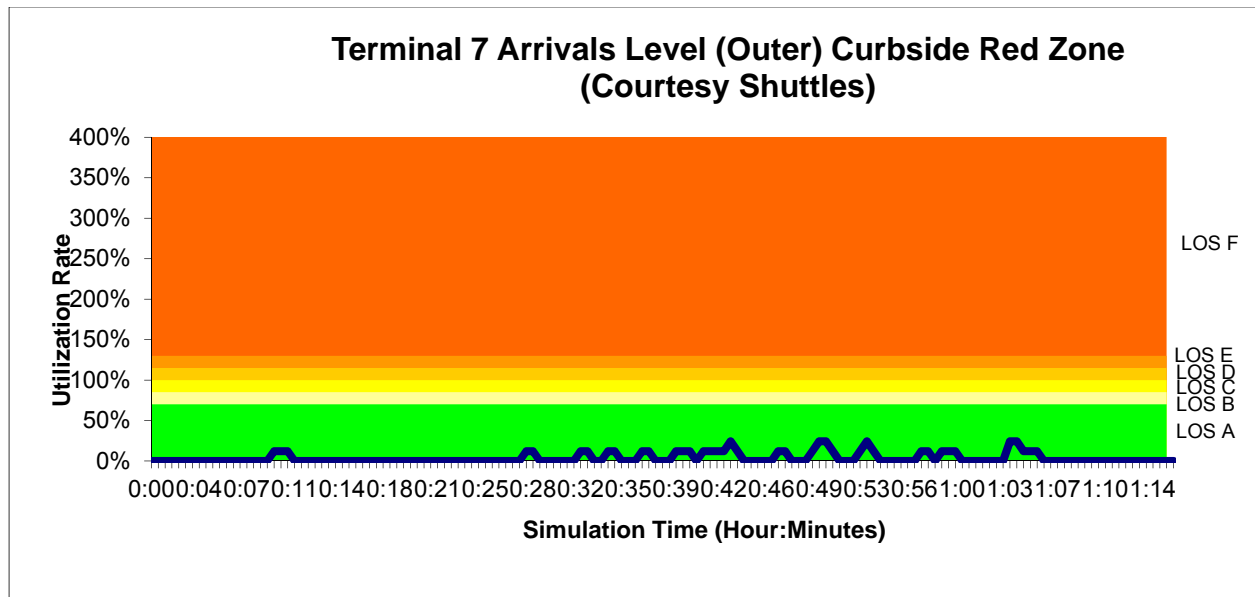
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Arrivals Level - Future With Program

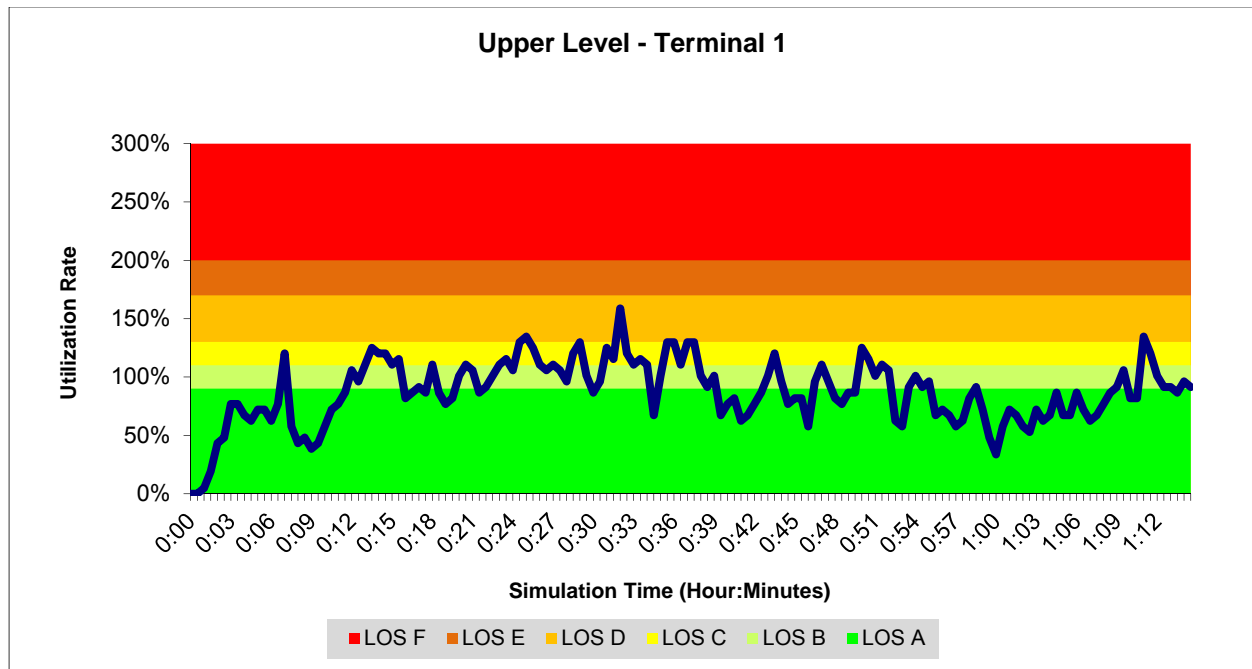


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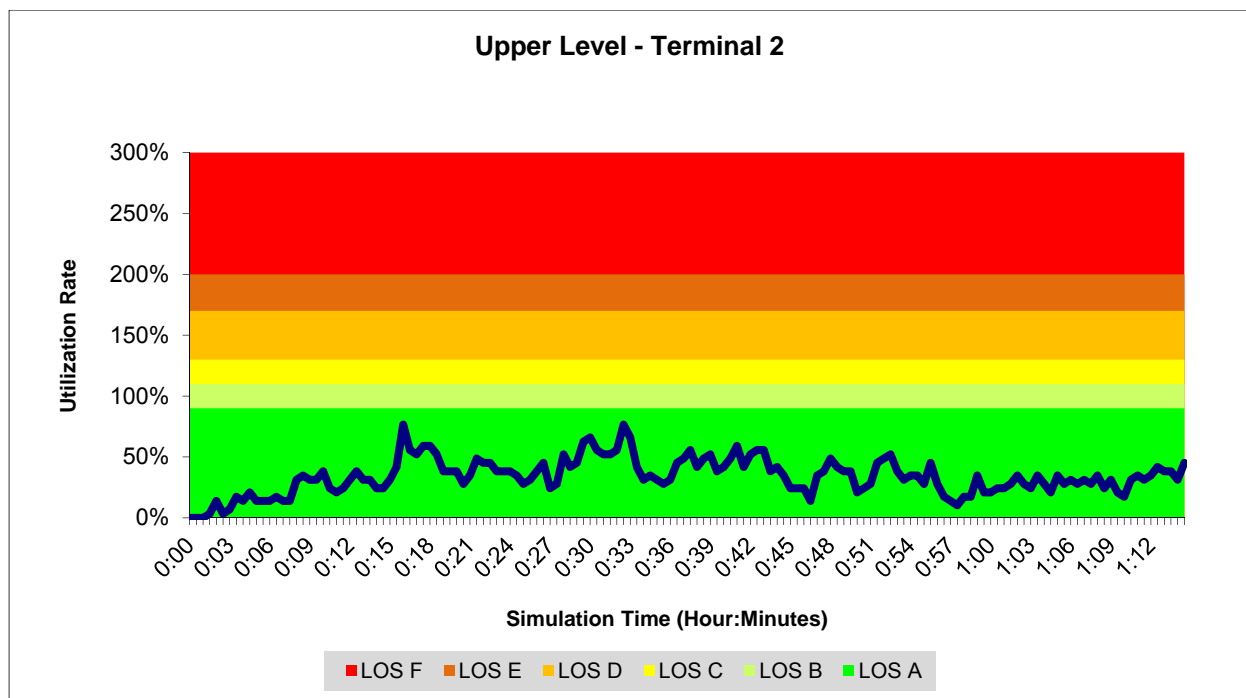


**Arrivals Level - Future With Program**

## Appendix E2- Curbside Utilization

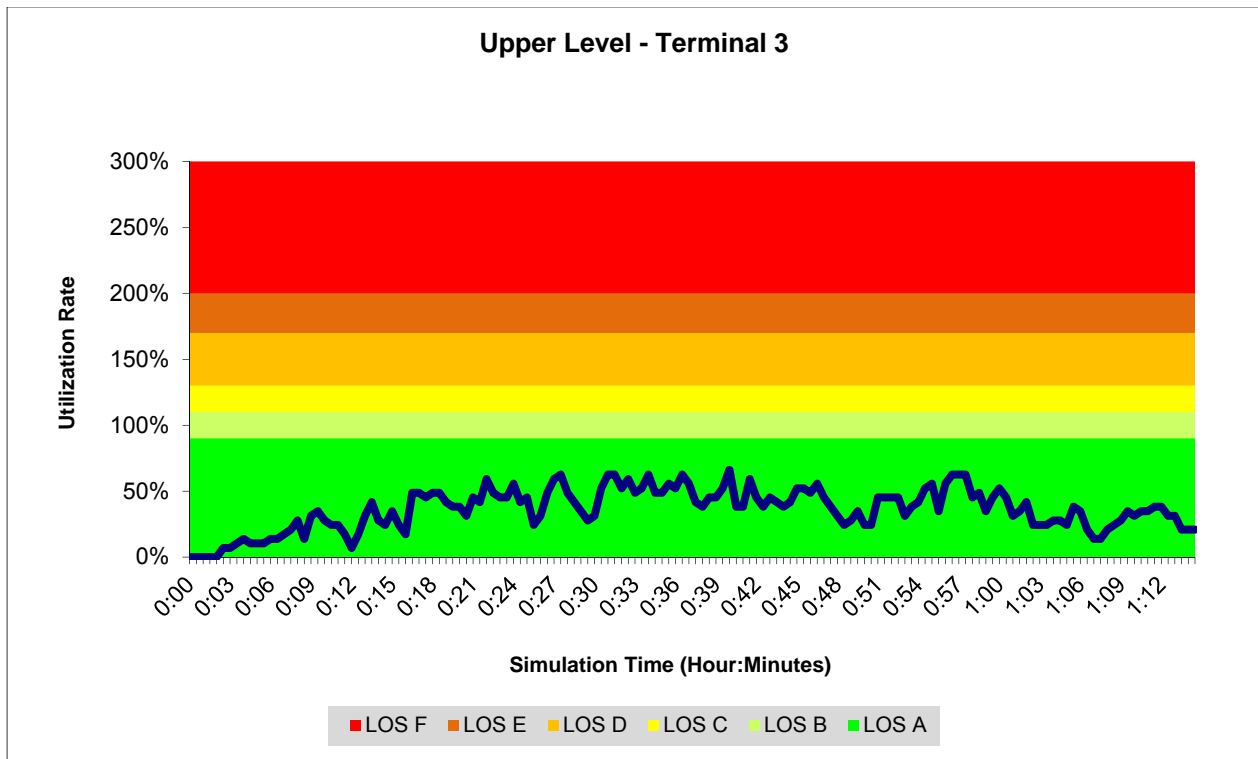


### Departures Level – 2012 Peak

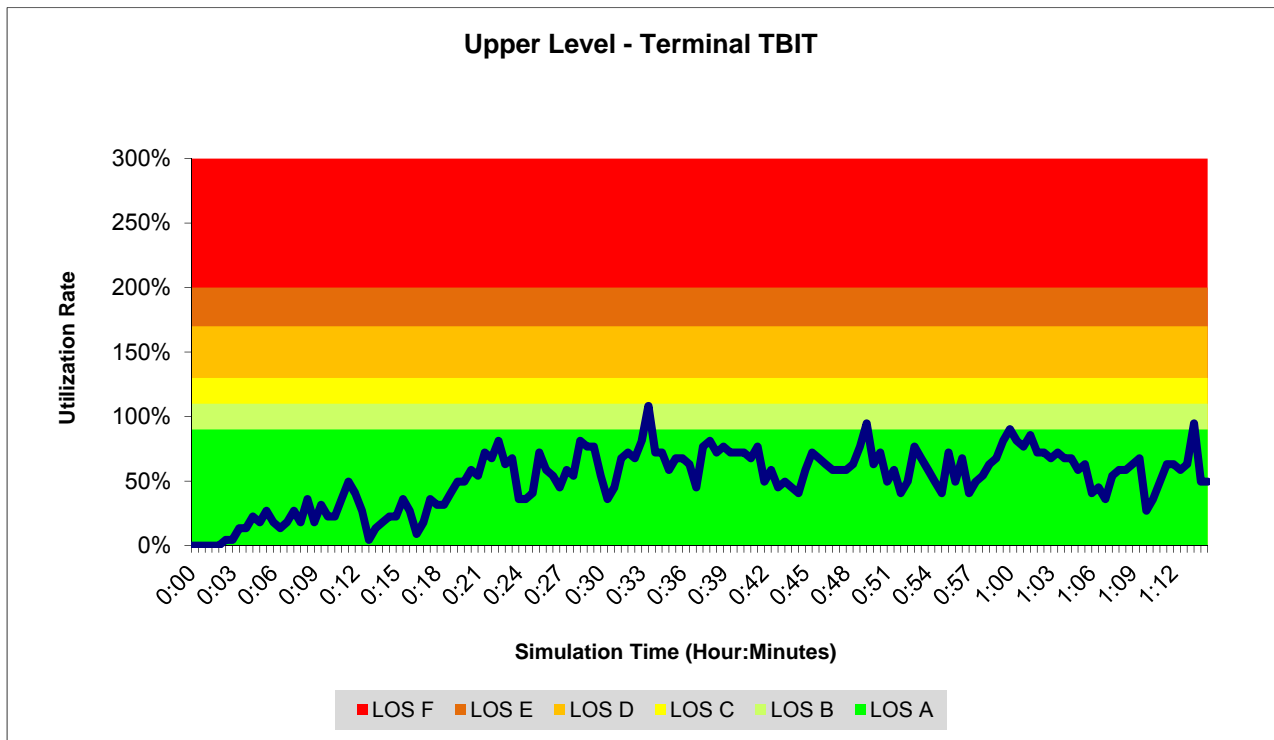




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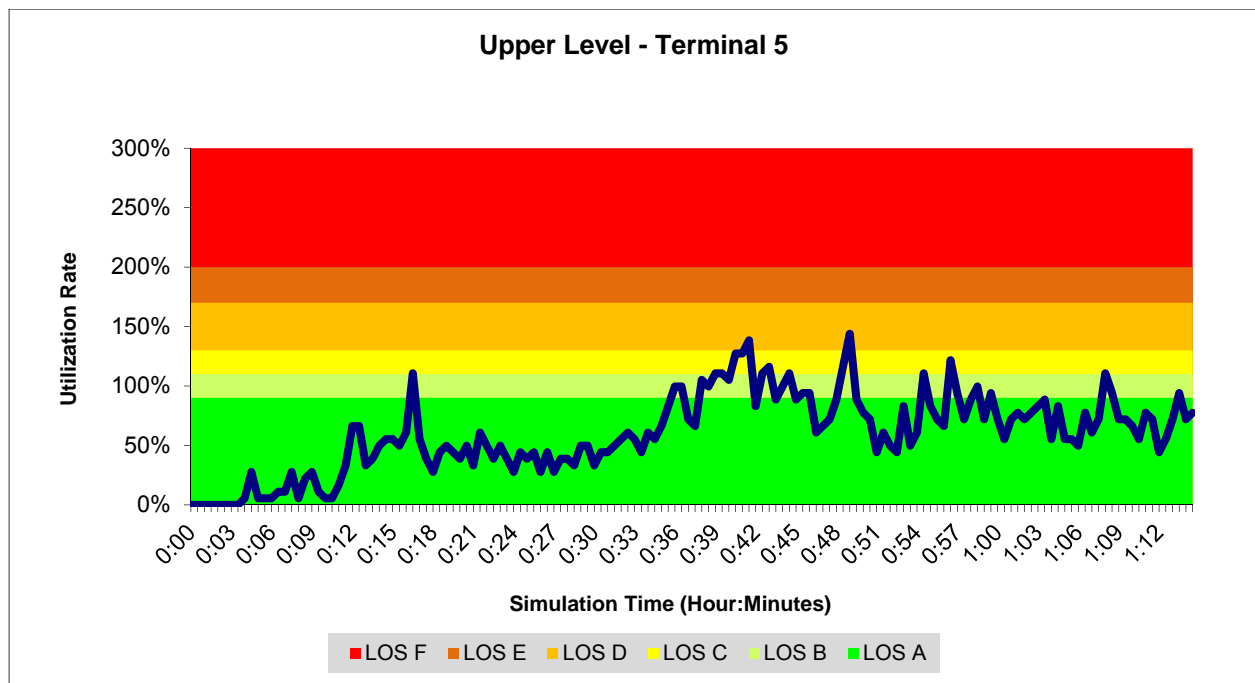
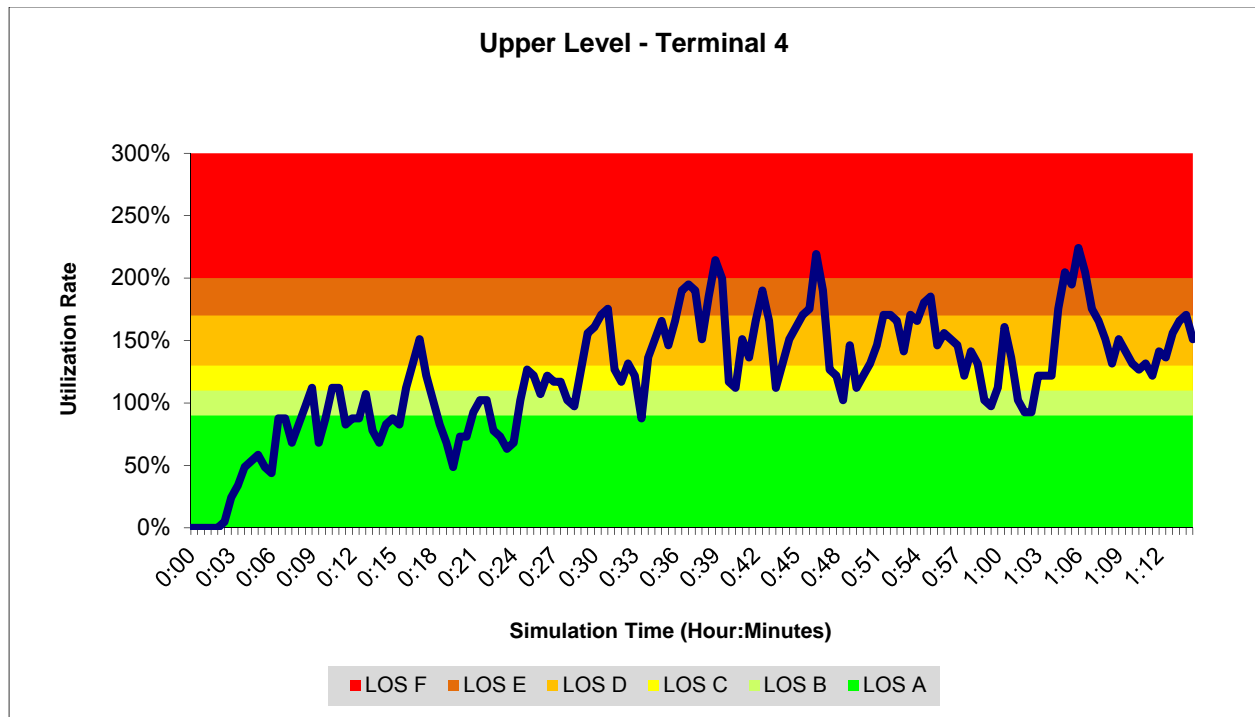


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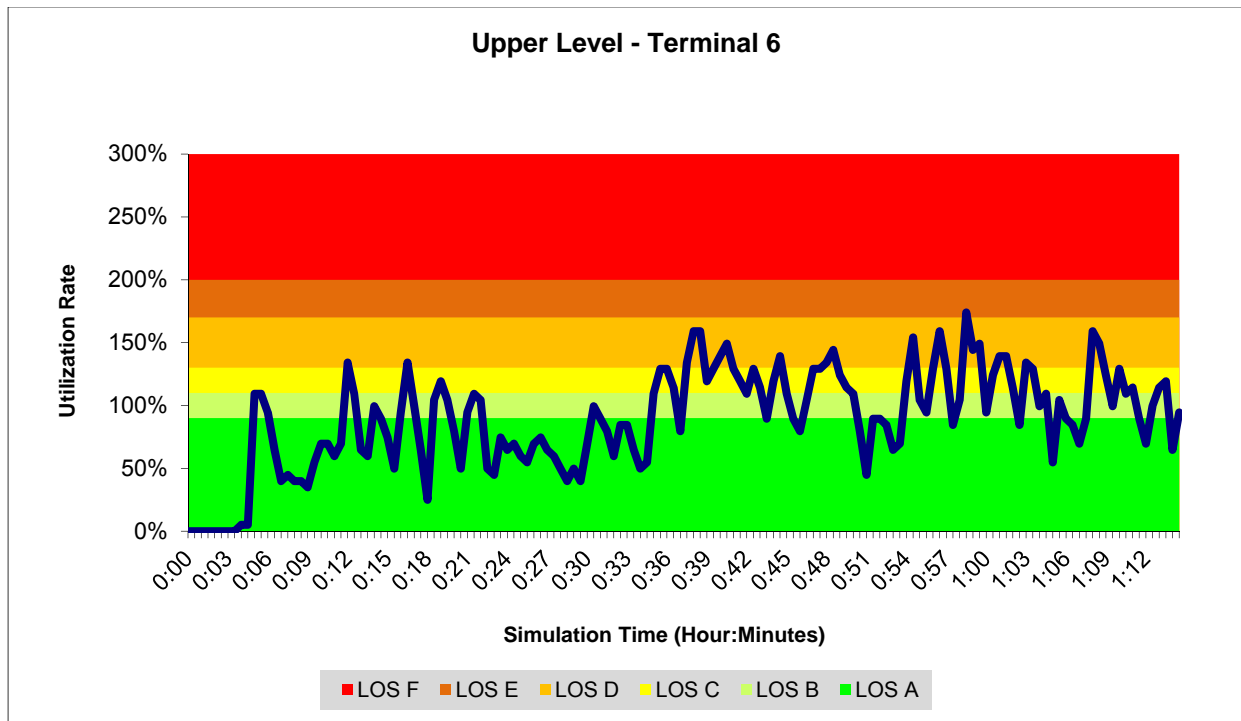
### Departures Level – 2012 Peak

## Appendix E2- Curbside Utilization

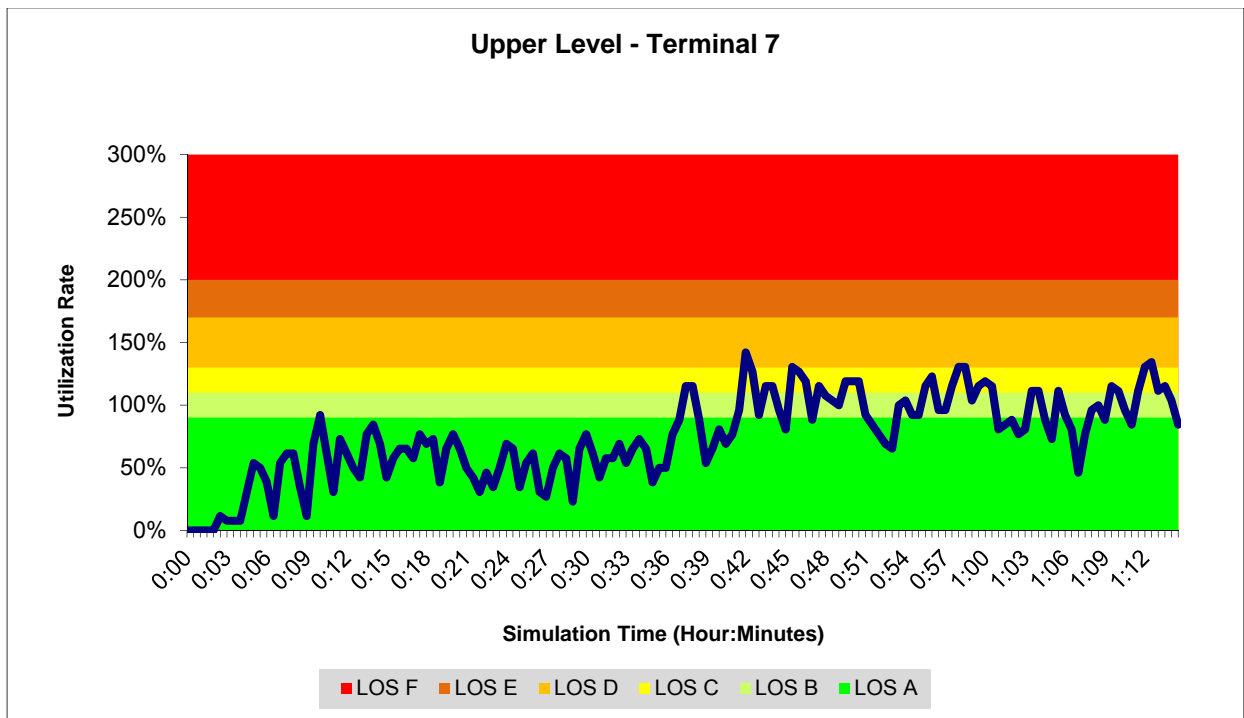


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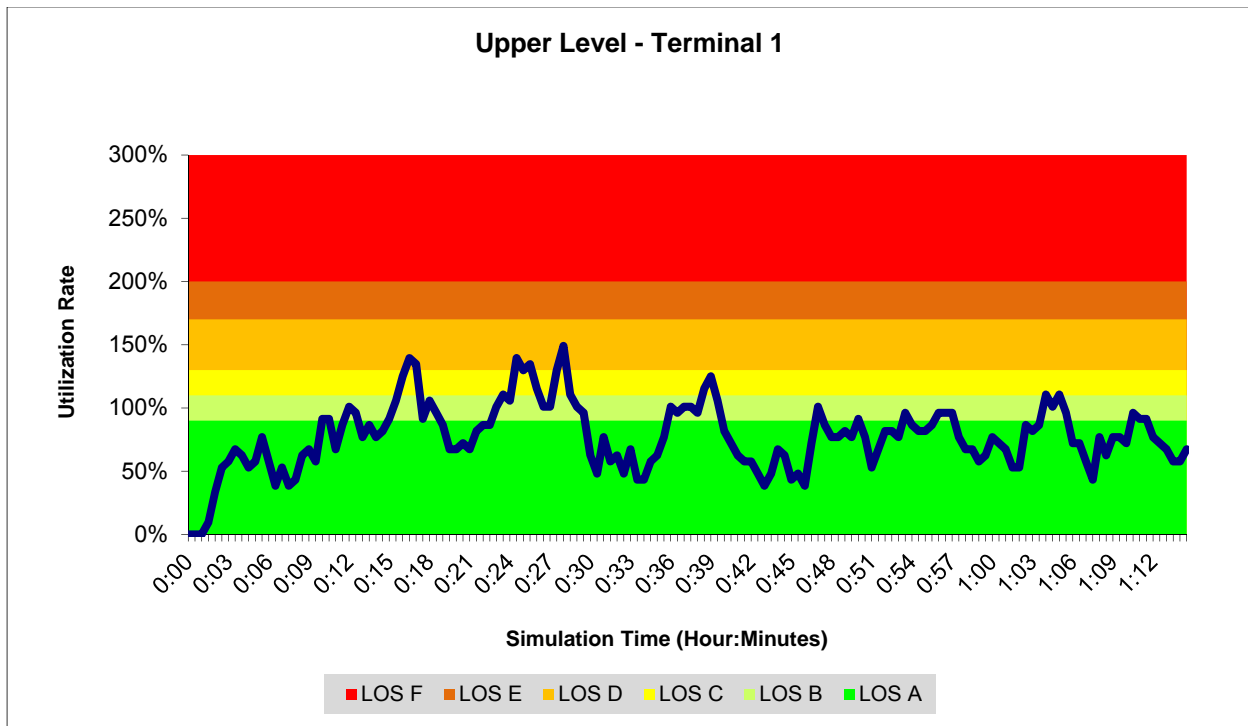
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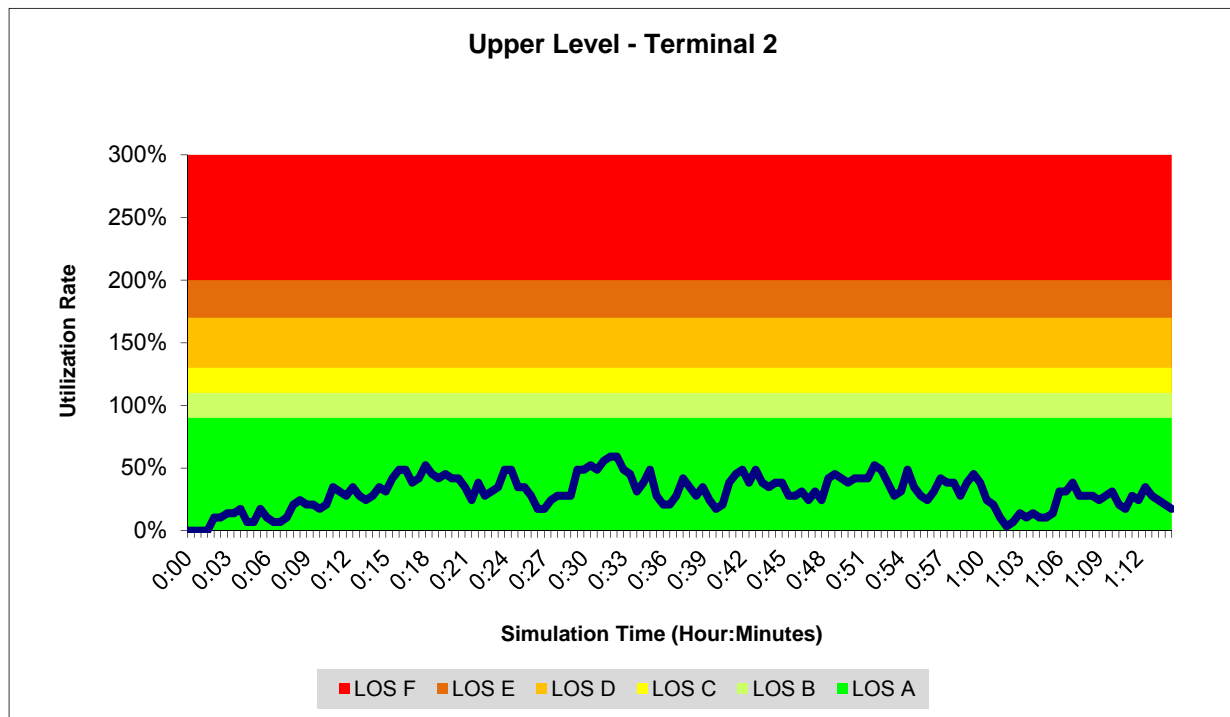
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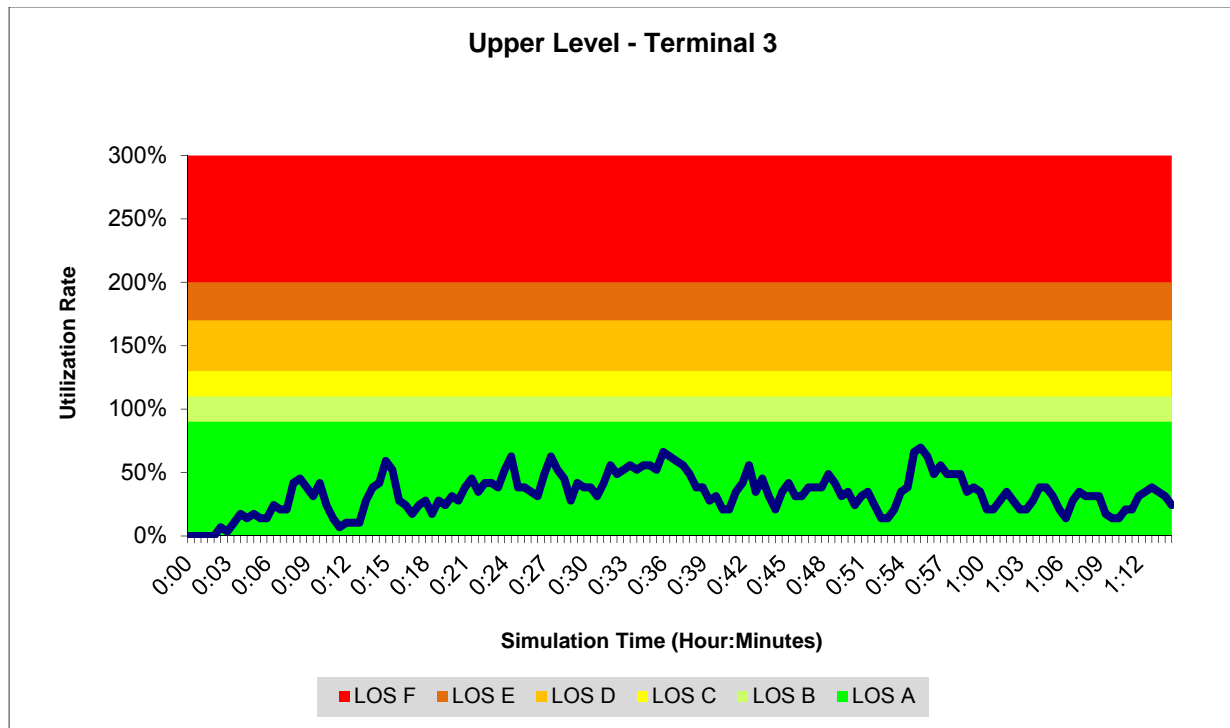
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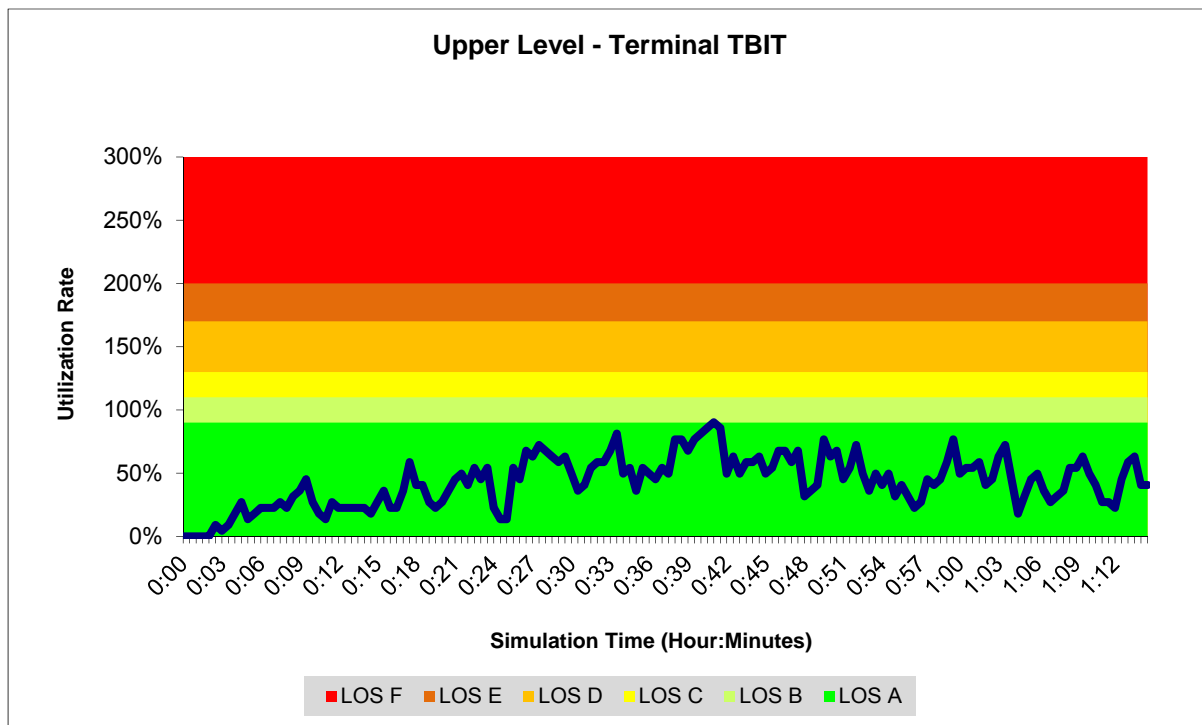
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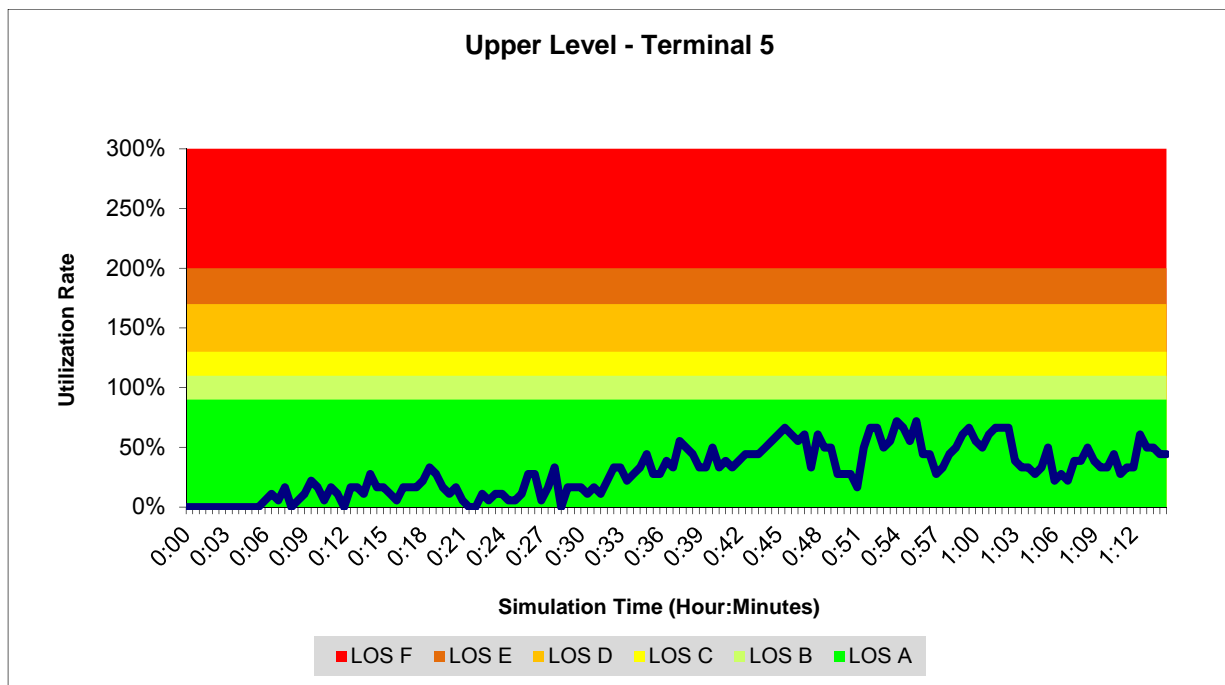
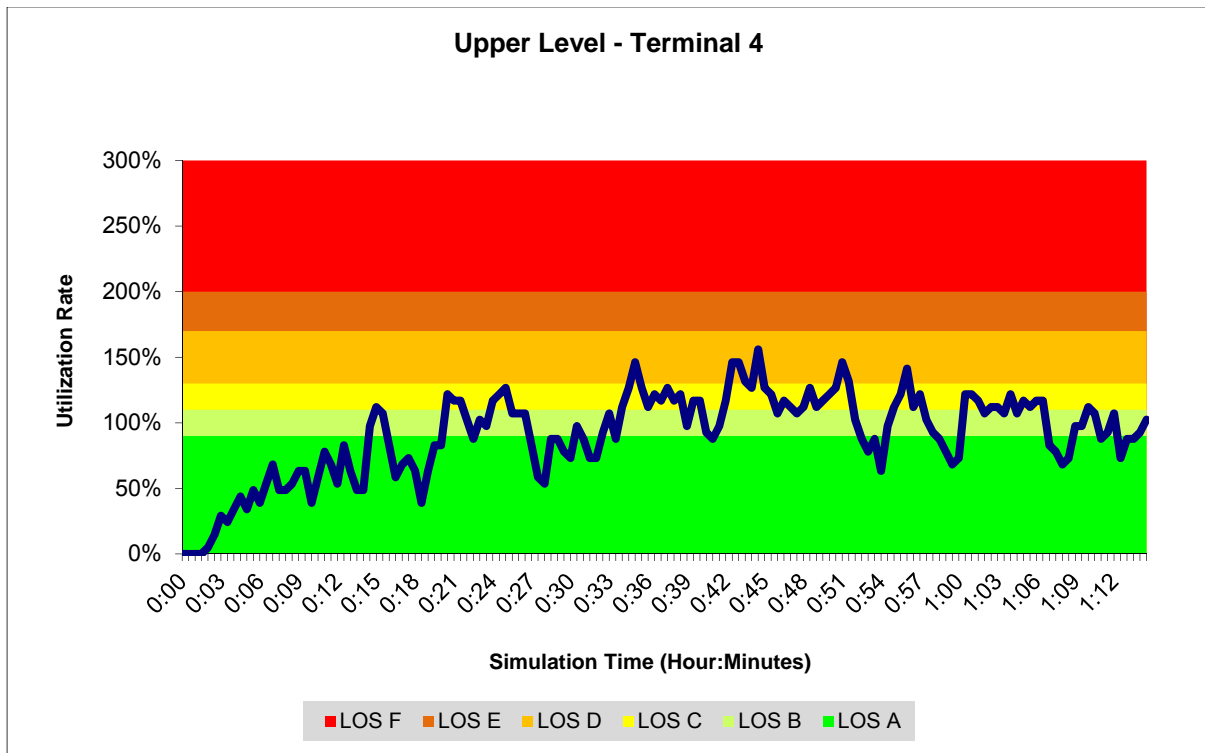
## Appendix E2- Curbside Utilization



### Departures Level-Future Without Program

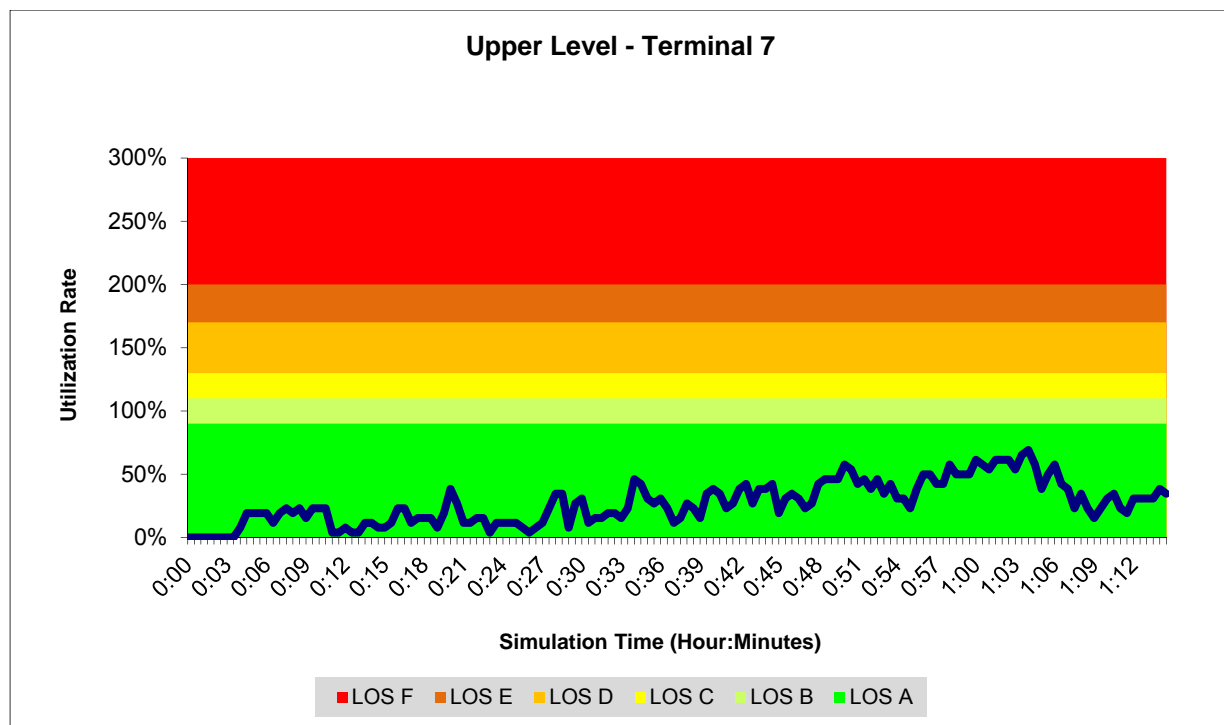
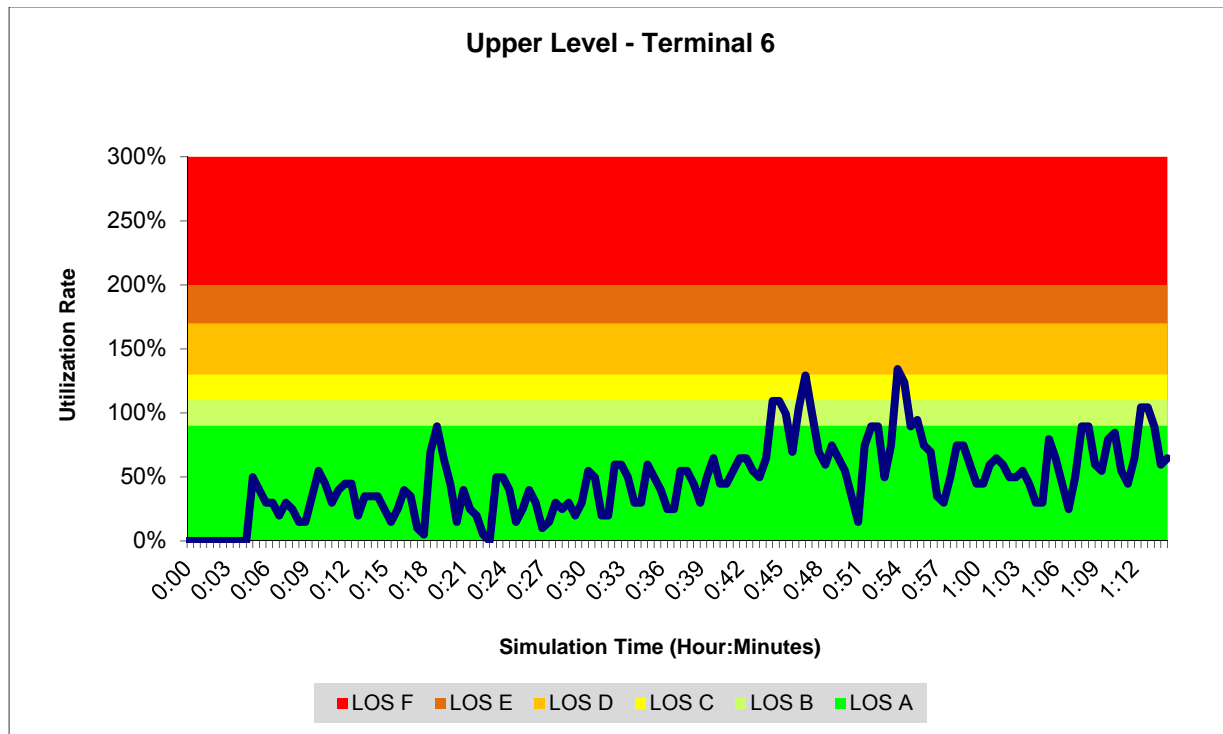


## Appendix E2- Curbside Utilization



### Departures Level-Future Without Program

## Appendix E2- Curbside Utilization



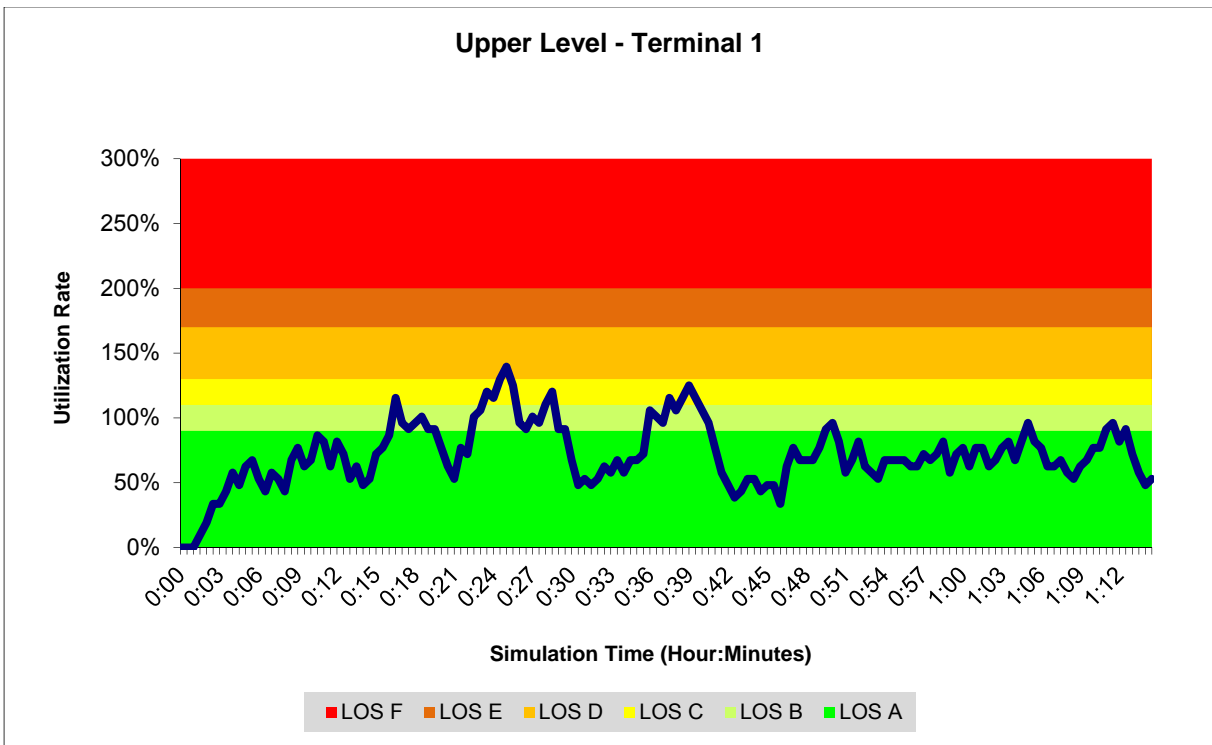
### Departures Level-Future Without Program

## ***Appendix E2- Curbside Utilization***

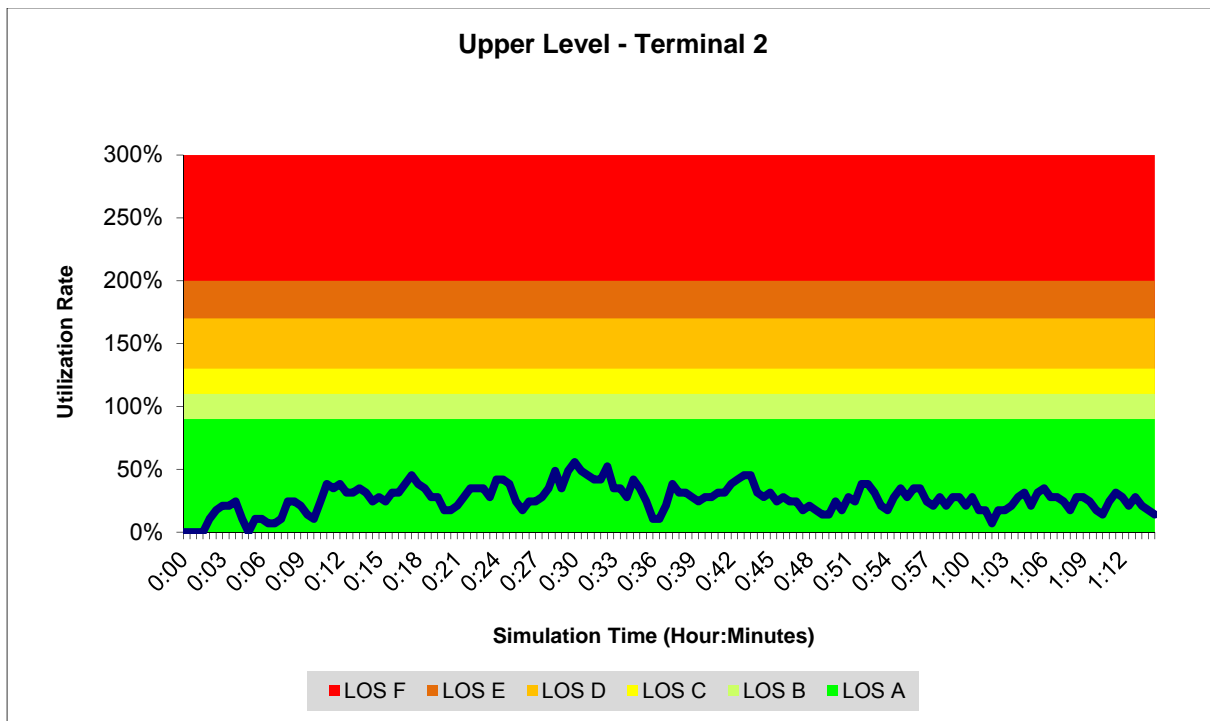
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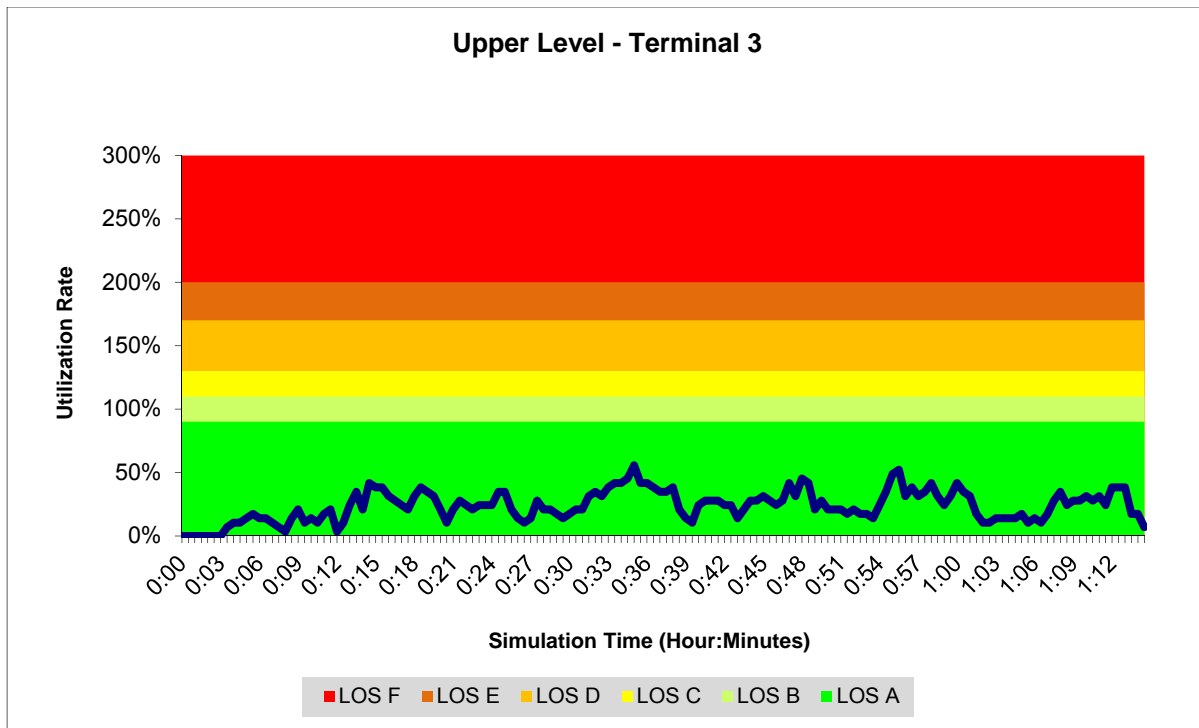
## Appendix E2- Curbside Utilization



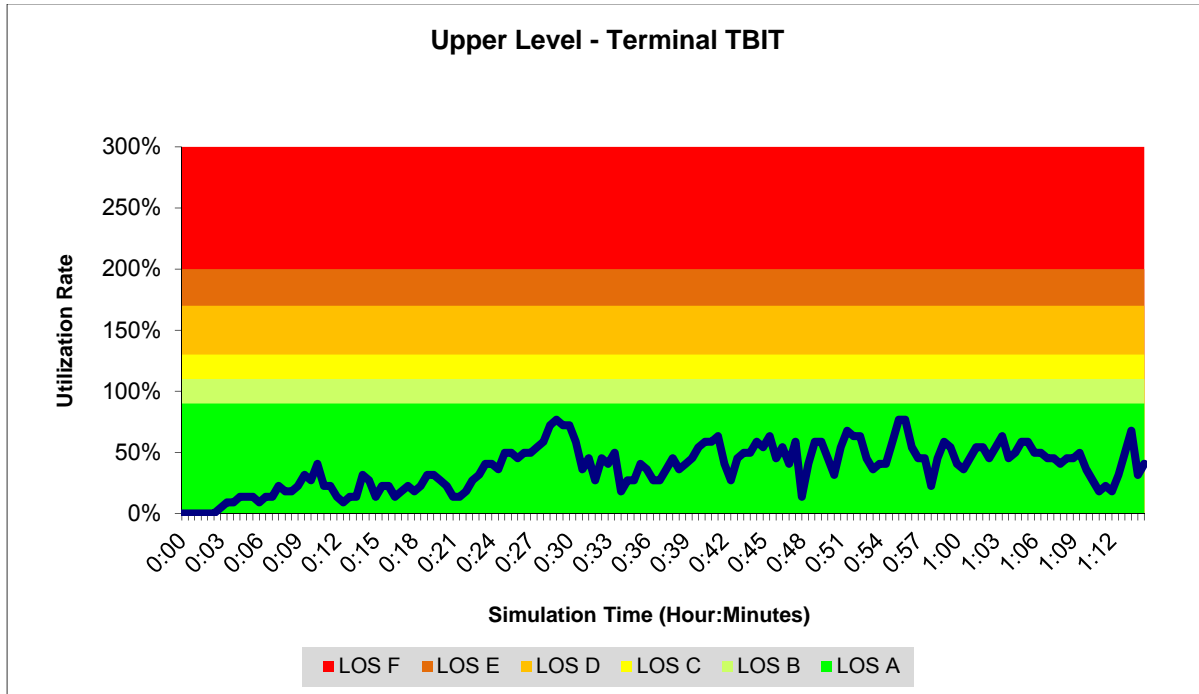
### Departures Level -Arrivals Level - Future With Program



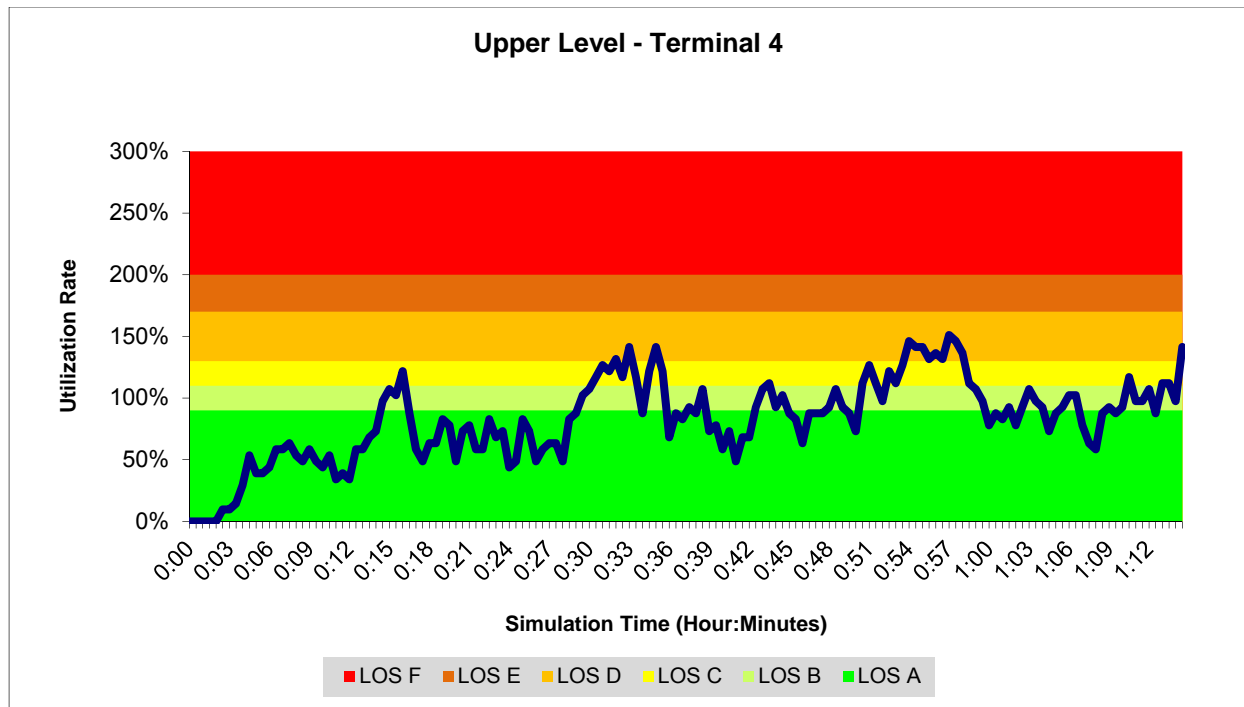
## Appendix E2- Curbside Utilization



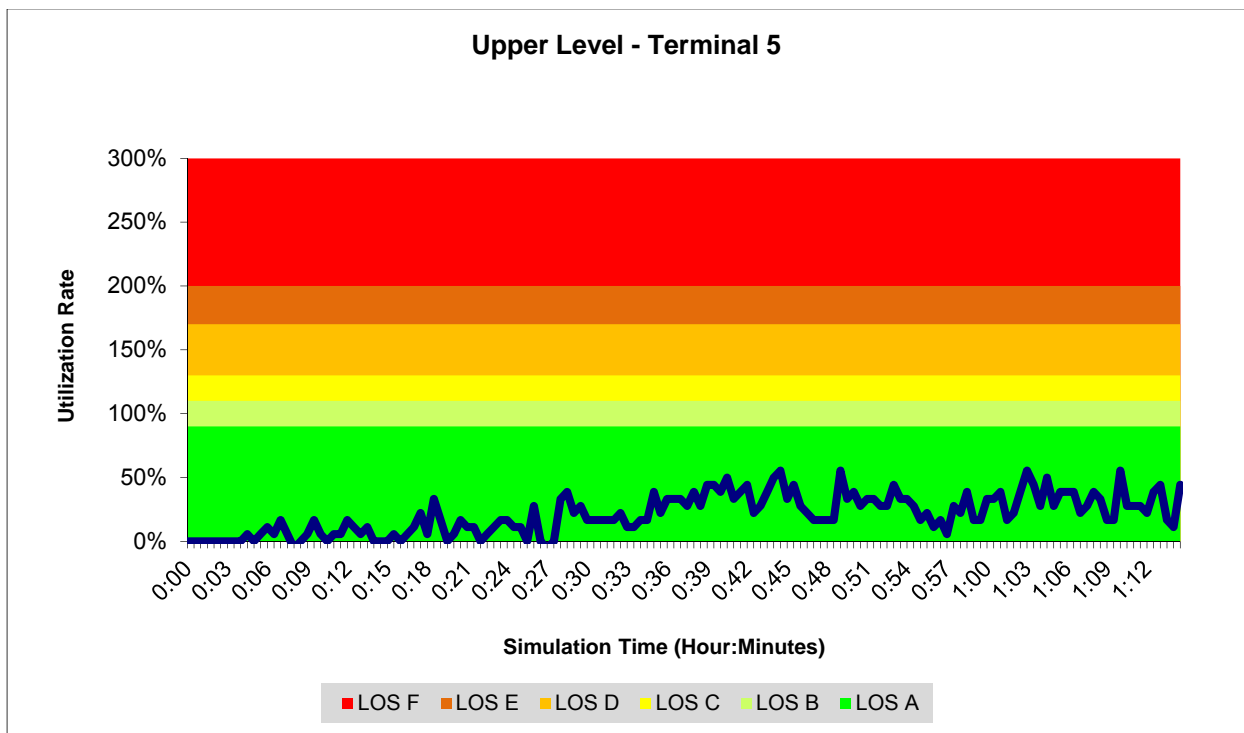
### Departures Level -Arrivals Level - Future With Program



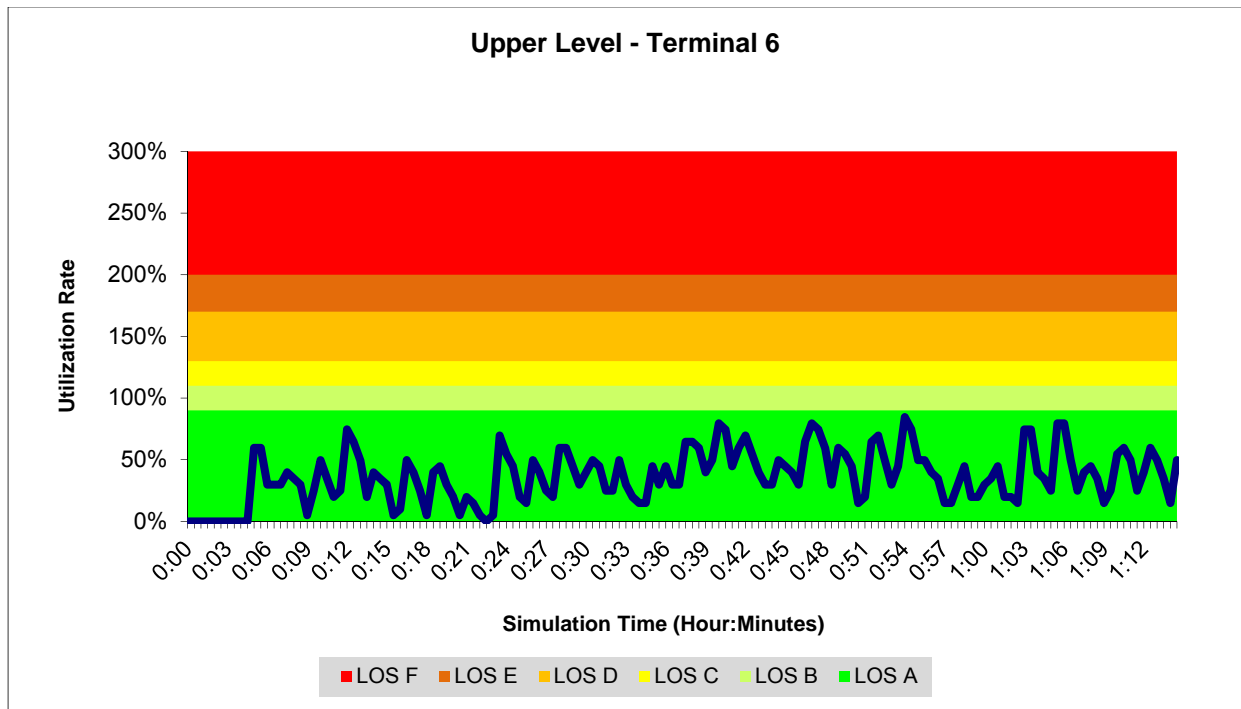
## Appendix E2- Curbside Utilization



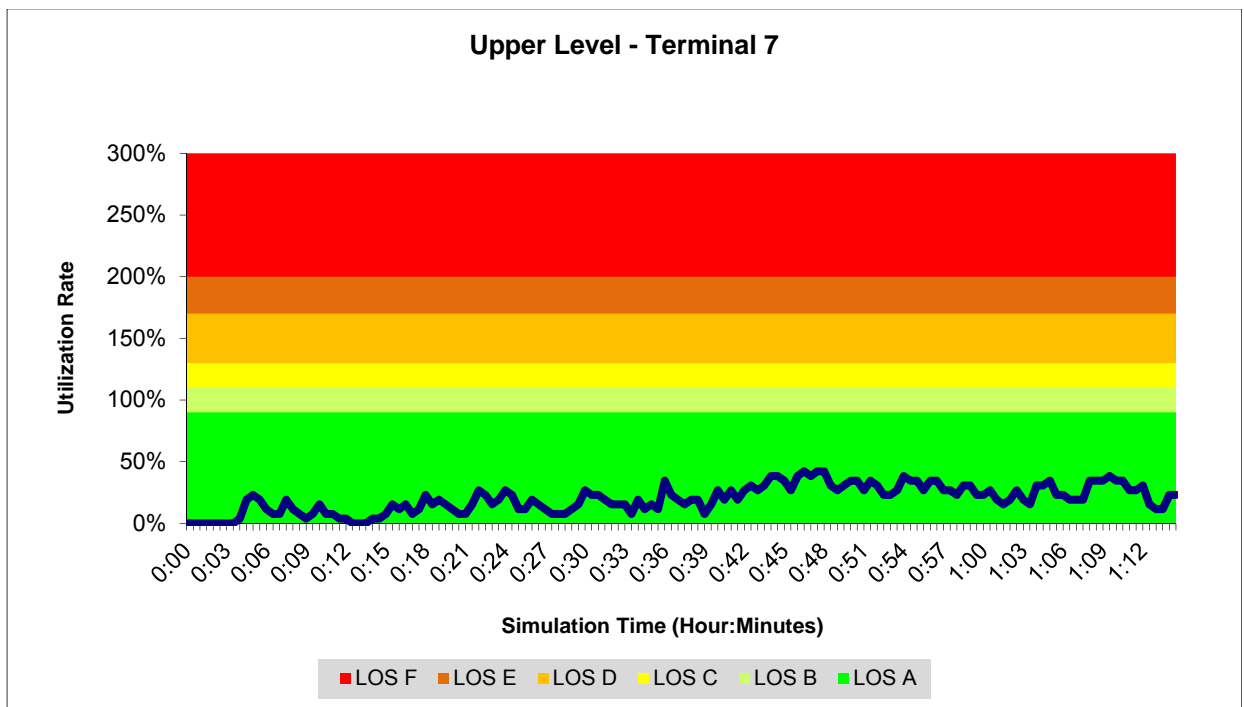
### Departures Level -Arrivals Level - Future With Program



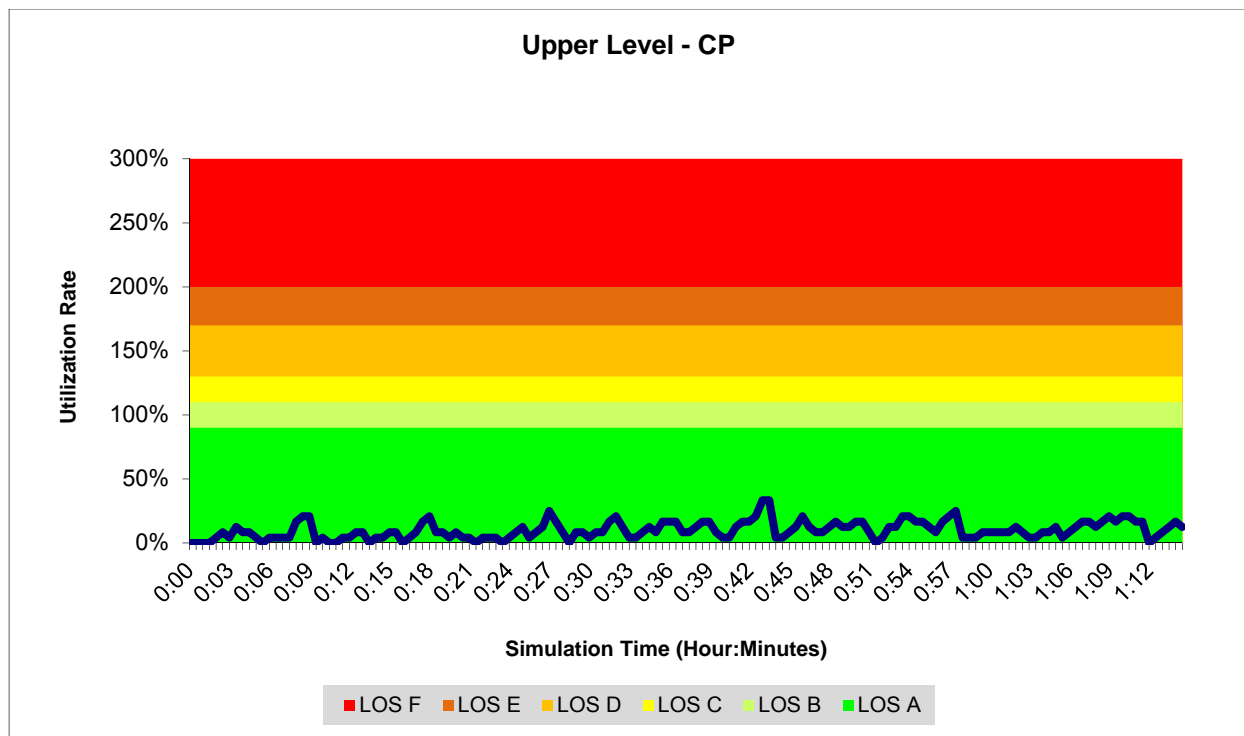
## Appendix E2- Curbside Utilization



### Departures Level -Arrivals Level - Future With Program



## Appendix E2- Curbside Utilization



**Departures Level -Arrivals Level - Future With Program**

## ***Appendix E3- Intersection Capacity Analysis Worksheets***

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### **Appendix E3- Intersection Capacity Analysis Worksheets**

The following pages of this appendix show the intersection capacity analysis worksheets generated from the capacity analysis software. Note: for all scenarios, the Intersection of World Way South and Center Way were analyzed using Synchro, because of the limitations of Circular 212 (C212) method in analyzing a five legged intersection. All other analysis was conducted using Traffix set to evaluate using the C212 method.

## Appendix E3- Intersection Capacity Analysis Worksheets

UL Existing Peak

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-----
Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)
*****
Intersection #1 World Way North and Skyway
*****
Cycle (sec):      120      Critical Vol./Cap. (X):      0.429
Loss Time (sec):   0 (Y+R = 4 sec) Average Delay (sec/veh):      xxxxxx
Optimal Cycle:     80      Level Of Service:      A
*****
Approach:      North Bound      South Bound      East Bound      West Bound
Movement:      L - T - R      L - T - R      L - T - R      L - T - R
-----|-----|-----|-----|
Control:      Protected      Protected      Protected      Protected
Rights:      Include      Include      Include      Include
Min. Green:      0 0 0 0 0 0 0 0 20 0 0 0 0 0 60 0
Lanes:      0 0 0 0 0 0 0 0 1! 0 3 0 0 0 0 0 0 5! 0 0
-----|-----|-----|-----|
Volume Module:
Base Vol:      0 0 0 0 0 0 822 0 0 0 0 0 1820 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 0 0 0 0 0 822 0 0 0 0 0 1820 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 0 0 0 0 0 822 0 0 0 0 0 1820 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 0 0 0 0 0 822 0 0 0 0 0 1820 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.10 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 0 0 0 0 0 0 904 0 0 0 0 0 1820 0
-----|-----|-----|-----|
Saturation Flow Module:
Sat/Lane: 1375 1375 1375 1375 1375 1375 1375 1375 1375 1375 1375 1375
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.00 0.00 0.00 xxxxx 0.01 4.00 0.00 0.00 0.00 0.00 5.00 0.00
Final Sat.: 0 0 0 0 0 0 5500 0 0 0 0 0 6875 0
-----|-----|-----|-----|
Capacity Analysis Module:
Vol/Sat: 0.00 0.00 0.00 0.00 0.00 0.16 0.00 0.00 0.00 0.00 0.26 0.00
Crit Vol: 0 226 0 364
Crit Moves: ****
*****
```

## Appendix E3- Intersection Capacity Analysis Worksheets

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-----
                        Level Of Service Computation Report
                  Circular 212 Planning Method (Base Volume Alternative)
*****
Intersection #2 World Way South and West Way
*****
Cycle (sec):          120          Critical Vol./Cap. (X):          0.403
Loss Time (sec):       0 (Y+R = 6 sec) Average Delay (sec/veh):      xxxxxx
Optimal Cycle:         80          Level Of Service:              A
*****
Approach:      North Bound      South Bound      East Bound      West Bound
Movement:      L - T - R      L - T - R      L - T - R      L - T - R
-----|-----|-----|-----|
Control:       Protected      Protected      Protected      Protected
Rights:        Include      Include      Include      Include
Min. Green:    0 0 0 0 0 20 0 0 0 0 60 0 0 0 0 0
Lanes:         0 0 0 0 0 2 0 0 0 0 0 0 0 0 0 0
-----|-----|-----|-----|
Volume Module:
Base Vol:      0 0 0 489 0 0 0 1429 0 0 0 0
Growth Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:   0 0 0 489 0 0 0 1429 0 0 0 0
User Adj:      1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:       1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:    0 0 0 489 0 0 0 1429 0 0 0 0
Reduct Vol:    0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol:   0 0 0 489 0 0 0 1429 0 0 0 0
PCE Adj:       1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:       1.00 1.00 1.00 1.10 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.:    0 0 0 538 0 0 0 1429 0 0 0 0
-----|-----|-----|-----|
Saturation Flow Module:
Sat/Lane:      1375 1375 1375 1375 1375 1375 1375 1375 1375 1375 1375 1375
Adjustment:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes:         0.00 0.00 0.00 2.00 0.00 0.00 0.00 5.00 0.00 0.00 0.00 0.00
Final Sat.:    0 0 0 2750 0 0 0 6875 0 0 0 0
-----|-----|-----|-----|
Capacity Analysis Module:
Vol/Sat:       0.00 0.00 0.00 0.20 0.00 0.00 0.00 0.21 0.00 0.00 0.00 0.00
Crit Vol:      0 269 286 0
Crit Moves:    ****
*****
```



## Appendix E3- Intersection Capacity Analysis Worksheets

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-----
                        Level Of Service Computation Report
                        Circular 212 Planning Method (Base Volume Alternative)
*****
Intersection #3 World Way South and East Way
*****
Cycle (sec):          100          Critical Vol./Cap. (X):          0.375
Loss Time (sec):      0 (Y+R = 4 sec) Average Delay (sec/veh):      xxxxxx
Optimal Cycle:        80          Level Of Service:          A
*****
Approach:      North Bound      South Bound      East Bound      West Bound
Movement:      L - T - R      L - T - R      L - T - R      L - T - R
-----|-----|-----|-----|
Control:      Protected      Protected      Protected      Protected
Rights:      Include      Include      Include      Include
Min. Green:      0 0 0 0      20 0 0 0      0 0 60 0      0 0 0 0
Lanes:      0 0 0 0 0      2 0 0 0 0      0 1 5 0 0      0 0 0 0 0
-----|-----|-----|-----|
Volume Module:
Base Vol:      0 0 0 0      388 0 0 0      0 1810 0 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 0 0 0      388 0 0 0      0 1810 0 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 0 0 0      388 0 0 0      0 1810 0 0 0 0
Reduct Vol: 0 0 0 0      0 0 0 0      0 0 0 0 0 0 0 0
Reduced Vol: 0 0 0 0      388 0 0 0      0 1810 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.10 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 0 0 0 0      427 0 0 0      0 1810 0 0 0 0
-----|-----|-----|-----|
Saturation Flow Module:
Sat/Lane: 1375 1375 1375 1375 1375 1375 1375 1375 1375 1375 1375 1375
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.00 0.00 0.00 0.00 2.00 0.00 0.00 0.00 6.00 0.00 0.00 0.00
Final Sat.: 0 0 0 0      2750 0 0 0      0 8250 0 0 0 0
-----|-----|-----|-----|
Capacity Analysis Module:
Vol/Sat: 0.00 0.00 0.00 0.16 0.00 0.00 0.00 0.22 0.00 0.00 0.00 0.00
Crit Vol: 0 213 302 0
Crit Moves: ****
*****
```

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## Appendix E3- Intersection Capacity Analysis Worksheets

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```
-----
                        Level Of Service Computation Report
                        Circular 212 Planning Method (Base Volume Alternative)
*****
Intersection #1 World Way North and Skyway
*****
Cycle (sec):          120                Critical Vol./Cap. (X):          0.491
Loss Time (sec):      0 (Y+R = 4 sec)    Average Delay (sec/veh):      xxxxxx
Optimal Cycle:        80                Level Of Service:          A
*****
Approach:      North Bound      South Bound      East Bound      West Bound
Movement:      L - T - R      L - T - R      L - T - R      L - T - R
-----|-----|-----|-----|
Control:        Protected      Protected      Protected      Protected
Rights:          Include      Include      Include      Include
Min. Green:      0 0 0 0      0 0 0 20      0 0 0 0      0 0 60 0
Lanes:           0 0 0 0 0      0 0 1! 0 3      0 0 0 0 0      0 0 5! 0 0
-----|-----|-----|-----|
Volume Module:
Base Vol:        0 0 0 0      0 0 927      0 0 0      0 2103 0
Growth Adj:      1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:      0 0 0 0      0 0 927      0 0 0      0 2103 0
User Adj:        1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:          1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:       0 0 0 0      0 0 927      0 0 0      0 2103 0
Reduct Vol:       0 0 0 0      0 0 0      0 0 0      0 0 0 0
Reduced Vol:      0 0 0 0      0 0 927      0 0 0      0 2103 0
PCE Adj:          1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:          1.00 1.00 1.00 1.00 1.00 1.10 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.:       0 0 0 0      0 0 1020      0 0 0      0 2103 0
-----|-----|-----|-----|
Saturation Flow Module:
Sat/Lane:        1375 1375 1375 1375 1375 1375 1375 1375 1375 1375 1375 1375
Adjustment:       1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes:           0.00 0.00 0.00 xxxx 0.01 4.00 0.00 0.00 0.00 0.00 5.00 0.00
Final Sat.:       0 0 0 0      0 0 5500      0 0 0      0 6875 0
-----|-----|-----|-----|
Capacity Analysis Module:
Vol/Sat:          0.00 0.00 0.00 0.00 0.00 0.19 0.00 0.00 0.00 0.00 0.31 0.00
Crit Vol:         0 255 0 421
Crit Moves:          ****          ****
*****
```

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## Appendix E3- Intersection Capacity Analysis Worksheets

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```
-----
                        Level Of Service Computation Report
                        Circular 212 Planning Method (Base Volume Alternative)
*****
Intersection #2 World Way South and West Way
*****
Cycle (sec):          120          Critical Vol./Cap. (X):          0.426
Loss Time (sec):      0 (Y+R = 6 sec) Average Delay (sec/veh):      xxxxxx
Optimal Cycle:        80          Level Of Service:          A
*****
Approach:      North Bound      South Bound      East Bound      West Bound
Movement:      L - T - R      L - T - R      L - T - R      L - T - R
-----|-----|-----|-----|
Control:      Protected      Protected      Protected      Protected
Rights:      Include      Include      Include      Include
Min. Green:      0 0 0 0 0 20 0 0 0 0 0 60 0 0 0 0 0
Lanes:      0 0 0 0 0 2 0 0 0 0 0 0 5 0 0 0 0 0
-----|-----|-----|-----|
Volume Module:
Base Vol:      0 0 0 579 0 0 0 0 1334 0 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 0 0 579 0 0 0 0 1334 0 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 0 0 579 0 0 0 0 1334 0 0 0 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 0 0 579 0 0 0 0 1334 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.10 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 0 0 0 637 0 0 0 0 1334 0 0 0 0
-----|-----|-----|-----|
Saturation Flow Module:
Sat/Lane: 1375 1375 1375 1375 1375 1375 1375 1375 1375 1375 1375 1375
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.00 0.00 0.00 2.00 0.00 0.00 0.00 5.00 0.00 0.00 0.00 0.00
Final Sat.: 0 0 0 2750 0 0 0 6875 0 0 0 0
-----|-----|-----|-----|
Capacity Analysis Module:
Vol/Sat: 0.00 0.00 0.00 0.23 0.00 0.00 0.00 0.19 0.00 0.00 0.00 0.00
Crit Vol: 0 318 267 0
Crit Moves: ****
*****
```

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## Appendix E3- Intersection Capacity Analysis Worksheets

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-----
                        Level Of Service Computation Report
                        Circular 212 Planning Method (Base Volume Alternative)
*****
Intersection #3 World Way South and East Way
*****
Cycle (sec):          100          Critical Vol./Cap. (X):          0.220
Loss Time (sec):      0 (Y+R = 4 sec) Average Delay (sec/veh):      xxxxxx
Optimal Cycle:        80          Level Of Service:          A
*****
Approach:      North Bound      South Bound      East Bound      West Bound
Movement:      L - T - R      L - T - R      L - T - R      L - T - R
-----|-----|-----|-----|
Control:      Protected      Protected      Protected      Protected
Rights:      Include      Include      Include      Include
Min. Green:      0 0 0 0 0 20 0 0 0 0 0 60 0 0 0 0 0
Lanes:      0 0 0 0 0 2 0 0 0 0 0 1 5 0 0 0 0 0
-----|-----|-----|-----|
Volume Module:
Base Vol:      0 0 0 59 0 0 0 0 1621 0 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 0 0 59 0 0 0 0 1621 0 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 0 0 59 0 0 0 0 1621 0 0 0 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 0 0 59 0 0 0 0 1621 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.10 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 0 0 0 65 0 0 0 0 1621 0 0 0 0
-----|-----|-----|-----|
Saturation Flow Module:
Sat/Lane: 1375 1375 1375 1375 1375 1375 1375 1375 1375 1375 1375 1375
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.00 0.00 0.00 2.00 0.00 0.00 0.00 6.00 0.00 0.00 0.00 0.00
Final Sat.: 0 0 0 2750 0 0 0 8250 0 0 0 0
-----|-----|-----|-----|
Capacity Analysis Module:
Vol/Sat: 0.00 0.00 0.00 0.02 0.00 0.00 0.00 0.20 0.00 0.00 0.00 0.00
Crit Vol: 0 32 270 0
Crit Moves:      ****      ****
*****
```

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## Appendix E3- Intersection Capacity Analysis Worksheets

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```
-----
                        Level Of Service Computation Report
Circular 212 Planning Method (Future Volume Alternative)
*****
Intersection #1 World Way North and Skyway
*****
Cycle (sec):          120          Critical Vol./Cap. (X):          0.491
Loss Time (sec):      0 (Y+R = 4 sec) Average Delay (sec/veh):      xxxxxx
Optimal Cycle:        80          Level Of Service:          A
*****
Approach:      North Bound      South Bound      East Bound      West Bound
Movement:      L - T - R      L - T - R      L - T - R      L - T - R
-----
Control:      Protected      Protected      Protected      Protected
Rights:      Include      Include      Include      Include
Min. Green:      0 0 0 0 0 0 0 0 20 0 0 0 0 0 0 60 0 0
Lanes:      0 0 0 0 0 0 0 0 1! 0 3 0 0 0 0 0 0 5! 0 0
-----
Volume Module:
Base Vol:      0 0 0 0 0 0 927 0 0 0 0 0 2103 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 0 0 0 0 0 927 0 0 0 0 0 2103 0
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 0 0 0 0 0 0 927 0 0 0 0 0 2103 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 0 0 0 0 0 927 0 0 0 0 0 2103 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 0 0 0 0 0 927 0 0 0 0 0 2103 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.10 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 0 0 0 0 0 0 1020 0 0 0 0 0 2103 0
-----
Saturation Flow Module:
Sat/Lane: 1375 1375 1375 1375 1375 1375 1375 1375 1375 1375 1375 1375
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.00 0.00 0.00 0.00 xxxxx 0.01 4.00 0.00 0.00 0.00 0.00 5.00 0.00
Final Sat.: 0 0 0 0 0 0 5500 0 0 0 0 0 6875 0
-----
Capacity Analysis Module:
Vol/Sat: 0.00 0.00 0.00 0.00 0.00 0.19 0.00 0.00 0.00 0.00 0.31 0.00
Crit Vol: 0 255 0 421
Crit Moves: ****
*****
```

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## Appendix E3- Intersection Capacity Analysis Worksheets

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```
-----
                        Level Of Service Computation Report
                Circular 212 Planning Method (Base Volume Alternative)
*****
Intersection #2 World Way South and West Way
*****
Cycle (sec):          120                Critical Vol./Cap. (X):          0.426
Loss Time (sec):      0 (Y+R = 6 sec)    Average Delay (sec/veh):      xxxxxx
Optimal Cycle:        80                Level Of Service:          A
*****
Approach:      North Bound      South Bound      East Bound      West Bound
Movement:      L - T - R      L - T - R      L - T - R      L - T - R
-----|-----|-----|-----|
Control:      Protected      Protected      Protected      Protected
Rights:      Include      Include      Include      Include
Min. Green:      0 0 0 0      20 0 0 0      0 60 0 0      0 0 0 0
Lanes:      0 0 0 0 0      2 0 0 0 0      0 0 5 0 0      0 0 0 0 0
-----|-----|-----|-----|
Volume Module:
Base Vol:      0 0 0 579 0 0      0 1334 0 0 0 0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 0 0 579 0 0      0 1334 0 0 0 0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume: 0 0 0 579 0 0      0 1334 0 0 0 0
Reduct Vol: 0 0 0 0 0 0      0 0 0 0 0 0
Reduced Vol: 0 0 0 579 0 0      0 1334 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj: 1.00 1.00 1.00 1.10 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Vol.: 0 0 0 637 0 0      0 1334 0 0 0 0
-----|-----|-----|-----|
Saturation Flow Module:
Sat/Lane: 1375 1375 1375 1375 1375 1375 1375 1375 1375 1375 1375 1375
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 0.00 0.00 0.00 2.00 0.00 0.00 0.00 5.00 0.00 0.00 0.00 0.00
Final Sat.: 0 0 0 2750 0 0      0 6875 0 0 0 0
-----|-----|-----|-----|
Capacity Analysis Module:
Vol/Sat: 0.00 0.00 0.00 0.23 0.00 0.00 0.00 0.19 0.00 0.00 0.00 0.00
Crit Vol: 0 318 267 0
Crit Moves: ****
*****
```

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## Appendix E3- Intersection Capacity Analysis Worksheets

UL Future With Program

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-----
                        Level Of Service Computation Report
                Circular 212 Planning Method (Base Volume Alternative)
*****
Intersection #3 World Way South and East Way
*****
Cycle (sec):          100                Critical Vol./Cap. (X):          0.220
Loss Time (sec):      0 (Y+R = 4 sec)    Average Delay (sec/veh):      xxxxxx
Optimal Cycle:        80                Level Of Service:          A
*****
Approach:             North Bound        South Bound        East Bound        West Bound
Movement:             L - T - R          L - T - R          L - T - R          L - T - R
-----|-----|-----|-----|
Control:              Protected          Protected          Protected          Protected
Rights:               Include            Include            Include            Include
Min. Green:           0    0    0        20    0    0        0    60    0        0    0    0
Lanes:                0    0    0    0    2    0    0    0    0    1    5    0    0    0    0
-----|-----|-----|-----|
Volume Module:
Base Vol:             0    0    0        59    0    0        0 1621    0        0    0    0
Growth Adj:           1.00 1.00 1.00      1.00 1.00 1.00      1.00 1.00 1.00      1.00 1.00 1.00
Initial Bse:          0    0    0        59    0    0        0 1621    0        0    0    0
User Adj:             1.00 1.00 1.00      1.00 1.00 1.00      1.00 1.00 1.00      1.00 1.00 1.00
PHF Adj:              1.00 1.00 1.00      1.00 1.00 1.00      1.00 1.00 1.00      1.00 1.00 1.00
PHF Volume:           0    0    0        59    0    0        0 1621    0        0    0    0
Reduct Vol:           0    0    0        0    0    0        0    0    0        0    0    0
Reduced Vol:          0    0    0        59    0    0        0 1621    0        0    0    0
PCE Adj:              1.00 1.00 1.00      1.00 1.00 1.00      1.00 1.00 1.00      1.00 1.00 1.00
MLF Adj:              1.00 1.00 1.00      1.10 1.00 1.00      1.00 1.00 1.00      1.00 1.00 1.00
Final Vol.:           0    0    0        65    0    0        0 1621    0        0    0    0
-----|-----|-----|-----|
Saturation Flow Module:
Sat/Lane:             1375 1375 1375      1375 1375 1375      1375 1375 1375      1375 1375 1375
Adjustment:           1.00 1.00 1.00      1.00 1.00 1.00      1.00 1.00 1.00      1.00 1.00 1.00
Lanes:                0.00 0.00 0.00      2.00 0.00 0.00      0.00 6.00 0.00      0.00 0.00 0.00
Final Sat.:           0    0    0        2750    0    0        0 8250    0        0    0    0
-----|-----|-----|-----|
Capacity Analysis Module:
Vol/Sat:              0.00 0.00 0.00      0.02 0.00 0.00      0.00 0.20 0.00      0.00 0.00 0.00
Crit Vol:             0                32                270                0
Crit Moves:           ****                ****
*****
```

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## Appendix E3- Intersection Capacity Analysis Worksheets

LL Existing Peak

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### RSA Study

#### Level Of Service Computation Report Circular 212 Planning Method (Base Volume Alternative)

##### Intersection #1 Skyway @ World Way North

Cycle (sec): 100 Critical Vol./Cap. (X): 0.482  
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx  
Optimal Cycle: 44 Level Of Service: A

Street Name: Skyway World Way North

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Protected	Protected	Protected	Protected
Rights:	Ignore	Include	Include	Include
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0
Lanes:	2 0 1 0 0	0 0 0 0 3	0 0 0 0 0	0 0 6 0 0

Volume Module:

Base Vol:	258	146	0	0	0	580	0	0	0	0	1848	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	258	146	0	0	0	580	0	0	0	0	1848	0
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	258	146	0	0	0	580	0	0	0	0	1848	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	258	146	0	0	0	580	0	0	0	0	1848	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.10	1.00	0.00	1.00	1.00	1.10	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	284	146	0	0	0	638	0	0	0	0	1848	0

Saturation Flow Module:

Sat/Lane:	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.00	0.00	0.00	0.00	3.00	0.00	0.00	0.00	0.00	6.00	0.00
Final Sat.:	2750	1375	0	0	0	4125	0	0	0	0	8250	0

Capacity Analysis Module:

Vol/Sat:	0.10	0.11	0.00	0.00	0.00	0.15	0.00	0.00	0.00	0.00	0.22	0.00
Crit Vol:	142					213	0				308	
Crit Moves:	****					****					****	

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## Appendix E3- Intersection Capacity Analysis Worksheets

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### RSA Study

#### Level Of Service Computation Report Circular 212 Planning Method (Base Volume Alternative)

##### Intersection #3 World Way South and East Way

Cycle (sec): 100 Critical Vol./Cap. (X): 0.179  
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx  
Optimal Cycle: 28 Level Of Service: A

Street Name: Easy Way World Way South

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Protected	Protected	Protected	Protected
Rights:	Include	Include	Include	Include
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0
Lanes:	0 0 0 0 0	2 0 0 0 0	0 1 4 0 0	0 0 0 0 0

Volume Module:

Base Vol:	0 0 0	175 0 0	150 1368 0	0 0 0
Growth Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Initial Bse:	0 0 0	175 0 0	150 1368 0	0 0 0
User Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
PHF Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
PHF Volume:	0 0 0	175 0 0	150 1368 0	0 0 0
Reduct Vol:	0 0 0	0 0 0	0 0 0	0 0 0
Reduced Vol:	0 0 0	175 0 0	150 1368 0	0 0 0
PCE Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
MLF Adj:	1.00 1.00 1.00	1.10 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Final Vol.:	0 0 0	193 0 0	150 1368 0	0 0 0

Saturation Flow Module:

Sat/Lane:	1375 1375 1375	1375 1375 1375	1375 1375 1375	1375 1375 1375
Adjustment:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Lanes:	0.00 0.00 0.00	2.00 0.00 0.00	0.49 4.51 0.00	0.00 0.00 0.00
Final Sat.:	0 0 0	2750 0 0	679 6196 0	0 0 0

Capacity Analysis Module:

Vol/Sat:	0.00 0.00 0.00	0.07 0.00 0.00	0.22 0.22 0.00	0.00 0.00 0.00
Crit Vol:	0	96	150	0
Crit Moves:		****	****	

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## Appendix E3- Intersection Capacity Analysis Worksheets

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### RSA Study

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-----
Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)
*****
Intersection #4 Exit Intersection
*****
Cycle (sec):      100      Critical Vol./Cap. (X):      0.000
Loss Time (sec):   0 (Y+R = 4 sec) Average Delay (sec/veh):      xxxxxx
Optimal Cycle:     0      Level Of Service:
*****
Street Name:      World Way
Approach:          North Bound      South Bound      East Bound      West Bound
Movement:          L - T - R      L - T - R      L - T - R      L - T - R
-----|-----|-----|-----|
Control:           Protected      Protected      Protected      Protected
Rights:            Include      Include      Include      Include
Min. Green:        0 0 0 0 0      0 0 0 0 0      0 0 0 0 0      0 0 0 0 0
Lanes:             0 0 0 0 0      0 0 0 0 0      0 0 0 0 0      0 0 0 0 0
-----|-----|-----|-----|
Volume Module:
Base Vol:          0 0 0 0 0      0 0 0 0 0      0 0 0 0 0      0 0 0 0 0
Growth Adj:        0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
Initial Bse:       0 0 0 0 0      0 0 0 0 0      0 0 0 0 0      0 0 0 0 0
User Adj:          0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
PHF Adj:           0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
PHF Volume:        0 0 0 0 0      0 0 0 0 0      0 0 0 0 0      0 0 0 0 0
Reduct Vol:        0 0 0 0 0      0 0 0 0 0      0 0 0 0 0      0 0 0 0 0
Reduced Vol:       0 0 0 0 0      0 0 0 0 0      0 0 0 0 0      0 0 0 0 0
PCE Adj:           0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
MLF Adj:           0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
Final Vol.:        0 0 0 0 0      0 0 0 0 0      0 0 0 0 0      0 0 0 0 0
-----|-----|-----|-----|
Saturation Flow Module:
Sat/Lane:          0 0 0 0 0      0 0 0 0 0      0 0 0 0 0      0 0 0 0 0
Adjustment:        1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes:             0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
Final Sat.:        0 0 0 0 0      0 0 0 0 0      0 0 0 0 0      0 0 0 0 0
-----|-----|-----|-----|
Capacity Analysis Module:
Vol/Sat:           0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
Crit Vol:          0 0 0 0 0      0 0 0 0 0      0 0 0 0 0      0 0 0 0 0
Crit Moves:
*****
```

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## Appendix E3- Intersection Capacity Analysis Worksheets

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### RSA Study

#### Level Of Service Computation Report Circular 212 Planning Method (Base Volume Alternative)

##### Intersection #1 Skyway @ World Way North Future Intersection

Cycle (sec): 40 Critical Vol./Cap. (X): 0.426  
Loss Time (sec): 0 (Y+R = 5 sec) Average Delay (sec/veh): xxxxxx  
Optimal Cycle: 40 Level Of Service: A

Street Name: Skyway World Way North  
Approach: North Bound South Bound East Bound West Bound  
Movement: L - T - R L - T - R L - T - R L - T - R  
Control: Protected Protected Protected Protected  
Rights: Ignore Include Include Include  
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0  
Lanes: 0 0 0 0 0 0 0 0 0 0 6 0  
Volume Module:  
Base Vol: 0 0 0 0 0 814 0 0 0 0 1726 0  
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
Initial Bse: 0 0 0 0 0 814 0 0 0 0 1726 0  
User Adj: 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
PHF Adj: 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
PHF Volume: 0 0 0 0 0 814 0 0 0 0 1726 0  
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0  
Reduced Vol: 0 0 0 0 0 814 0 0 0 0 1726 0  
PCE Adj: 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
MLF Adj: 1.00 1.00 0.00 1.00 1.00 1.10 1.00 1.00 1.00 1.00 1.00 1.00  
Final Vol.: 0 0 0 0 0 895 0 0 0 0 1726 0  
Saturation Flow Module:  
Sat/Lane: 1375 1375 1375 1375 1375 1375 1375 1375 1375 1375 1375 1375  
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
Lanes: 0.00 0.00 0.00 0.00 0.00 3.00 0.00 0.00 0.00 0.00 6.00 0.00  
Final Sat.: 0 0 0 0 0 4125 0 0 0 0 8250 0  
Capacity Analysis Module:  
Vol/Sat: 0.00 0.00 0.00 0.00 0.00 0.22 0.00 0.00 0.00 0.00 0.21 0.00  
Crit Vol: 0 298 0 288  
Crit Moves: \*\*\*\*

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## Appendix E3- Intersection Capacity Analysis Worksheets

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### RSA Study

#### Level Of Service Computation Report Circular 212 Planning Method (Base Volume Alternative)

##### Intersection #3 World Way South and East Way

Cycle (sec): 120 Critical Vol./Cap. (X): 0.369  
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx  
Optimal Cycle: 120 Level Of Service: A

Street Name: Easy Way World Way South

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Protected	Protected	Protected	Protected
Rights:	Include	Include	Include	Include
Min. Green:	0 0 0	10 0 0	0 110 0	0 0 0
Lanes:	0 0 0 0 0	2 0 0 0 0	0 1 4 0 0	0 0 0 0 0

Volume Module:

Base Vol:	0 0 0	225 0 0	90 1831 0	0 0 0
Growth Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Initial Bse:	0 0 0	225 0 0	90 1831 0	0 0 0
User Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
PHF Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
PHF Volume:	0 0 0	225 0 0	90 1831 0	0 0 0
Reduct Vol:	0 0 0	0 0 0	0 0 0	0 0 0
Reduced Vol:	0 0 0	225 0 0	90 1831 0	0 0 0
PCE Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
MLF Adj:	1.00 1.00 1.00	1.10 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Final Vol.:	0 0 0	248 0 0	90 1831 0	0 0 0

Saturation Flow Module:

Sat/Lane:	1375 1375 1375	1375 1375 1375	1375 1375 1375	1375 1375 1375
Adjustment:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Lanes:	0.00 0.00 0.00	2.00 0.00 0.00	0.23 4.77 0.00	0.00 0.00 0.00
Final Sat.:	0 0 0	2750 0 0	322 6553 0	0 0 0

Capacity Analysis Module:

Vol/Sat:	0.00 0.00 0.00	0.09 0.00 0.00	0.28 0.28 0.00	0.00 0.00 0.00
Crit Vol:	0	124	384	0
Crit Moves:		****	****	

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## Appendix E3- Intersection Capacity Analysis Worksheets

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### RSA Study

#### Level Of Service Computation Report Circular 212 Planning Method (Base Volume Alternative)

##### \*\*\*\*\* Intersection #6 Existing Skyway INTERsection \*\*\*\*\*

Cycle (sec): 40 Critical Vol./Cap. (X): 0.456  
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx  
Optimal Cycle: 40 Level Of Service: A  
\*\*\*\*\*

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	20	0	0	0	0	0	0	0	0	0	20	0
Lanes:	2	0	0	0	0	0	0	0	0	0	5	0

Volume Module:

Base Vol:	83	0	0	0	0	0	0	0	0	0	2904	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	83	0	0	0	0	0	0	0	0	0	2904	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	83	0	0	0	0	0	0	0	0	0	2904	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	83	0	0	0	0	0	0	0	0	0	2904	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.10	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	91	0	0	0	0	0	0	0	0	0	2904	0

Saturation Flow Module:

Sat/Lane:	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.00	0.00
Final Sat.:	2750	0	0	0	0	0	0	0	0	0	6875	0

Capacity Analysis Module:

Vol/Sat:	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.42	0.00
Crit Vol:	46				0			0			581	
Crit Moves:	****										****	

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## Appendix E3- Intersection Capacity Analysis Worksheets

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### RSA Study

#### Level Of Service Computation Report Circular 212 Planning Method (Base Volume Alternative)

##### Intersection #1 Skyway @ World Way North Future Intersection

Cycle (sec): 40 Critical Vol./Cap. (X): 0.424  
Loss Time (sec): 0 (Y+R = 5 sec) Average Delay (sec/veh): xxxxxx  
Optimal Cycle: 40 Level Of Service: A

Street Name: Skyway World Way North  
Approach: North Bound South Bound East Bound West Bound  
Movement: L - T - R L - T - R L - T - R L - T - R  
Control: Protected Protected Protected Protected  
Rights: Ignore Include Include Include  
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0  
Lanes: 0 0 0 0 0 0 0 0 0 0 6 0  
Volume Module:  
Base Vol: 0 0 0 0 0 808 0 0 0 0 1718 0  
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
Initial Bse: 0 0 0 0 0 808 0 0 0 0 1718 0  
User Adj: 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
PHF Adj: 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
PHF Volume: 0 0 0 0 0 808 0 0 0 0 1718 0  
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0  
Reduced Vol: 0 0 0 0 0 808 0 0 0 0 1718 0  
PCE Adj: 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
MLF Adj: 1.00 1.00 0.00 1.00 1.00 1.10 1.00 1.00 1.00 1.00 1.00 1.00  
Final Vol.: 0 0 0 0 0 889 0 0 0 0 1718 0  
Saturation Flow Module:  
Sat/Lane: 1375 1375 1375 1375 1375 1375 1375 1375 1375 1375 1375 1375  
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
Lanes: 0.00 0.00 0.00 0.00 0.00 3.00 0.00 0.00 0.00 0.00 6.00 0.00  
Final Sat.: 0 0 0 0 0 4125 0 0 0 0 8250 0  
Capacity Analysis Module:  
Vol/Sat: 0.00 0.00 0.00 0.00 0.00 0.22 0.00 0.00 0.00 0.00 0.21 0.00  
Crit Vol: 0 296 0 286  
Crit Moves: \*\*\*\*

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## Appendix E3- Intersection Capacity Analysis Worksheets

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### RSA Study

#### Level Of Service Computation Report Circular 212 Planning Method (Base Volume Alternative)

##### Intersection #3 World Way South and East Way

Cycle (sec): 120 Critical Vol./Cap. (X): 0.353  
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx  
Optimal Cycle: 120 Level Of Service: A

Street Name: Easy Way World Way South

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Protected	Protected	Protected	Protected
Rights:	Include	Include	Include	Include
Min. Green:	0 0 0	10 0 0	0 110 0	0 0 0
Lanes:	0 0 0 0 0	2 0 0 0 0	0 1 4 0 0	0 0 0 0 0

Volume Module:

Base Vol:	0 0 0	194 0 0	90 1806 0	0 0 0
Growth Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Initial Bse:	0 0 0	194 0 0	90 1806 0	0 0 0
User Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
PHF Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
PHF Volume:	0 0 0	194 0 0	90 1806 0	0 0 0
Reduct Vol:	0 0 0	0 0 0	0 0 0	0 0 0
Reduced Vol:	0 0 0	194 0 0	90 1806 0	0 0 0
PCE Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
MLF Adj:	1.00 1.00 1.00	1.10 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Final Vol.:	0 0 0	213 0 0	90 1806 0	0 0 0

Saturation Flow Module:

Sat/Lane:	1375 1375 1375	1375 1375 1375	1375 1375 1375	1375 1375 1375
Adjustment:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Lanes:	0.00 0.00 0.00	2.00 0.00 0.00	0.24 4.76 0.00	0.00 0.00 0.00
Final Sat.:	0 0 0	2750 0 0	326 6549 0	0 0 0

Capacity Analysis Module:

Vol/Sat:	0.00 0.00 0.00	0.08 0.00 0.00	0.28 0.28 0.00	0.00 0.00 0.00
Crit Vol:	0	107	379	0
Crit Moves:		****	****	

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## Appendix E3- Intersection Capacity Analysis Worksheets

LL Future with Program

Wed Jan 8, 2014 14:55:51

Page 6-1

### RSA Study

#### Level Of Service Computation Report Circular 212 Planning Method (Base Volume Alternative)

##### Intersection #6 Existing Skyway INTERsection

Cycle (sec): 40 Critical Vol./Cap. (X): 0.445  
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx  
Optimal Cycle: 40 Level Of Service: A

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Protected	Protected	Protected	Protected
Rights:	Include	Include	Include	Include
Min. Green:	20 0 0	0 0 0	0 0 0	0 20 0
Lanes:	2 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 5 0 0

Volume Module:	North Bound	South Bound	East Bound	West Bound
Base Vol:	83 0 0	0 0 0	0 0 0	0 2828 0
Growth Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Initial Bse:	83 0 0	0 0 0	0 0 0	0 2828 0
User Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
PHF Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
PHF Volume:	83 0 0	0 0 0	0 0 0	0 2828 0
Reduct Vol:	0 0 0	0 0 0	0 0 0	0 0 0
Reduced Vol:	83 0 0	0 0 0	0 0 0	0 2828 0
PCE Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
MLF Adj:	1.10 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Final Vol.:	91 0 0	0 0 0	0 0 0	0 2828 0

Saturation Flow Module:	North Bound	South Bound	East Bound	West Bound
Sat/Lane:	1375 1375 1375	1375 1375 1375	1375 1375 1375	1375 1375 1375
Adjustment:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Lanes:	2.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 5.00 0.00
Final Sat.:	2750 0 0	0 0 0	0 0 0	0 6875 0











Capacity Analysis Module:	North Bound	South Bound	East Bound	West Bound
Vol/Sat:	0.03 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.41 0.00
Crit Vol:	46	0	0	566
Crit Moves:	****			****

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









World Way South / Center Way Exit Intersection  
Exsiting Peak











8/21/2013

					
Movement	EBT	EBR	NEL	NER	NER2
Lane Configurations					
Volume (vph)	948	597	574	945	624
Ideal Flow (vphpl)	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5
Lane Util. Factor	0.86	0.86	0.97	0.81	0.91
Frt	0.97	0.85	0.95	0.85	0.85
Flt Protected	1.00	1.00	0.97	1.00	1.00
Satd. Flow (prot)	4751	1389	3100	2400	1348
Flt Permitted	1.00	1.00	0.97	1.00	1.00
Satd. Flow (perm)	4751	1389	3100	2400	1348
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1030	649	624	1027	678
RTOR Reduction (vph)	0	0	0	25	53
Lane Group Flow (vph)	1296	383	973	878	401
Heavy Vehicles (%)	0%	0%	9%	9%	9%
Turn Type		Perm		Prot	Perm
Protected Phases	4		2	2	
Permitted Phases		4			2
Actuated Green, G (s)	36.4	36.4	45.4	45.4	45.4
Effective Green, g (s)	36.4	36.4	45.4	45.4	45.4
Actuated g/C Ratio	0.40	0.40	0.50	0.50	0.50
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	1905	557	1550	1200	674
w/s Ratio Prot	0.27		0.31	c0.37	
w/s Ratio Perm		c0.28			0.30
w/c Ratio	0.68	0.69	0.63	0.73	0.59
Uniform Delay, d1	22.4	22.5	16.5	17.9	16.2
Progression Factor	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.0	3.5	0.8	2.3	1.4
Delay (s)	23.4	26.0	17.3	20.2	17.6
Level of Service	C	C	B	C	B
Approach Delay (s)	24.0		18.5		
Approach LOS	C		B		
Intersection Summary					
HCM Average Control Delay			20.8	HCM Level of Service	C
HCM Volume to Capacity ratio			0.71		
Actuated Cycle Length (s)			90.8	Sum of lost time (s)	9.0
Intersection Capacity Utilization			64.4%	ICU Level of Service	C
Analysis Period (min)			15		
c Critical Lane Group					

World Way South / Center Way Exit Intersection  
Future No Project

8/21/2013

					
Movement	EBT	EBR	NEL	NER	NER2
Lane Configurations					
Volume (vph)	908	555	525	1029	648
Ideal Flow (vphpl)	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5
Lane Util. Factor	0.86	0.86	0.97	0.81	0.91
Frt	0.97	0.85	0.94	0.85	0.85
Frt Protected	1.00	1.00	0.97	1.00	1.00
Satd. Flow (prot)	4758	1389	3077	2400	1348
Frt Permitted	1.00	1.00	0.97	1.00	1.00
Satd. Flow (perm)	4758	1389	3077	2400	1348
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	987	603	571	1118	704
RTOR Reduction (vph)	0	0	0	25	61
Lane Group Flow (vph)	1228	362	996	907	404
Heavy Vehicles (%)	0%	0%	9%	9%	9%
Turn Type	Perm		Prot		Perm
Protected Phases	4		2	2	
Permitted Phases		4			2
Actuated Green, G (s)	35.7	35.7	47.0	47.0	47.0
Effective Green, g (s)	35.7	35.7	47.0	47.0	47.0
Actuated g/C Ratio	0.39	0.39	0.51	0.51	0.51
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	1852	541	1577	1230	691
w/s Ratio Prot	0.26		0.32	0.38	
w/s Ratio Perm		0.26			0.30
w/c Ratio	0.66	0.67	0.63	0.74	0.58
Uniform Delay, d1	23.0	23.1	16.1	17.5	15.6
Progression Factor	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.9	3.1	0.8	2.3	1.3
Delay (s)	24.0	26.3	16.9	19.9	16.8
Level of Service	C	C	B	B	B
Approach Delay (s)	24.5		18.1		
Approach LOS	C		B		
Intersection Summary					
HCM Average Control Delay	20.6		HCM Level of Service		C
HCM Volume to Capacity ratio	0.71				
Actuated Cycle Length (s)	91.7		Sum of lost time (s)		9.0
Intersection Capacity Utilization	65.3%		ICU Level of Service		C
Analysis Period (min)	15				
c Critical Lane Group					

					
Movement	EBT	EBR	NEL	NER	NER2
Lane Configurations					
Volume (vph)	1023	559	451	994	633
Ideal Flow (vphpl)	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5
Lane Util. Factor	0.86	0.86	0.97	0.81	0.91
Frt	0.98	0.85	0.93	0.85	0.85
Fit Protected	1.00	1.00	0.97	1.00	1.00
Satd. Flow (prot)	4781	1389	3060	2400	1348
Fit Permitted	1.00	1.00	0.97	1.00	1.00
Satd. Flow (perm)	4781	1389	3060	2400	1348
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1112	608	490	1080	688
RTOR Reduction (vph)	0	0	0	31	63
Lane Group Flow (vph)	1331	389	933	854	377
Heavy Vehicles (%)	0%	0%	9%	9%	9%
Turn Type		Perm		Prot	Perm
Protected Phases	4		2	2	
Permitted Phases		4			2
Actuated Green, G (s)	36.6	36.6	43.6	43.6	43.6
Effective Green, g (s)	36.6	36.6	43.6	43.6	43.6
Actuated g/C Ratio	0.41	0.41	0.49	0.49	0.49
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	1962	570	1496	1173	659
w/s Ratio Prot	0.28		0.30	c0.36	
w/s Ratio Perm		c0.28			0.28
w/c Ratio	0.68	0.68	0.62	0.73	0.57
Uniform Delay, d1	21.5	21.5	16.8	18.1	16.2
Progression Factor	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.9	3.4	0.8	2.3	1.2
Delay (s)	22.4	24.9	17.6	20.4	17.4
Level of Service	C	C	B	C	B
Approach Delay (s)	23.0		18.6		
Approach LOS	C		B		
<b>Intersection Summary</b>					
HCM Average Control Delay		20.5		HCM Level of Service	C
HCM Volume to Capacity ratio		0.71			
Actuated Cycle Length (s)		89.2		Sum of lost time (s)	9.0
Intersection Capacity Utilization		65.1%		ICU Level of Service	C
Analysis Period (min)		15			

c Critical Lane Group



# **Midfield Satellite Concourse Final EIR**

## **Appendix A**

**Original Comment Letters on the Midfield Satellite Concourse  
Draft EIR**





**DEPARTMENT OF TRANSPORTATION**

DISTRICT 7, OFFICE OF TRANSPORTATION PLANNING

IGR/CEQA BRANCH

100 MAIN STREET, MS # 16

LOS ANGELES, CA 90012-3606

PHONE: (213) 897-9140

FAX: (213) 897-1337

*Flex your power!  
Be energy efficient!*

April 17, 2014

Ms. Lisa Trifiletti  
Los Angeles World Airports  
Planning Division  
One World Way, Suite 218  
Los Angeles, CA, 90045

Re: Los Angeles International Airport (LAX)  
**Midfield Satellite Concourse North Project**  
Draft Environmental Impact Report (DEIR)  
SCH#2013021020 IGR#131036/EA  
Vic: LA/405/19.00-25.00, LA/105/0.50-5.00

Dear Ms. Trifiletti

The California Department of Transportation (Caltrans) hereby acknowledges receipt of the Draft Environmental Impact Report (DEIR) prepared for the proposed Midfield Satellite Concourse North Project (MSC North Project) at LAX. The MSC North project is phase I of the overall MSC Program which consists of a new multi-level concourse located within the western portion of the airfield west of the Tom Bradley's International Terminal and a passenger processing space or Central Terminal Processor (CTP). The MSC North project would involve the construction of a concourse of up to 11-gates, improvements to taxiways and taxilanes, a supplemental airport traffic control tower, and utilities.

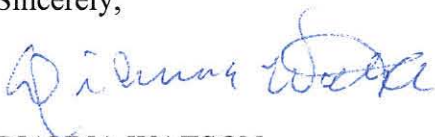
Caltrans has reviewed the transportation sections included in the DEIR with especial interest on potential impacts to State highway facilities nearby which are Sepulveda Boulevard (SR-1), Interstate 405 (I-405) and Interstate 105 (I-105) and has the following comments.

- The traffic impact analysis in the DEIR analyzes impacts related to construction of the proposed MSC North project. The analysis provides an estimate of construction-related traffic impacts within the off-airport roadway system. The MSC North project would not increase the number of employees or airline passengers traveling through LAX. In addition, the expected AM and PM peak construction activity is expected to occur outside the normal daily peak periods. Therefore, potential transportation impacts to the Los Angeles County Congestion Management Program (CMP) roadway network which includes freeways were determined to be less than significant. Please explain why the additional 11 aircraft gates would not generate additional passenger traffic on the surrounding roadway network including on freeways.
- We note LAX has established a Ground Transportation Office which purpose is to monitor traffic conditions, advise about detours and congested areas, and to enforce delivery times and routes. The Ground Transportation Office will monitor closely construction deliveries and employee arrival and departures to maintain the peak construction traffic off peak commuting periods. Please require the Ground Transportation Office, or CALM team, to coordinate and obtain Caltrans' approval for any detour plans and lanes closures on Sepulveda Boulevard (SR-1).

- Section 4.7.5.2 states that the Bradley West Project EIR identifies improvements to the intersections at Sepulveda Boulevard and Imperial Highway and at I-405 southbound ramps to La Cienega Boulevard north of Century Boulevard. Please provide a description of the planned improvements at these locations. Caltrans requests early coordination of planned improvements on or affecting state highway facilities. Depending on the type of improvements, they may follow the encroachment process or the Project Initiation Process (PID) which is somewhat more involved as it includes analysis of different alternatives.
- We note that traffic impacts to the intersection of I-405 northbound off-ramp and Century Boulevard would constitute a cumulative impact but those impacts are not cumulative considerable. The Final EIR for the Hollywood Park Redevelopment project in the City of Inglewood determined that this intersection is expected to operate at Level of Service "F" and plans to add ITS (signal synchronization) as a mitigation measure. Please coordinate with the City of Inglewood and Caltrans to mitigate future cumulative traffic impacts at this intersection.
- Please be aware that the City of Inglewood is planning modifications to Century Boulevard which include reducing the number through lanes east I-405 to Van Ness Avenue. This project may occur during the next 5 years, please include it in the list of related construction project in the vicinity of LAX.
- Please be reminded that oversized construction truck deliveries expected to utilize State highways will need a transportation permit and possibly a California Highway Patrol (CHP) escort.
- Due to recurrent traffic congestion on I-405 and I-105 during peak commuting periods, please schedule heavy-duty construction-related trucks away from these periods as much as possible.

If you have any questions regarding these comments, please contact project coordinator Elmer Alvarez at (213) 897-6696 and electronically at [elmer.alvarez@dot.ca.gov](mailto:elmer.alvarez@dot.ca.gov). You may also contact me at (213) 897-9140 or [dianna.watson@dot.ca.gov](mailto:dianna.watson@dot.ca.gov)

Sincerely,



DIANNA WATSON  
IGR/CEQA Program Manager  
Caltrans, District 7



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DEBORAH WEINTRAUB, AIA, LEED<sub>AP</sub>  
INTERIM CITY ENGINEER

1149 S. BROADWAY, SUITE 700  
LOS ANGELES, CA 90015-2213

<http://eng.lacity.org>

March 27, 2014

Ms. Cynthia Guidry, P.E.  
Interim Deputy Executive Director  
Los Angeles World Airports  
1 World Way, 2<sup>nd</sup> Floor  
Los Angeles, CA 90045-5803

Dear Ms. Guidry:

**MIDFIELD SATELLITE CONCOURSE PROJECT/CASE NO. 001-014LAXSP**

Your letter of March 6, 2014 sent to the Bureau of Engineering for review of the Midfield Satellite Concourse Project was referred to my office for response.

As duly noted in your project description, the Midfield Satellite Project is located entirely within the City of Los Angeles LAX Plan area and would, therefore, not appear to affect any non-airport roadways nor cause changes to storm water runoff or the storm drain system.

A review of the DEIR for this project does indicate that it spans the North Outfall Replacement Sewer (NORS) and anticipates a direct connection to NORS. There was no mention of the volume of wastewater to be generated nor whether there is a risk of sewer gases backing up into the connecting sewer, resulting in sewer odor problems in the new concourse. There was also no mention of physically protecting NORS from the overlying concourse structure.

If you have any questions, please contact me at (310) 575-8381.

Sincerely,

Michael Patonai, P.E.  
District Engineer  
WLA District Office  
Bureau of Engineering

MK/MP/mjw  
Q:\memo-ltr\Midfield Satellite Con Proj Ltr 03-27-14

cc: Deborah Weintraub


MSC-AL00001



**CITY OF LOS ANGELES**  
INTER-DEPARTMENTAL CORRESPONDENCE

Date: April 15, 2014

To: Lisa Trifiletti, Director of Environment and Land Use Planning  
Los Angeles World Airports

From: Eddie Guerrero, Senior Transportation Engineer   
Department of Transportation

**Subject: LAX MIDFIELD SATELLITE CONCOURSE (MSC) NORTH PROJECT  
DEIR - LADOT REVIEW**

The Los Angeles Department of Transportation (LADOT) has completed its review of the traffic impact analysis completed for the Los Angeles International Airport (LAX) Midfield Satellite Concourse (MSC) - Draft Environmental Impact Report (DEIR) and have determined that the traffic analysis adequately describes the potential impacts related to the project.

**RECOMMENDATION**

Based on the information presented in the MSC – DEIR, LADOT is requesting the following action:

1. That consideration be given to directing construction traffic away from the Sepulveda corridor to the Imperial Highway corridor if possible and,
2. Should it not be possible to remove the identified impact at Manchester Avenue and Sepulveda Boulevard, the mitigation proposal cited under Section 4.7.9.2 can be implemented within the existing street right-of-way and thus would be feasible without requiring street widening and,
3. That the Applicable LAX Master Plan Commitments, as identified under Section 4.7.7, be adhered to fully.

**DISCUSSION**

As discussed in the MSC-DEIR, implementation of the MSC Program will be pursued across multiple phases beginning with the MSC North Project. However, because the future operation of the MSC North Project would not result in long-term operational changes to traffic activity and traffic flows within the Airport area, because it would not change the number of aircraft operations or where aircraft passengers are dropped off or picked up at LAX, the EIR project level analysis for this phase was limited to potential construction traffic impacts only. As further discussed in the DEIR, the future phases of the MSC program that are not part of the MSC North project have only been conceptually planned and therefore only analyzed at the program level and as such,

MSC-AL00002

LADOT has chosen to reserve comment until such time that the future phases are more fully defined and are analyzed at the project level.

With respect to the construction traffic analysis, the DIER has identified potential construction traffic impacts at the following three locations:

- 1) Imperial Highway and Main Street
- 2) Manchester Avenue and Sepulveda Boulevard
- 3) Sepulveda Boulevard and Westchester Parkway

Per Section 4.7.9.1 of the DIER, there is no feasible mitigation for the potential impacts at locations 1 and 3 listed above and the mitigation suggested for location 2, per Section 4.7.9.2, is to widen the westbound approach to allow for implementation of an additional left-turn lane and an exclusive right turn lane. However, upon further review it has been determined that implementation of the proposed mitigation can be accomplished within the existing available right-of-way and thus, should this mitigation be needed, it could be implemented without widening the roadway.

It is also worth noting that per Table 4.7-8, the corresponding "With Project" level of service (LOS) condition for each of the three locations listed above is LOS C, LOS D, and LOS F, respectively. Therefore, with respect to this condition, it is LADOT's opinion that the construction traffic plan should be revised, if possible, in order to direct the distribution of construction traffic from the Sepulveda corridor and shift it to the Imperial Highway corridor or, at the very least, minimize the Sepulveda corridor distribution to the greatest extent possible.

Excerpts for the project EIR, pertaining to section 4.7.7, section 4.7.9.1, section 4.7.9.2 and Table 4.7-8 discussed above, are attached for reference. If you have any questions, I can be reached at (213) 485-1062.

SH:EG

Attachment

c: Jay Kim, Sean Haeri, Rudy Guevara, LADOT

## **4.7 Construction Surface Transportation**

### **4.7.7 Applicable LAX Master Plan Commitments**

LAWA is requiring that applicable commitments identified in the LAX Master Plan MMRP be implemented as part of the proposed MSC North Project. The following transportation-related commitments identified in the LAX Master Plan MMRP would be applied to the proposed MSC North Project and thus are included as part of the proposed MSC North Project for purposes of environmental review:

#### **C-1. Establishment of a Ground Transportation/Construction Coordination Office.**

- Establish this office for the life of the construction projects to coordinate deliveries, monitor traffic conditions, advise motorists and those making deliveries about detours and congested areas, and monitor and enforce delivery times and routes. LAWA would periodically analyze traffic conditions on designated routes during construction to see whether there is a need to improve conditions through signage and other means.

This office may undertake a variety of duties, including but not limited to:

- Inform motorists about detours and congestion by use of static signs, changeable message signs, media announcements, airport website, etc.;
- Work with airport police and the Los Angeles Police Department to enforce delivery times and routes;
- Establish staging areas;
- Coordinate with police and fire personnel regarding maintenance of emergency access and response times;
- Coordinate roadway projects of Caltrans, City of Los Angeles, and other jurisdictions with those of the Airport construction projects;
- Monitor and coordinate deliveries;
- Establish detour routes;
- Work with residential and commercial neighbors to address their concerns regarding construction activity; and
- Analyze traffic conditions to determine the need for additional traffic controls, lane restriping, signal modifications, etc.

Note: Subsequent to the approval of the LAX Master Plan, LAWA established a "Ground Transportation/Construction Coordination Office" in the form of the CALM team. The CALM team coordinates and monitors construction traffic, coordinates with agencies as necessary, and reviews traffic control plans to address any concerns prior to approval. The CALM team, discussed in detail in Subsection 4.7.3.8, (under Regulatory Context), above, provides implementation of the LAX Master Plan Commitment C-1.

#### **C-2. Construction Personnel Airport Orientation.**

- All construction personnel will be required to attend an airport project-specific orientation (pre-construction meeting) that includes where to park, where staging areas are located, construction policies, etc.



## **4.7 Construction Surface Transportation**

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### **ST-9. Construction Deliveries.**

- Construction deliveries requiring lane closures shall receive prior approval from the Construction Coordination Office. Notification of deliveries shall be made with sufficient time to allow for any modifications to approved traffic detour plans.

### **ST-12. Designated Truck Delivery Hours.**

- Truck deliveries shall be encouraged to use night-time hours and shall avoid the peak periods of 7:00 AM to 9:00 AM and 4:30 PM to 6:30 PM.

### **ST-14. Construction Employee Shift Hours.**

- Shift hours that do not coincide with the heaviest commuter traffic periods (7:00 AM to 9:00 AM, 4:30 PM to 6:30 PM) would be established. Work periods will be extended to include weekends and multiple work shifts, to the extent possible and necessary.

### **ST-16. Designated Haul Routes.**

- Every effort will be made to ensure that haul routes are located away from sensitive noise receptors.

### **ST-17. Maintenance of Haul Routes.**

- Haul routes on off-airport roadways will be maintained periodically and will comply with City of Los Angeles or other appropriate jurisdictional requirements for maintenance. Minor striping, lane configurations, and signal phasing modifications would be provided as needed.

### **ST-18. Construction Traffic Management Plan.**

- A complete construction traffic plan will be developed to designate detour and/or haul routes, variable message and other sign locations, communication methods with airport passengers, construction deliveries, construction employee shift hours, construction employee parking locations and other relevant factors.

### **ST-22. Designated Truck Routes.**

- For dirt and aggregate and all other materials and equipment, truck deliveries will be on designated routes only (freeways and non-residential streets). Every effort will be made for routes to avoid residential frontages. The designated routes on City of Los Angeles streets are subject to approval by LADOT's Bureau of Traffic Management and may include, but will not necessarily be limited to: Pershing Drive (Westchester Parkway to Imperial Highway); Florence Avenue (Aviation Boulevard to I-405); Manchester Boulevard (Aviation Boulevard to I-405); Aviation Boulevard (Manchester Avenue to Imperial Highway); Westchester Parkway/Arbor Vitae Street (Pershing Drive to I-405); Century Boulevard (Sepulveda Boulevard to I-405); Imperial Highway (Pershing Drive to I-405); La Cienega Boulevard (north of Imperial Highway); Airport Boulevard (Arbor Vitae Street to Century Boulevard); Sepulveda Boulevard (Westchester Parkway to Imperial Highway); I-405; and I-105.

## 4.7 Construction Surface Transportation

Table 4.7-8

Proposed Project - Level of Service Analysis Results - Impact Comparison 2: Cumulative Traffic (December 2018)

Intersection	Peak Hour <sup>1</sup>	Baseline [A]				Cumulative Peak (December 2018)				Cumulative Impact Determination [C]-[A]		Cumulative Considerable Determination/Significant Impact [C]-[B]	
		V/C <sup>2</sup>	LOS <sup>3</sup>	V/C <sup>2</sup>	LOS <sup>3</sup>	V/C <sup>2</sup>	LOS <sup>3</sup>	V/C <sup>2</sup>	LOS <sup>3</sup>	Change in V/C	Cumulative Impact?	Change in V/C	Cumulative Contribution?
1. Aviation Boulevard and Century Boulevard	Construction AM	0.467	A	0.584	A	0.588	A	0.121	A	0.121	--	0.004	--
	Construction PM	0.594	A	0.755	C	0.758	C	0.164	C	0.164	Yes	0.003	--
2. Imperial Highway and Aviation Boulevard	Construction AM	0.500	A	0.623	B	0.623	B	0.123	B	0.123	--	0.000	--
	Construction PM	0.512	A	0.643	B	0.651	B	0.139	B	0.139	--	0.008	--
3. Aviation Boulevard and 111th Street	Construction AM	0.295	A	0.371	A	0.371	A	0.076	A	0.076	--	0.000	--
	Construction PM	0.404	A	0.486	A	0.487	A	0.083	A	0.083	--	0.001	--
4. La Cienega Boulevard and Century Boulevard	Construction AM	0.626	B	0.754	C	0.756	C	0.130	C	0.130	Yes	0.002	--
	Construction PM	0.762	C	1.045	F	1.045	F	0.283	F	0.283	Yes	0.000	--
5. Sepulveda Blvd. and Century Blvd.	Construction AM	0.424	A	0.581	A	0.576	A	0.152	A	0.152	--	-0.005	--
	Construction PM	0.590	A	0.697	B	0.702	C	0.112	C	0.112	Yes	0.005	--
6. Century Boulevard and I-405 Northbound Ramp	Construction AM	0.634	B	0.751	C	0.754	C	0.120	C	0.120	Yes	0.003	--
	Construction PM	0.459	A	0.543	A	0.545	A	0.086	A	0.086	--	0.002	--
7. Imperial Highway and Douglas Street	Construction AM	0.199	A	0.227	A	0.228	A	0.029	A	0.029	--	0.001	--
	Construction PM	0.375	A	0.463	A	0.472	A	0.097	A	0.097	--	0.009	--
8. Sepulveda Boulevard and Howard Hughes Parkway	Construction AM	0.219	A	0.314	A	0.338	A	0.119	A	0.119	--	0.024	--
	Construction PM	0.419	A	0.495	A	0.506	A	0.087	A	0.087	--	0.011	--
9. Imperial Highway and La Cienega Boulevard	Construction AM	0.191	A	0.215	A	0.232	A	0.041	A	0.041	--	0.017	--
	Construction PM	0.453	A	0.526	A	0.531	A	0.078	A	0.078	--	0.005	--
10. Imperial Highway and Main Street	Construction AM	0.499	A	0.589	A	0.764	C	0.265	C	0.265	Yes	0.175	Yes



## 4.7 Construction Surface Transportation

Table 4.7-8

Proposed Project - Level of Service Analysis Results - Impact Comparison 2: Cumulative Traffic (December 2018)

Intersection	Peak Hour <sup>1</sup> Construction PM	Baseline		Cumulative Peak (December 2018)				Cumulative Impact Determination		Cumulative Considerable Contribution?	
		[A]	[B]	Without Project With Project				[C]-[A]	[C]-[B]	Change in V/C	Cumulatively Considerable Contribution?
				LOS <sup>3</sup>	V/C <sup>2</sup>	LOS <sup>3</sup>	V/C <sup>2</sup>	Change in V/C			
		0.439	A	0.555	A	0.693	B	0.254	--	0.138	--
11. Imperial Highway and Pershing Drive	Construction AM	0.184	A	0.427	A	0.589	A	0.405	--	0.162	--
	Construction PM	0.316	A	0.485	A	0.636	B	0.320	--	0.151	--
12. Imperial Highway and Sepulveda Boulevard	Construction AM	0.496	A	0.631	B	0.631	B	0.135	--	0.000	--
	Construction PM	1.004	F	1.186	F	1.191	F	0.187	Yes	0.005	--
13. Imperial Highway and Nash Street	Construction AM	0.362	A	0.513	A	0.524	A	0.162	--	0.011	--
	Construction PM	0.239	A	0.312	A	0.321	A	0.082	--	0.009	--
14. Imperial Highway and I-105 Ramp	Construction AM	0.513	A	0.644	B	0.654	B	0.141	--	0.010	--
	Construction PM	0.471	A	0.581	A	0.585	A	0.114	--	0.004	--
15. Imperial Highway and I-405 Northbound Ramp	Construction AM	0.211	A	0.250	A	0.256	A	0.045	--	0.006	--
	Construction PM	0.480	A	0.547	A	0.552	A	0.072	--	0.005	--
16. La Cienega Boulevard and Lennox Boulevard	Construction AM	0.164	A	0.199	A	0.199	A	0.035	--	0.000	--
	Construction PM	0.306	A	0.348	A	0.348	A	0.042	--	0.000	--
17. La Cienega Boulevard and 111th Street	Construction AM	0.128	A	0.146	A	0.148	A	0.020	--	0.002	--
	Construction PM	0.311	A	0.365	A	0.365	A	0.054	--	0.000	--
18. La Cienega Blvd. & I-405 Southbound Ramps North of Century	Construction AM	0.387	A	0.438	A	0.438	A	0.051	--	0.000	--
	Construction PM	0.410	A	0.464	A	0.464	A	0.054	--	0.000	--
19. La Cienega Blvd. & I-405 Southbound Ramps South of Century	Construction AM	0.135	A	0.179	A	0.179	A	0.044	--	0.000	--
	Construction PM	0.284	A	0.409	A	0.409	A	0.125	--	0.000	--

## 4.7 Construction Surface Transportation

Table 4.7-8

Proposed Project - Level of Service Analysis Results - Impact Comparison 2: Cumulative Traffic (December 2018)

Intersection	Peak Hour <sup>1</sup>	Baseline [A]				Cumulative Peak (December 2018)				Cumulative Impact Determination [C]-[A]		Cumulative Considerable Determination/Significant Impact [C]-[B]	
		V/C <sup>2</sup>	LOS <sup>3</sup>	V/C <sup>2</sup>	LOS <sup>3</sup>	V/C <sup>2</sup>	LOS <sup>3</sup>	V/C <sup>2</sup>	LOS <sup>3</sup>	Change in V/C	Cumulative Impact?	Change in V/C	Cumulative Considerable Contribution?
20. La Cienega Blvd. & I-405 Southbound Ramps North of Imperial	Construction AM	0.136	A	0.168	A	0.168	A	0.168	A	0.032	--	0.000	--
	Construction PM	0.218	A	0.286	A	0.286	A	0.286	A	0.068	--	0.000	--
21. Sepulveda Boulevard and La Tijera Boulevard	Construction AM	0.337	A	0.441	A	0.471	A	0.471	A	0.134	--	0.030	--
	Construction PM	0.613	B	1.008	F	1.015	F	1.015	F	0.402	Yes	0.007	--
22. Sepulveda Boulevard and Lincoln Boulevard	Construction AM	0.457	A	0.561	A	0.561	A	0.561	A	0.104	--	0.000	--
	Construction PM	0.750	C	0.963	E	0.968	E	0.968	E	0.218	Yes	0.005	--
23. Sepulveda Boulevard and Manchester Avenue	Construction AM	0.395	A	0.481	A	0.511	A	0.511	A	0.116	--	0.030	--
	Construction PM	0.711	C	0.867	D	0.897	D	0.897	D	0.186	Yes	0.030	Yes
24. Westchester Parkway and Pershing Drive	Construction AM	0.151	A	0.395	A	0.486	A	0.486	A	0.335	--	0.091	--
	Construction PM	0.213	A	0.413	A	0.575	A	0.575	A	0.362	--	0.162	--
25. Sepulveda Boulevard and Westchester Parkway	Construction AM	0.309	A	0.857	D	0.949	E	0.949	E	0.640	Yes	0.092	Yes
	Construction PM	0.649	B	1.072	F	1.113	F	1.113	F	0.464	Yes	0.041	Yes
26. Sepulveda Boulevard and 76th/77th Street	Construction AM	0.337	A	0.385	A	0.385	A	0.385	A	0.048	--	0.000	--
	Construction PM	0.440	A	0.568	A	0.596	A	0.596	A	0.156	--	0.028	--
27. Sepulveda Boulevard and 79th/80th Street	Construction AM	0.253	A	0.292	A	0.320	A	0.320	A	0.067	--	0.028	--
	Construction PM	0.513	A	0.586	A	0.592	A	0.592	A	0.079	--	0.006	--
28. Sepulveda Boulevard and 83rd Street	Construction AM	0.211	A	0.253	A	0.281	A	0.281	A	0.070	--	0.028	--
	Construction PM	0.458	A	0.526	A	0.532	A	0.532	A	0.074	--	0.006	--
29. La Cienega Boulevard and 104th Street	Construction AM	0.111	A	0.130	A	0.131	A	0.131	A	0.020	--	0.001	--

Los Angeles International Airport

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### 4.7 Construction Surface Transportation

Table 4.7-8

Proposed Project - Level of Service Analysis Results - Impact Comparison 2: Cumulative Traffic (December 2018)

Intersection	Cumulative Peak (December 2018)									
	Baseline		Without Project		With Project		Cumulative Impact Determination		Cumulative Considerable Determination/Significant Impact	
	[A]		[B]		[C]		[C]-[A]		[C]-[B]	
	Peak Hour <sup>1</sup>	V/C <sup>2</sup>	LOS <sup>3</sup>	V/C <sup>2</sup>	LOS <sup>3</sup>	V/C <sup>2</sup>	LOS <sup>3</sup>	Change in V/C	Cumulative Impact?	Cumulative Considerable Contribution?
	Construction PM	0.276	A	0.326	A	0.326	A	0.050	--	0.000

Notes:

- The hours of analysis include the construction AM peak (6:00 AM - 7:00 AM) and the construction PM peak (3:30 PM - 4:30 PM).
- Volume to capacity ratio. Includes an LADOT ATSAC benefit applied at each intersection with the exception of intersections #6 and #15, which are not a part of the LADOT system
- Level of Service range: A (excellent) to F (failure).
- Indicates "No Impact"

Source: Ricondo & Associates, Inc., using TRAFFIX, September 2013.

## **4.7 Construction Surface Transportation**

### **4.7.9 Mitigation Measures**

As described above in Section 4.7.8, the MSC North Project would result in significant construction-related traffic impacts. In some cases, it was determined that improvements would not be feasible to implement and that the impact would be significant and unavoidable. In other cases, it would be feasible to implement the mitigation under consideration. The discussion below presents both those improvements that were considered but determined to be infeasible, as well as those improvements that would be feasible and are thereby included in the recommended mitigation program.

#### **4.7.9.1 Intersection Improvements Considered but Determined to be Infeasible**

The following improvements were identified at the intersections that were anticipated to be significantly impacted by construction-related traffic generated by the MSC North Project, but were determined to be infeasible to implement. For each intersection, the improvement is described, as is the reason it is not considered to be feasible to implement.

- Imperial Highway and Main Street (Intersection #10)

To mitigate the anticipated impacts, the westbound direction of Imperial Highway would need to be widened to provide one additional through lane. The resulting westbound lane configuration would consist of two left-turn lanes, two through lanes, and one through/right-turn lane. Implementation of this potential mitigation is determined infeasible due to right-of-way constraints along Imperial Highway and given that the short-term nature of the construction-related impact would not justify the widening of the intersection.

- Sepulveda Boulevard and Westchester Parkway (Intersection #25)

To mitigate the anticipated impacts, the northbound direction of Sepulveda Boulevard would need to be widened to provide two left-turn lanes. The resulting northbound lane configuration would consist of two left-turn lanes, three through lanes, and a right-turn lane. Implementation of this potential mitigation is determined to be infeasible due to right-of-way constraints along Sepulveda Boulevard and given that the short-term nature of the construction-related impact would not justify the widening of the intersection.

#### **4.7.9.2 Intersection Improvements Determined to be Feasible**

The following improvements were identified at the intersections that were anticipated to be significantly impacted by construction-related traffic generated by the MSC North Project, and were determined to be feasible to implement.

- Sepulveda Boulevard and Manchester Avenue (Intersection #23)

To mitigate construction-related impacts at this intersection, the westbound approach of Manchester Avenue would be widened to provide a right-turn lane and left-turn lane. The resulting westbound lane configuration would be comprised of two left-turn lanes, two through lanes, and one right-turn lane. Implementation of this mitigation measure



## 4.7 Construction Surface Transportation

would reduce the impact to a less-than-significant level for all scenarios and all impact comparisons.

### 4.7.10 Level of Significance After Mitigation

**Table 4.7-9** summarizes the final LOS with all feasible intersection improvements identified in Section 4.7.9. Given the physical constraints adjacent to two impacted intersections, Imperial Highway and Main Street (Intersection #10) and Sepulveda Boulevard and Westchester Parkway (Intersection #25), and the temporary nature of the construction-related impacts, these improvements are infeasible and will not be implemented. As a result, impacts to these intersections would be significant and unavoidable.

**Table 4.7-9**

#### Level of Service With Feasible Intersection Improvements

Intersection		Peak Hour <sup>1</sup>	Cumulative Peak (December 2018)						Significant Impact with Improvements?
			Without Project (Without Improvements)		With Project (Without Improvements)		With Project (With Improvements) <sup>1</sup>		
			[A]		[B]		[C]		
			V/C <sup>2</sup>	LOS <sup>3</sup>	V/C <sup>2</sup>	LOS <sup>3</sup>	V/C <sup>2</sup>	LOS <sup>3</sup>	
23.	Sepulveda Boulevard and Manchester Avenue	Construction PM	0.867	D	0.897	D	0.847	D	No

Notes:

1 The hours of analysis include the construction AM peak (6:00 AM - 7:00 AM) and the construction PM peak (3:30 PM - 4:30 PM).

2 Volume to capacity ratio. Includes an LADOT ATSAC benefit applied at the intersection.

3 Level of Service range: A (excellent) to F (failure).

Source: Ricondo & Associates, Inc., using TRAFFIX, September 2013.

April 16, 2014

**VIA E-MAIL (LAXSTAKEHOLDERLIAISON@LAWA.ORG)**

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Re: Draft Environmental Impact Report for Los Angeles International Airport  
Midfield Satellite Concourse - Comments by the Cities of Inglewood, Culver City  
and Ontario, and the County of San Bernardino

Dear Brenda and Lisa:

The following constitute the comments of the above-mentioned Cities and County (collectively "Commentors") concerning the Draft Environmental Impact Report ("DEIR") for the Los Angeles International Airport ("LAX") Midfield Satellite Concourse ("Project"), pursuant to the requirements of the California Environmental Quality Act, Cal. Pub. Res. Code § 21000, *et seq.* ("CEQA"), and its implementing guidelines, 14 Cal. Code Regs. § 15000, *et seq.* ("CEQA Guidelines").

The issues raised by these comments fall into three general categories:

(1) To the extent the DEIR is "tiered" from the LAX Master Plan Environmental Impact Report ("Master Plan EIR"), originally certified in 2004, the same flaws that characterize the Master Plan EIR still remain and pervade the DEIR here, including the designation of a base year which is inconsistent as between the Master Plan EIR and the project it is purporting to evaluate; and inflation of the baseline for, among other impacts, noise, thereby minimizing the apparent impacts of the Project;

(2) Improper segmentation of the north and south portions of the Project, and failure to analyze the Project as a unit, even where the south portion of the Project is described in detail in the DEIR and is, therefore, a reasonably foreseeable consequence of the development of the northern portion which must be addressed in the DEIR, *see, e.g., Laurel Heights Improvement Ass'n v. Regents of Univ. of Cal.*, 47 Cal.3d 376, 396 (1988); the development of the south portion will clearly change the scope and nature of the initial project and, more importantly, its environmental impacts, *Id.*; and the south portion of the project which is analyzed at a program level in the DEIR would have little or no independent utility absent the construction of the northern portion of the Midfield Satellite Concourse; and

(3) A surface traffic analysis that relies on an improperly restrictive study area; anecdotal rather than analytic choice of intersections to which to assign traffic flow; and which improperly relies on the analysis of the vehicles used by construction workers in the Master Plan EIR, even though that analysis was demonstrably flawed.

I. THE DEIR'S ANALYSIS IS TAINTED BY ITS "TIERING" ON THE MASTER PLAN EIR

The DEIR's reliance on the Master Plan EIR as a platform for analysis would normally be pro forma. In this case, however, it is a fatal flaw in the analysis, because the relevant analyses in the Master Plan EIR were, as commented upon in their November 4, 2003 letter and attachment, manifestly deficient. (A true and correct copy of Inglewood's November 4, 2003 letter and its attachment are attached to these comments as Exhibit 1, and incorporated by reference.)

As may be remembered, the Master Plan EIR was challenged by the Cities of Inglewood and Culver City and County of Los Angeles as well as El Segundo and the environmental group Alliance for a Regional Solution to Airport Congestion ("ARSAC"), for, among other defects: (1) the use of multiple inconsistent base years such that it was impossible for the public to accurately discern which base year was applicable to a given purpose; (2) improper limitation on the Project Definition; and (3) inadequate noise, air quality and surface traffic analyses. These issues were not permanently resolved because the parties entered into a settlement of the lawsuit which addressed some, but not all of these issues.

Many of these lingering flaws are reflected in the DEIR. These include: (1) improper segmentation of the whole Midfield Satellite Concourse project into two parts, the north and the south, even though the southern, unanalyzed, portion of the Project would seem to have no utility at all without the construction of the concourse, the first 11 gates, the utilities, and the improved taxiways which are components of the "north" project being analyzed in the DEIR at the project level; and (2) inadequate discussion of surface traffic impacts.

The settlement did, however, materially change the parameters of the Project. It substituted for five components of the Master Plan, including the relocation of the North Runway

Complex to the south, and the demolition and relocation of Terminals 1 through 3, other projects that meet the purposes that the original project would have served. The newly designated project components are very different in location and attributes from those evaluated in the Master Plan EIR (e.g., movement of the North Runway Complex to the south instead of the north, and change in the location of the terminals). Therefore, analysis of surface traffic patterns, for example, may differ materially between the two plans due to a difference in the location of the construction. In short, the DEIR sits on a crumbling base in the Master Plan EIR and the DEIR's conclusions are, therefore, suspect for the same reasons.

II. THE DEIR IMPROPERLY SEGMENTS THE NORTH AND SOUTH PORTIONS OF THE PROJECT

The DEIR proposes to address the impacts of the Project in two stages: the first including a concourse of up to 11 gates; improvements to taxiways and taxilanes; a supplemental Federal Aviation Administration ("FAA") Air Traffic Control Tower; and utilities to support the north segment. DEIR, § 1.0, p. 1-2. The DEIR then asserts that the "program serves a unique and independent function, and it can occur if there are no future phases of the MSC program," DEIR, § 1.2, p. 1-3. The "independence" of the "northern" project being evaluated in the DEIR is not the issue, however. The real issue is the independent utility of the southern component of the Project not being evaluated. See, e.g., *Communities for a Better Environment v. City of Richmond*, 184 Cal.App.4<sup>th</sup> 70 (2010). As the approved LAX Master Plan and its associated EIR evaluated the development of the "West Satellite Concourse" (ultimately renamed the "Midfield Satellite Concourse"), in its entirety, DEIR, § 1.2, p. 1-3, the two portions of the Project were clearly "linked" and, thus, the southern portion is a "reasonably foreseeable consequence of the project." See *Berkeley Keep Jets Over The Bay Comm. v. Board of Port Comm'rs*, 91 Cal.App.4<sup>th</sup> 1344, 1362 (2001). In short, postponing evaluation of a connected piece of the Project, the southern half, is a quintessential "segmentation" or "piecemealing" that CEQA prohibits.

III. THE DEIR'S ANALYSIS OF SURFACE TRAFFIC IMPACTS OF CONSTRUCTION IS PATENTLY DEFICIENT

The DEIR's surface traffic analysis of construction traffic is inadequate where it impermissibly attenuates the area studied; arbitrarily allocates the flow of construction vehicle traffic to a limited number of intersections within that area, while ignoring the potential flow to equally accessible and convenient nearby intersections; and entirely declines to evaluate surface traffic impacts from construction of the second (south) phase of the Project.

First, the DEIR defines the traffic study area to include "those roads and intersections that would most likely be used by employee and truck traffic . . .," DEIR, § 4.7.2, subsection 4.7.2.1, see also, § 4.7.33, based on data collected on two days in April and May, 2013. The DEIR does not fully explain how the parameters of the study area were determined, or why, for example, the intersections of Pershing and Manchester, Pershing and Culver Boulevard, and Culver Boulevard

Brenda Martinez-Sidhom  
Lisa Trifiletti  
April 16, 2014  
Page 4

and Jefferson were omitted, even though those intersections are often used by traffic from the north and east.

The DEIR similarly provides an unsupported explanation of the reason the surface traffic impacts of the construction of the purported second phase of the Project, the South Concourse, remains unanalyzed. The only explanation offered is that those impacts were analyzed in the Master Plan EIR and would not be “substantively” different. DEIR, § 4.7.1. However, as noted in Exhibit 1 hereto, the discussion of surface traffic impacts of construction in the Master Plan EIR is notably inadequate. Therefore, any reliance on that analysis is misplaced, and should give way to a full adequately analyzed and documented analysis of the surface traffic impacts of construction of the whole Midfield Satellite Concourse, not just selected pieces of it.

For all those reasons, Commentors urge LAWA to revisit its analysis with emphasis on correcting those flaws that have traveled through time from the Master Plan EIR to the current DEIR. Commentors thank LAWA for this opportunity to comment.

Sincerely,

BUCHALTER NEMER  
A Professional Corporation

By



Barbara Lichman

# EXHIBIT 1



November 4, 2003

Mr. Jim Ritchie  
City of Los Angeles  
Los Angeles World Airports  
LAX Master Plan/Room 218  
P.O. Box 92216  
Los Angeles, CA 90009-2216

Mr. David B. Kessler, AICP, AWP 611.2  
Federal Aviation Administration  
P.O. Box 92007  
World Way Postal Center  
Los Angeles, CA 90009-2007

Re: Draft and Supplemental Draft Environmental Impact Report/Environmental  
Impact Statement, Los Angeles International Airport Proposed Master Plan and  
Master Plan Addendum - Comments of the City of Inglewood

Dear Mr. Ritchie and Mr. Kessler:

The following constitute the comments of the City of Inglewood ("Inglewood") concerning the Draft ("DEIR") and Supplemental Draft Environmental Impact Report/Environmental Impact Statement ("SEIR") for the Los Angeles International Airport ("LAX") Master Plan ("Master Plan") and Master Plan Addendum ("Addendum") (together "Project"), submitted pursuant to the requirements of the California Environmental Quality Act, *Public Resources Code* § 21000, *et seq.*, ("CEQA"), its implementing Guidelines, 14 Cal.Code Regs. § 15000, *et seq.* ("CEQA Guidelines") and the National Environmental Policy Act, 42 U.S.C. § 4321, *et seq.*, ("NEPA").

It should be noted at the outset that the body of this letter emphasizes evaluation of new Alternative D as set forth in the SEIR. However, LAX has chosen a format that purports to integrate the analysis of Alternative D into the platform of the original DEIR which is predicated on analysis of Alternatives A-C. While Inglewood believes this format is not optimal in achieving the goal of informing the public and decision makers of the Project's potential impacts, as set forth below, it has attached comments specific to the analyses of Alternatives A through C, as contained in the DEIR, to the extent they remain applicable, as Attachment 1 to this letter. It

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should be further noted that issues raised in Attachment 1 with regard to the analytic adequacy of the DEIR with respect to Alternatives A through C may impact the adequacy of the SEIR's analysis of Alternative D. With that caveat, the issues raised with respect to Alternative D fall generally into six categories:

(I) The SEIR's Project definition is improperly attenuated in that: (a) its baseline for analysis is 1996, almost 10 years before scheduled commencement of Project construction. While arguably reflective of physical environmental conditions in the vicinity of the Project when the Notice of Preparation ("NOP") for the DEIR was published in 1997, a 1996 baseline cannot faithfully represent environmental conditions 10 years later; and (b) the SEIR's purported 15 year term, from the year 2000 to the year 2015, does not take into account the four to five year delay in Project implementation from 2001 to at least 2005-6, and, thus, leaves the final five (5) years of the 15-year term of Project implementation, from 2015 to 2020, and the environmental impacts that may arise during those years, unanalyzed;

(II) Alternative D does not represent a meaningful constraint on capacity because it does not consider the capacity enhancing capability of new large aircraft or the Project's airfield reconfiguration designed to accommodate them;

(III) As a result, the SEIR's noise analysis fails to fully reveal the Project's aircraft and traffic noise impacts on homes and schools, the vast bulk of which fall on Inglewood, or to provide adequate measures to mitigate those impacts;

(IV) The SEIR's air quality methodology and resulting analysis does not adequately portray the emissions impacts of construction vehicles, aircraft and ancillary Ground Support Equipment ("GSE") or truck traffic associated with the Project;

(V) The SEIR's traffic analysis understates the Project's traffic impacts;

(VI) The SEIR's proforma discussion of environmental justice does not fully address the skewed distribution of the Project's impacts which fall almost entirely upon the minority/low income citizens of Inglewood, or offer adequate measures to avoid, minimize or mitigate the maldistribution of Project impacts.

I. THE SEIR'S PROJECT DEFINITION IS INCOMPLETE.

The SEIR's Project definition is improperly circumscribed by: (1) the utilization of the vehicle of a "supplemental" EIR, where a complete new EIR, encompassing Alternatives A through D would have been appropriate; (2) the utilization of a 1996 baseline, dating back seven years from the publication of the SEIR, where data indicates that the correct baseline would have been the full year 2001; and (3) the utilization of the years 2000 to 2015 as the 15-year term of

the Project, even though the Project, under the most optimistic circumstances, is not scheduled to begin until 2005 and, thus, a fifteen year Project term will end in the year 2020, leaving the environmental impacts of the Project arising during the last five years of the Project term, from 2015 to 2020, unanalyzed.

A. The SEIR Improperly Attenuates Analysis of the “Whole” Project.

A “project” for CEQA purposes, “means the whole of an action, which has the potential for resulting in either a direct physical change to the environment, or a reasonably foreseeable indirect physical change in the environment . . .” CEQA Guidelines § 15378(a). “Project” is “given a broad interpretation so as to maximize protection of the environment.” See, *e.g.*, *McQueen v. Board of Directors of the Midpeninsula Regional Open Space District*, 202 Cal.App.3d 1136, 1143 (1988). “In general, the lead agency must fully analyze each “project” in a single environmental review document.” *Remy, Michael, Guide to the California Environmental Quality Act*, 10<sup>th</sup> Ed.1999, p. 75. “Thus, in performing its analysis, the agency should not split a project into two or more segments”, *Id.*, thus insuring “that environmental considerations do not become submerged by chopping a large project into many little ones . . .” *Burbank-Glendale-Pasadena Airport Authority v. Hensler*, 233 Cal.App.3d 577, 592 (1991).

That dissection of a large project into several smaller ones is, however, precisely what seems to have happened here. Although the SEIR purports to relate Alternative D to DEIR Alternatives A through C, in reality the two documents are not directly comparable. The principal goal of the DEIR is capacity expansion and elimination of delay. [“ . . . [I]f LAX does not increase capacity to accommodate some of the projected increase in demand for air travel services, the demand will be met by other airports in the region or elsewhere in the Western United States.” The principal goals of Alternative D are, however, very different, *i.e.*, (1) to enhance the safety and security at LAX for users and to protect the airport infrastructure; (2) to encourage the development and use of regional airports to serve local demand by constraining the facility capacity to approximately the same aviation activity levels identified in the no action/no project alternative; (3) to maintain LAX as the international gateway to Southern California; and (4) to mitigate the environmental impacts of LAX’s continued operations, SEIR, Section 2, pp. 2-1, 2.

Even though the SEIR maintains that “purpose and need for the LAX Master Plan has not changed since the publication of the DEIR”, Executive Summary, p. ES-1, it is clear that adequate analysis of the two sets of alternatives involves different data, methodology and assumptions. As a consequence of the failure to incorporate the analyses of all alternatives into a single document, structured by the same goals, assumptions and methodologies, the conclusions concerning Alternative D’s relationship to the other alternatives, as well as to the environment, are suspect at the outset.

Moreover, the SEIR exceeds the proper scope of a supplement as set forth in the CEQA Guidelines. A supplement only “augments a previously certified EIR”, CEQA Guidelines § 15163, Discussion, and only where “minor additions or changes would be necessary to make the previous EIR adequately apply to the project in the changed situation.” CEQA Guidelines § 15163(a)(2). Neither of these conditions exists here. The DEIR was never certified. Further, the changes to the Master Plan contained in the SEIR are far from minor. In fact, they constitute a new “preferred alternative”, supported by new goals, objectives, methodological approaches, and data, as well as resulting comparisons and ultimate conclusions.

The legislature and the public resources agency charged with CEQA’s implementation have taken the position that, prior to ultimate certification, a single project must be analyzed in a single comprehensive document. The rationale for this position becomes clear with reference to the SEIR. The isolation of a single alternative, Alternative D, and the consequent welter of cross-references to the previous DEIR, a two year old document, its technical reports and appendices, as well as to the SEIR, its technical reports and appendices, is a nearly insurmountable challenge to the public and to decision makers, even if the analytic framework of the DEIR and SEIR were comparable, thus defeating CEQA’s principal goals of “informed decision-making and informed public participation.” *Save Our Peninsula Committee v. Monterey County Board of Supervisors*, 87 Cal.App.4th 99, 118 (2001).

B. The Use of the Years 1996 and 2015 as the Project’s Temporal Parameters is, in Practical Terms, Inappropriate.

Despite the distinct justification and framework of analysis for Alternative D, the SEIR links Alternative D to the DEIR through the use of the same 1996 environmental baseline and 2015 Project end date. While the 1997 date for publication of the NOP (or 1996, the last full year of data before publication) theoretically constitutes the correct environmental baseline, CEQA Guidelines § 15125(a),<sup>1</sup> it does not in this case, for at least two reasons. First, the 1996 baseline used in the DEIR does not accurately reflect the physical conditions in the vicinity of the Project even at the time of the publication of the NOP in July 1997 (see Attachment 1, pp. 3-6). Second, even if 1996 did accurately reflect conditions applicable to the DEIR, it does not do so where, as here, a complete new comprehensive EIR containing equivalent analyses of all alternatives is required. The new EIR would have required publication of an NOP sometime after the year 2001, when the DEIR was originally circulated. Thus the years 2001 or 2002, the

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<sup>1</sup> CEQA Guidelines § 15125 states, in pertinent part: “An EIR must include a description of the physical and environmental conditions in the vicinity of the project, as they exist at the time the notice of preparation is published, or if no notice of preparation is published, at the time environmental analysis is commenced, from both a local and regional perspective. This environmental setting will normally constitute the baseline physical conditions by which a lead agency determines whether an impact is significant.” CEQA Guidelines § 15125(a).

likely last full years of data before the publication of the new EIR, would have been the appropriate base years for the analysis contained in the SEIR.

Nevertheless, the SEIR avoids the use of 2001/2002 by introducing a year 2000 baseline “for informational purposes only”, predicated on “the most recent normal year for which a complete data set is available.” SEIR, § 3, p. 3-5. The rationale behind the choice of the year 2000 was apparently that, due to the terrorist attacks of September, 2001, “2001 is an anomalous year that would be inappropriate to use for a comparison to the Draft EIS/EIR’s baseline year.” SEIR § 3.2.1, p. 3-5, and “similarly, aviation activity in 2002 is also considered to be an anomalous year due to the effects of September 11, 2001.” SEIR, § 3.2.1, p. 3-5.

Neither the SEIR’s conclusions nor its rationale are convincing. SEIR, App. S-B acknowledges that, with respect to the year 2001 “the typical month for the design day schedule (August) would be unaffected by September 11, 2001.” App. S-B, p. 1 [emphasis added]. Nevertheless, the SEIR further opines “the ratio of peak month activity to annual activity is exceptionally high, due to the overwhelming fourth quarter decline in activity,” App. S-B, p. 2, although the SEIR contains no data to support that contention. However, review of OPSNET statistics for the years 1996 through 2002 reveals that operations for the full year 2001 at LAX declined by only 50,000, to 738,679 from the seven year high of 783,684 reached in 2000. The data also demonstrates natural annual fluctuations of almost 20,000 operations between 1996 (approximately 763,000 operations) and 2000 (approximately 783,000 operations). Thus, use of 2001, with requisite caveats, would have constituted at least as accurate a picture of the environmental circumstances in the vicinity of the Project as did the year 1996, seven years in advance of the publication of the SEIR.

The practical impact of utilizing the year 2001, rather than 1996, as a base year, is manifest. As there were fewer operations in 2001, and, thus, potentially fewer environmental impacts from them, a comparison with the Project years would have resulted in greater apparent impacts from the Project, than when compared to 1996, with a larger number of operations and concomitant impacts.

Finally, the use of the year 2015 as the end point of the Project is confounding at best. The SEIR’s purpose and need statement includes the need to “respond to local and regional demand for air transportation during the period 2000 to 2015”. SEIR, p. ES-1. From that statement, it can be reasonably deduced that LAX looks to a 15 year Project period. The problem is that the Project will not now commence construction, let alone full implementation, until in or after 2005. This would bring the end point of the Project period to the year 2020. 2020 is, however, outside the DEIR’s, as well as the SEIR’s, scope of analysis. In other words, the SEIR appears to leave the environmental impacts which may arise during the last five years of the Project’s implementation entirely unevaluated.

II. ALTERNATIVE D DOES NOT REPRESENT A MEANINGFUL CONSTRAINT ON CAPACITY, AND, THUS, WILL CAUSE IMPACTS IN EXCESS OF THOSE ANTICIPATED FROM THE “NO PROJECT” ALTERNATIVE.

One of the SEIR’s stated goals is to “encourage the development and use of regional airports to serve local demand by constraining the facility capacity at LAX to approximately the same aviation activity levels identified in the no action/no project alternative.” In support of that goal, the SEIR proposes a purported reduction in the available number of loading gates and spaces from 163 to 153; reduction in the linear feet of terminal frontage; and maintenance of cargo warehouse space at 3.1 million square feet. Despite these changes, the SEIR does not meet its goal of constrained capacity.

A. The New Runway Configuration Encourages Access for New Large Aircraft.

First, the reduction in available gates will not meaningfully constrain capacity because of the evolution toward higher utilization of New Large Aircraft (“NLA”), including the A380. With increasing use of NLAs, the airport will be able to accomplish more throughput with fewer gates, although of a larger size. The close to doubling in terminal capacity as between the 1996 baseline and Alternative D (from 3,997,000 square feet to 6,550,000 square feet) will also serve to accommodate the apparent projected increase in passengers resulting from introduction of NLA’s.

NLAs are not however included in the projected fleet mix for the Project (SEIR, App. SC-1, Table S7), although it is apparent that the real aim of the Project is to accommodate them. The reconstruction and separation of Runways 7R/25L and 7L/25R in the south complex, and the addition of parallel taxiways (SEIR, Section 3, p. 3-48), as well as the ultimate extension of Runway 6R/24L to 1,280 feet to the east, to a total length of 11,700 feet and the extension of Runway 6L/24R 1,495 feet to the west, for a total length of 10,420 feet (SEIR, Section 3, p. 3-41) confirm that conclusion.

B. The Separation of Runways and Additional Taxiways Will Encourage Increased Capacity for Conventional Aircraft.

Second, even without NLAs, capacity would increase. Staggered runway ends (SEIR, Figure S3-8), permits simultaneous arrivals and departures in Visual Flight Rule (clear) weather, as do increased runway separations. The construction of two parallel taxiways between existing sets of runways will also allow an increase in the number of operations the airport can accommodate. Aircraft will be able to land with minimal separation and will be able to hold on taxiways between arrival and departure runways. Aircraft will then be able to land on one parallel runway and depart on the other without interruption. Multiple aircraft can be held between runways crossed to the terminal when there is no departure demand. This changed

configuration is a striking contrast to today's situation where there is not room to hold multiple smaller aircraft between the runways. If an aircraft is holding at a runway exit, the landing aircraft must now proceed to another exit. This requires increased separation between arrivals as there is not sufficient room to hold the aircraft exiting the runways.

Finally, the proposed limitation on increase in cargo handling facilities to 3.1 million square feet, as a means to control capacity, is entirely beside the point. Many cargo carriers at LAX are in the business of "same day" delivery, requiring fast turn around, but no warehousing. Where warehousing is required, off-site warehousing is available.

C. Alternative D Does Not Appear to Materially Further the Twin Goals of "Safety and Security".

In stark contrast to the SEIR's unstated goal of capacity increase, its stated goals of increased safety and security are elusive. With respect to the alleged Project safety goal of remedying runway incursions, obviously the proposed runway taxiway configuration will help. In the last analysis, however, six billion dollars is a steep price to pay, where significant improvements could be achieved by better airport signage, increased controller and pilot education, and strict enforcement of regulations and relevant provisions of operations handbooks.

With respect to security, Alternative D is an anachronism. By the time it is completed in 2015 or after, the world situation and/or technological progress will likely have rendered the security rationale for restructuring whole terminals and parking structures as well as freeway access to make them even more remote from aircraft and difficult for passengers to access, obsolete. While the goal is noble, Alternative D vastly exceeds current security requirements, developed and administered by the Transportation Security Agency, which the SEIR acknowledges are currently being met at LAX. On the other hand, the SEIR fails to address security issues such as: (1) the potential threat directly posed by airport employees and vendors who cannot, by virtue of their jobs, be funneled through the GTC; (2) the near term additional Federal security requirements such as the requirement for screening of cargo; and (3) the potential for attack on the GTC itself, where thousands of passengers will be concentrated, instead of disbursed, as they are now, through a number of terminals.

In summary, the final goal of Alternative D, to make LAX an international hub, is the dominant one, although somewhat inconsistent with Alternative D's other goals, because it can only be accomplished through the significant increases in capacity brought about by the reconfiguration of the airfield to allow the introduction of NLA capable of carrying large numbers of passengers long distances. Capacity increases are inevitably accompanied by increases in air quality, noise and related impacts. Therefore, the theme that flows throughout the

SEIR, that the characteristics and impacts of Alternative D are more or less the same as those of the “No Project” alternative is, at minimum, an overly optimistic assessment.

III. ALTERNATIVE D’S NOISE IMPACTS ARE, AT BEST, UNVERIFIABLE AND, AT WORST, UNDERSTATED.

Alternative D’s noise impacts in general, and on Inglewood specifically, appear significantly understated. As a consequence, the mitigation measures set forth in both SEIR, Sections 4.1, Noise, and 4.2, Land Use, are inadequate to compensate for its impacts.

A. The SEIR Appears Methodologically Flawed.

One of the most notable issues from a methodological perspective is, as set forth above, the absence of the NLA, the A380 aircraft, from the fleet mix from which the noise analysis was derived (see SEIR, App. SC-1, Table S7). If, as set forth above, the NLAs are the principal beneficiaries of Alternative D’s proposed reconfiguration of the airfield, their operation should be anticipated from a noise perspective. As it stands, however, Inglewood, and other affected communities, remain in the dark regarding the potential noise impacts of the larger, heavier, and potentially noisier aircraft. And, as Inglewood is the principal recipient of arrival noise, the size and shape of the contour over Inglewood may be materially affected by the omission of the A380 and other NLAs from the Project fleet mix.

The second issue arises out of the bifurcation of the analyses of DEIR Alternatives A through C, from SEIR Alternative D. SEIR App. S-C1 states that the DEIR was prepared with the INM 6.0 model, and the SEIR with the INM 6.0c model. As the two model versions use slightly different databases, it is not possible to ascertain whether the comparisons contained in the SEIR between alternatives are, in fact, accurate.

Similarly the flight track assumptions in the DEIR and SEIR diverge. SEIR, App. SC-1, Exh. S2, contains what purports to be existing flight tracks to the west for the noise analysis of Alternatives A through C, showing multiple turns originating immediately at the ends of the runways. SEIR, App. SC-1, Exhibit S4, however, reveals accurate flight tracks which do not begin to diverge until at or about the shoreline. The use of flight tracks that diverge immediately after takeoff, and prior to the shoreline, results in noise contours artificially expanded to the north and south along departure routes in areas west of the airport. Had the actual flight tracks represented in SEIR, App. SC-1, Table S4 for Alternative D, been used in the DEIR noise analysis of Alternatives A through C, the noise contours to the north and south depicted in the DEIR for Alternatives A through C would have been nearly identical to those in the SEIR for the analysis of Alternative D. As a result, the purported beneficial change to communities north and southwest of the airport from implementation of Alternative D may not exist if the correct



baseline for noise analysis is used. Absent defensible inputs, it is not possible to ascertain with any certainty the integrity of the comparative results of the noise modeling.

Further, the apparent contradictory information set forth in SEIR, App. SC-1 [“Reserve runway 6L/24R for arrival traffic only, during normal operating conditions . . .” See, *e.g.*, § 3, p. 3-42, and Tables S-2 and S-8, which appear to demonstrate the use of both outboard runways for both arrivals and departures at all times of the day (see also Section 3, p. 3-42 [“occasional departures would continue off the outboard runway 6L/24R during peak departing period. . .”], obscures both Alternative D’s capacity enhancing and consequent noise enhancing potential. Departures over Inglewood on Runway 6L/24R at night could substantially change the noise contours in ways not already analyzed or disclosed in the SEIR. In addition, SEIR, App. SC-1, Project 2.1.4, states that a 3 degree glideslope has been assumed for all approaches. While this is the normal default option, the SEIR does not: (1) validate the assumption with use of actual data from LAX operations; or (2) disclose the noise impacts of the 3 degree glideslope, when combined with the extension of Runway 6L/24R over 1,000 feet to the east. A preliminary calculation reveals that the combination may result in aircraft between 125 and 250 feet lower in altitude over Inglewood, with concomitantly higher noise impacts on arrival not disclosed in the SEIR.

The same lack of validation impacts flight track and operations data in several ways. First, SEIR, App. S-C1, Section 2.1, states that the LAX software automatically assigns an aircraft to a flight track and to an INM aircraft type. However, the SEIR is not clear as to whether there any radar tracking data to verify the INM assigned flight tracks, nor is it clear that the aircraft types are being assigned properly (*e.g.*, “light” vs. “heavy” aircraft). Second, SEIR, App. S-C1, Section 2.1.5 states that the average number of aircraft operations by aircraft type and time of day were estimated on proportional basis, using the 85% of operations that were actually monitored by the LAX software. The Appendix does not reveal, however, whether this approach yields data that is consistent with actual operations at the airport. Third, SEIR App. SC-1, Table S-15, which purports to identify the anticipated L-MAX noise levels generated by aircraft operations provides no comparison with the results from noise monitoring stations surrounding LAX to determine the accuracy of the INM model in predicting L-MAX levels.

Fourth, SEIR App. SC-1, Table S14, portrays the aircraft noise analysis results in terms of DNL not CNEL. As DNL is a less stringent measure which omits additional weighting to noise events that occur in the evening hours from 7:00 to 10:00 p.m., a conversion factor must be applied to DNL results in order to accurately portray CNEL impacts. As a consequence, the CNEL impacts identified in SEIR, App. SC-1, Table S20, cannot be corroborated.

Last, and potentially most crucial, SEIR App. SC-1, Section 2.1.7 states that the INM underpredicts the CNEL by 0-3 dB based on noise monitoring around LAX. As the INM model uses SEL values to calculate  $L_{eq}$  and CNEL, it may be reasonably concluded that the SEL and  $L_{eq}$

analyses for Alternative D are also underpredicted by the same 0-3dB. Although a deviation of 3 dB CNEL is significant, as alluded to in the SEIR significance criteria used for assessing airport noise impacts, the SEIR contains no attempt to investigate the accuracy of the input data for the INM model for the purpose of calibrating the model to actual measurements at LAX, or verifying the results of the noise analysis.

B. Alternative D Does Not Fully Assess the Noise Impact on Inglewood Schools.

It is above dispute that, in general, the potential impacts of airport noise on children, and particularly children in a learning environment, are of critical importance, not only to the children and their families, but to society as a whole. Of particular importance to Inglewood, however, is that, as set forth in SEIR, App. SC-1, Alternative D will result in 12 additional schools in Inglewood exposed to single event noise levels sufficient to disrupt classes, as compared to noise levels in 1996. Nevertheless, the SEIR disaffirms significant impact from the increased exposure. SEIR Section 4.1.2.1.2, Project 4-11. [“no reliable statistical relationship between the amount of aircraft noise exposure present and the degree of learning difficulty experienced by children at affected schools” has been established.]

The treatment of the noise methodology used to evaluate noise impacts on schools reflects this conclusion. For example, SEIR Section 4.1.2.1.2, states that the peak hour of airport operations during school hours was used to assess the impact of aircraft noise on the schools. While this would be the proper approach (based on the threshold of significance established for the Project), SEIR, App. S-C1 reveals that instead of the peak hour, an average of 8 school hours was used in the analysis.

Moreover, the  $L_{eq}$  metric used in SEIR, App. SC-1, Table S33 appears incorrectly calculated. The average  $L_{eq}$  for the 8 hour school day in Table S33 is obtained by adding 10 log (3) to the 24 hour  $L_{eq}$  calculated by the INM model. The basis for this calculation appears to be that the 8 hour school day is 1/3 of the 24 hour day. However, this methodology is not correct since flights are not evenly distributed throughout the day. The result of the analysis is an average  $L_{eq}$  that is too low because most flights at LAX occur during the daytime. It should be further noted that, as set forth above, the model is acknowledged to underpredict  $L_{eq}$  values by 0 to 3 dB in any event. This underprediction, as well as the diminution in  $L_{eq}$  values caused by averaging were apparently not considered in the analysis or assessment of impact which should have been based on the peak, not average, hour, as acknowledged in SEIR Chapter 4.1.

Finally, while Section 4.1.2.1.2 also states that the “time above” was used as a threshold to evaluate noise impacts on schools, “time above” was not identified as a significance criterion in SEIR, App. S-C1. In fact, as set forth in SEIR Section 4.4.1.1, it is not clear whether the “time above” criterion is cumulative for a school day or for the peak hour, or whether it applies to each individual aircraft event. If it is cumulative, it can take many aircraft disruptions to achieve the 3

second “time above” criterion level used in the SEIR to establish disruption, thus creating an unrealistically high hurdle to the establishment of noise impacts on school populations.

C. Because of the Under Calculation of Noise Impacts, Measures Offered to Mitigate Noise Impacts on Schools are Inadequate.

Just as the analysis of noise impacts on schools is incomplete, so are the mitigation measures to remedy those impacts. Mitigation measures applicable to noise impacts on schools are limited to MM-LU-3 [“conduct study of the relationship between aircraft noise levels and the ability of children to learn”, SEIR Section 5, Project 5-21], and MM-LU-4 [“provide additional sound insulation for schools shown by MM-LU-3 to be significantly impacted by aircraft noise”, SEIR Section 5, Project 5-21 [emphasis added]]. The former involves the conduct of a study to determine if any measurable relationship exists between aircraft noise levels and the ability to learn. The latter is contingent upon the outcome of the former. The proposed measures are both legally and practicably inadequate.

First, it does not take a “comprehensive study”, or a mathematical relationship, to establish what is, at minimum, intuitively obvious - that an increase in airport noise of the type and magnitude portrayed in the SEIR will not be beneficial to learning. Second, it is improper for lead agencies to “defer formulation of possible mitigation programs by simply requiring future studies to see if mitigation may be feasible.” *Fairview Neighbors v. County of Ventura*, 70 Cal.App.4th 238, 244 (1999). Indeed, it is only where “after a thorough investigation, a lead agency finds that a particular impact is too speculative for evaluation, [that] the agency should note its conclusion and terminate discussion of the impact.” *Los Angeles Unified School District v. City of Los Angeles*, 58 Cal.App.4th 1019, 1026 (1997).

In *Los Angeles Unified School District*, a case only five years old, and involving the City of Los Angeles, proprietor of LAX, the court found that noise impacts on several schools from the proposed Warner Center Development in the San Fernando Valley were not too speculative for determination as claimed in the EIR, where “the authors of the EIR took precise measurements of existing traffic noise around Canoga Park High School and then used a Federal Highway Administration computer model to predict noise levels under alternative versions of the plan.” *Id.* On that ground, as well as a second ground, that sufficient reliable data had been developed to permit development of noise mitigation measures for residences in the area, *Id.* at 1028, the Court found that Los Angeles had failed to establish the reason why the same could not be done for the schools.

The same situation exists here. The SEIR contains what its authors, the lead agency, consider to be appropriate significance criteria based on several existing studies of classroom disruption, and analyzed in the INM, a Federal Aviation Administration model. Moreover, the SEIR contains what purports to be a definitive evaluation of noise impacts on residences, which

is accompanied by a number of mitigation measures, some of which are to be applied immediately upon Project implementation, and based on the determinations contained in the SEIR. There is, therefore, no cognizable reason, and the SEIR provides none, why reasonable, feasible mitigation measures to allay the impact of airport noise on children in 12 Inglewood schools should not be set forth in the SEIR.<sup>2</sup>

D. The SEIR's Analysis of Newly Awakened Population is Unclear and Potentially Inaccurate.

The SEIR reveals that the vast bulk of the population newly exposed by Alternative D to noise sufficient to awaken it on a regular basis, *i.e.*, 17,030 persons,<sup>3</sup> lives in Inglewood, while all other affected jurisdictions, including the City of Los Angeles, Los Angeles County and El Segundo will experience a net decrease of up to 19,000 residents in population exposed to SEL levels sufficient to awaken. SEIR, Table 4.2-29. For that reason alone, Inglewood has a deep concern that the analysis of Alternative D's sleep impacts be accurate, understandable, and that proposed mitigation measures be adequate to mitigate those impacts. Thorough review of the SEIR and its Appendices fails to disclose relevant answers.

1. The Methodology Employed to Analyze Sleep Impacts of Aircraft Noise is Unclear and Leads to a Potentially Inaccurate Conclusions.

The SEIR uses a 94 dB SEL "noise contour" as a metric to measure aircraft noise sufficient to awaken. SEIR § 6.1.2 contains a description of the methodology used to calculate the location of the 94 dB SEL noise contour. That description is, however, unclear. The 94 dB level represented in SEIR Section 6.1.2 is based on a study that states that 10% of the population exposed to this level of noise will be awakened no more than once every 10 days. To establish a noise contour for operations that would occur once every 10 days, it appears that the methodology only considered aircraft operations that occur at least 0.1 times per day (or once every 10 days). If this is a correct understanding of the methodology, then the methodology is in error. If the methodology includes only aircraft that have at least 0.1 operations per day, then some operations have been excluded from the analysis. This could mean for example, that

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<sup>2</sup> To further complicate the issue, SEIR, Section 6.2.3, based eligibility for school noise mitigation on CNEL levels, a much higher, cumulative hurdle than the SEL criteria used to assess noise impacts on schools in SEIR Section 6.2. The SEIR should be revised to apply the relevant SEL criteria consistently to both the determination of noise impacts on schools and the eligibility for mitigation of those noise impacts.

<sup>3</sup> When the population removed from the noise affected area by change in airfield configuration and resultant shift in the noise contour is considered, the net population in Inglewood exposed to regular awakening is 12,800 persons.

infrequent takeoffs to the east under Santa Ana conditions were not considered in the analysis. This omission would, of course, have a significant effect on Inglewood.

In effect, what is plotted in the SEIR is the 94 dB SEL contour (*i.e.*, the contour for 10% awakenings) for a subset of the total operations occurring at the airport. Therefore, the resulting analysis will be incorrect for two reasons: (1) It underpredicts the contour because it does not include all the flight operations at the airport; and (2) As the SEIR acknowledges that the model underpredicts SEL values by 0 to 3 dB, the resulting 94 dB SEL contour may also be underestimated by that amount. Finally, it is unclear from SEIR Section 6.1.2 whether the analysis of nighttime awakenings only included aircraft operations or also included ground runup operations which, in some instances, can be extremely noisy.

2. The Measures Proposed to Mitigate Awakenings are Incomplete and, Thus, At Least Partially Ineffective.

As a threshold matter, Inglewood appreciates the intent expressed in mitigation measure MM-LU-2, SEIR, Section 5, Project 5-20, to “incorporate residential dwelling units exposed to single event awakenings threshold into aircraft noise mitigation program.” However, SEIR Section 5 clouds that commitment by predicating the calculation of affected units on a comparison with “1992 65 CNEL contour”. Inglewood’s problem with that approach is twofold. First, the relevant baseline comparison throughout the SEIR for CEQA purposes is 1996. To suddenly employ 1992 contours as a baseline for comparison, without further explanation, renders the conclusion derived from that comparison suspect.

Inglewood is aware that the rationale for use of the 1992 contour is that, according to explanations offered in other forums, the 1992 contour represent the noisiest recent year due to the level of operations and the relative preponderance in the fleet of Stage 2 aircraft at that time. Nevertheless, neither the 1992 contour, nor data from 1992, are presented anywhere in the SEIR or relied upon in other sections. Therefore, further analysis of 1992 operations, noise levels, and resulting contours, as compared to those for 1996 and 2000, the designated baselines for analysis in the SEIR, is required to justify use of 1992 contours in this isolated instance.

Moreover, the results of the comparison of Alternative D with 1992 contours is inconsistent with the results derived from comparison with the designated 1996 baseline. While the comparison with 1992 purports to result in 4,140 dwelling units and 13,170 residents of Inglewood newly exposed to nighttime awakenings, the comparison with 1996 results in 6,010 dwelling units and 17,930 residents newly exposed. Clearly, a measure that excludes 1,870 units and 4,760 residents will only incompletely mitigate Alternative D’s noise impacts.

Second, while Inglewood appreciates the time and effort devoted to an application to the FAA for enforceable noise restrictions under 14 C.F.R. Part 161, that measure will also result in

only incomplete mitigation. As SEIR, App. S-C1, Section 3.1.6 indicates, the Part 161 application will only eliminate gratuitous use of nighttime takeoffs to the east. For safety reasons, takeoffs to the east will still occur during Santa Ana conditions or when coastal fog limits visibility. As acknowledged in SEIR, App. S-C1, Section 3.1.6, these safety reasons account for the great majority of takeoffs to the east. Therefore, the mitigation measure that is the subject of a Part 161 application will be only intermittently applicable, and, thus, may provide little relief to the residents of Inglewood. Finally, SEIR, App. S-C1, Section 6.1.3 states that the Part 161 application will only apply to eastbound takeoffs between midnight and 6:30 a.m. However, SEIR, App. S-C1, Section 6.1 states that the analysis of nighttime awakenings applies to the hours between 10:00 p.m. and 7:00 a.m. Therefore, the proposed mitigation measure will not cover a period of two and one-half hours each night.

In the last analysis, the gravamen of the mitigation for nighttime awakenings is the sound insulation program identified in SEIR, App. S-C1, Section 6.1.3. However, without further clarification concerning the extent of the units and population that will be covered by the sound insulation program, the program appears inadequate to mitigate the full noise impacts of Alternative D.

E. The Expansion of the ANMP Contemplated in Mitigation Measure MM-LU-1 May Provide Only Limited Relief to Inglewood Residents Newly Exposed to Noise in Excess of 65 dB CNEL.

The SEIR makes painfully clear that the vast bulk of the population newly exposed by Alternative D to noise in excess of 65 dB CNEL will be in Inglewood. Specifically, Alternative D is projected to increase the number of Inglewood residents impacted by noise in excess of 65 dB CNEL by 4,190, when compared to the 1996 baseline (as opposed to zero in El Segundo, 790 in the City of Los Angeles, and 380 in Los Angeles County). Nevertheless, the scope of MM-LU-1's applicability to these newly affected populations is not clearly defined.

For example, while MM-LU-1 proposes to expand the existing ANMP to "mitigate land uses that would be rendered incompatible by noise impacts associated with implementation of the LAX Master Plan", SEIR, 5-19, it also imposes criteria for inclusion in the ANMP that require the existing ANMP to be completed before expansion to newly impacted residences. As the current ANMP already involves thousands of units in Inglewood alone, not to speak of other communities; and as the process of sound insulation construction can be a lengthy and complex one, the almost 5,000 newly impacted residents of Inglewood may have to wait in line behind other residents of Inglewood and other communities for up to 10 years, all the while suffering the debilitating impacts on sleep, learning and living in general caused by Alternative D.

Moreover, as an alternative to insulation, MM-LU-1 proposes "acquisition of properties within the highest CNEL measurement zone" as well as those with "high concentrations of

residents and other noise sensitive occupants . . .” SEIR, Project 5-19, 20. MM-LU-1, however, fails to identify the manner in which the housing needs of newly exposed residents will be accommodated after their properties are acquired. In fact, the SEIR, Section 4.4.3, rejects the necessity of acquisition, and consequently ignores the need for attendant relocation. [“Under Alternative D, there would be a substantial reduction in property acquisition compared to the other build alternatives. No residential acquisition is proposed . . .” SEIR, p. 4-333] Nor is there any discussion of the way in which, in the tight and expensive L.A. housing market, decent affordable housing will be provided, or made available through new construction.

In light of the size of the potentially affected population, most of which are in Inglewood, and its heavily low income and minority characteristics, MM-LU-1 is sorely inadequate to mitigate the impacts of any of the proposed alternatives.

F. The Data and Metrics Used in the SEIR’s Analysis of Alternative D’s Traffic Noise Impacts Are Inconsistent With Those Used in the Evaluation of its Aircraft Noise Impacts.

The methodology used in the SEIR’s analysis of Alternative D’s traffic noise impacts is unclear as to the data used in the evaluation of peak hour traffic noise, as well as inconsistent as between the metrics used to assess traffic and aircraft noise. These inconsistencies may render the SEIR’s conclusions regarding Alternative D’s cumulative noise impacts questionable.

The SEIR states that peak noise hour data, *i.e.*, data for the noisiest one hour period of the day, were used in the analysis of traffic noise. SEIR § 4.1.2.1.3. However, based on review of SEIR, App. SC-2, Roadway Noise Data, it appears that, in fact, either peak a.m. or p.m. traffic data were used. These are not typically the noisiest hours of the day since traffic slows due to congestion. Thus, the SEIR’s traffic noise analysis may not have captured the true extent of the Project’s traffic noise impacts.<sup>4</sup>

Further, the metrics used to measure aircraft and traffic noise are inconsistent. The SEIR’s aircraft noise analysis depends on the cumulative CNEL metric.<sup>5</sup> The SEIR’s significance criterion for traffic noise, however, is the 24 hour  $L_{eq}$  metric which is a predicate to, but not identical with, the CNEL significance criterion. Where the SEIR purports “for information purposes”, to combine aircraft and traffic noise to estimate the total experienced

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<sup>4</sup> It appears, although it is by no means certain, that the data in SEIR, App. SC-2 takes this into account by reducing traffic speeds for future years. However, a more accurate way of dealing with the problem would be to start with the correct data in the first instance.

<sup>5</sup> The exceptions to the use of the CNEL metric is to assess noise impacts on schools and awakenings.

noise, Section 4.1.2.1.3, p. 4-12, it does so by converting both traffic and aircraft noise to a 24 hour  $L_{eq}$  metric, rather than converting traffic noise to a CNEL metric. The result is a comparison of “apples and oranges”, that deprives the public of the simplicity of a consistent metric. If using the  $L_{eq}$  metric would result in a more accurate characterization of the Project’s noise impacts, its use would be acceptable. However, the SEIR does not claim that this is so.

In short, while the SEIR states that the computation of the combined noise impacts of traffic and aircraft are for “information purposes” only, the reality is that noise in the vicinity of the project will have multiple components, two of which are aircraft and traffic, and another, construction noise as set forth below. The SEIR has an affirmative responsibility to fully and accurately depict the cumulative impacts of all three.

G. The Impact of Construction Noise From the Proposed GTC on Residents of Inglewood Has Not Been Adequately Evaluated.

SEIR Section 4.1.6.4.3 states, in pertinent part, that: (1) as the closest noise sensitive uses to the GTC are more than 1,000 feet to the east across La Cienega Boulevard and the I-405 in the City of Inglewood; (2) because construction equipment noise of 86 dBA  $L_{eq}$  would dissipate to approximately 66 dBA  $L_{eq}$  at that distance; and (3) because the road traffic and other noise would mask any construction noise, the impact of construction noise on homes in Inglewood would be less than significant. In reaching that conclusion, the SEIR relies on a theory conclusively rejected by the court in *Los Angeles Unified School District, supra*, 58 Cal.App.4th at 1025.

In its EIR in that case, as in the SEIR here, Los Angeles reasoned that “the noise level around the schools is already beyond the maximum level permitted under Department of Health Guidelines so even though traffic noise from the new development will make things worse, the impact is insignificant.” *Id.* After characterizing Los Angeles’ position, the court rejected it, relying on *Kings County Farm Bureau v. City of Hanford*, 221 Cal.App.3d 692, 720 (1990).

“This ratio theory, the court explained, ‘trivialized the project’s impact’ by focusing on individual inputs, not their collective significance. . . [T]he relevant issue to be addressed in the EIR on the plan is not the relative amount of traffic noise resulting from the project when compared to existing traffic noise, but whether any additional amount of traffic noise should be considered significant in light of the serious nature of the traffic noise problem already existing around the schools.” *Id.* quoting *Kings County Farm Bureau, supra*.

The SEIR’s analysis of the construction noise impacts of Alternative D is predicated upon precisely the same impermissible “ratio theory” as that rejected in *Los Angeles Unified School*



*District*. The SEIR opines both that construction equipment noise would dissipate to a less than discernable level at a distance of 1,000 feet from Inglewood and that road traffic noise would mask any construction noise. While some analysis exists in the SEIR to support the former, none whatsoever exists with respect to the latter. In other words, it is yet to be determined whether traffic noise, when calculated using peak noise hour data, as well as peak traffic data, will sufficiently exceed the level of construction noise, the peak hours of which may be entirely different, to mask or obliterate its impacts on residents less than a fifth of a mile away. As the court held in *Los Angeles Unified School District*, “we do not know the answer to this question but, more important, neither does the City”. *Id.* at 1026. Without those answers respecting the Project’s cumulative traffic, aircraft and construction noise impacts, the SEIR is potentially inadequate.

#### IV. THE SEIR DOES NOT FULLY DISCLOSE THE PROJECT’S AIR QUALITY IMPACTS.

The SEIR’s air quality analysis is of questionable accuracy where: (1) the methodology employed in the analysis understates baseline emission concentrations, thus leaving substantial headroom within which to make the finding that the Project increases emissions without violating ambient air quality standards (“AAQS”); (2) understates emissions from aircraft; (3) overstates emissions benefits from electrification of aircraft ground support equipment and the use of gate-based power, and understates emissions impacts from construction equipment; (4) omits heavy duty construction and transport truck emissions from the analysis; and (5) improperly defers the conformity analysis required for all Federally funded projects pursuant to the conformity provisions of the Clean Air Act, 42 U.S.C. § 7506, *et seq.*

##### A. The Methodology Used in the Calculation of Background Pollutant Concentrations Leads to Understatement of Impacts.

To varying degrees, the determination of the Project’s environmental impacts is dependent upon the background environment with which the Project impacts are compared. With respect to a determination of air quality impacts, the accurate calculation of background concentrations is particularly crucial, because it is upon that base that the compliance of Project specific emissions with regional air quality standards is determined. If that base is underestimated, the overall effect of airport improvements on AAQS compliance will be similarly understated. Here, it appears that the baseline concentrations upon which Alternative D’s compliance is predicated are calculated through a methodology that artificially lowers background emissions levels so as to allow room for Project emissions to fall below maximum applicable AAQS.

The SEIR employs a methodology whereby future year background concentrations, excluding PM<sub>10</sub>s, are determined by adjusting base year concentrations by the ratio of future

south coast regional emissions to current south coast regional emissions. For  $PM_{10}$ , the process is similar but is based on the ratio of estimated future year  $PM_{10}$  concentrations to current  $PM_{10}$  concentrations in central Los Angeles. Both methods seem likely to produce optimistic (too low) background concentrations for LAX.

First, both methods assume that regional reductions affect all areas of the region equally. However, background concentrations, as well as future emission reduction influences are constrained by geography around LAX. Since the prevailing wind is from southwest to northeast, the Pacific Ocean represents a physical constraint and it is unlikely that background pollutant concentrations coming into LAX will be reduced in proportion to emission reduction occurring downwind. In addition, the emissions based approach assumes that fully 100% of the background can be reduced, *i.e.*, if emissions go to zero, ambient concentrations go to zero. While this may be true in an idealized situation, transport and biogenic emissions represent a floor below which air quality cannot be locally reduced. For example, emissions associated with shipping may represent a floor for background  $NO_x$  and  $SO_2$  at LAX. The SEIR does not provide enough data from which to make that determination.

The SEIR does, however, provide additional evidence to support the conclusion that the Project's baseline concentrations are artificially reduced. For example, the SEIR's methodology assumes that emissions from LAX are already included in background concentrations, and, thus, they must represent conservative background pollutant concentration baselines for air quality analysis, as LAX emissions will be added on top of a background that already includes those same LAX emissions. This assumption is based on data concerning baseline short-term (sub-annual) background concentrations measured at an on-site monitoring station located just east of the southern runway configuration, and annual concentrations based on data collected at a SCAQMD monitoring facility in Hawthorne, located near, but southeast of LAX. Because, as set forth above, the prevailing wind direction for LAX area is southwest to northeast, the bulk of airport activity, including all terminal and motor vehicle operations, occur under the influence of a prevailing wind plume that is further north than the onsite monitoring station. While certain aircraft takeoff and queuing emissions are undoubtedly accounted for in the on-site baseline concentrations, these represent only a small fraction of overall airport emissions.

National Weather Service data for 1984 through 1992 at LAX demonstrates the likelihood that these monitoring data are not significantly impacted by LAX emissions. Winds are out of the west or southwest  $48 \pm 6\%$  (or approximately  $\frac{1}{2}$ ) of all hours in that period. To get a better idea of the significance of this distribution, if a circle were centered at LAX and split into 16 equal "slices", the wind would be blowing off the ocean through only two of those 16 slices for fully  $\frac{1}{2}$  of all hours. Moreover, these winds would be blowing in a direction such that LAX emissions would have no influence on the off-site monitoring station and little, if any, influence on the on-site measurement. Perhaps most tellingly, winds moved in a prevailing south to north direction (from the bottom half of the circle to the top half)  $82 \pm 3\%$  of all hours between 1984

and 1992. Thus, only during  $9 \pm 2\%$  of all hours did wind move from the northwest quadrant of the circle toward the southeastern quadrant (*i.e.*, in the direction necessary to influence either the on-site or off-site monitors). Therefore, whatever influence LAX has on either site is clearly modest since the off-site station is located south of LAX and the on-site station is on the southeastern corner of the airport. Consequently, there is little influence from LAX on the off-site concentrations used as background, and only a slight influence on the on-site based background concentrations.

In summary, as a result of employing the specified methodology, 2015 background concentrations are potentially reduced by 50% for NO<sub>2</sub>, 60% for CO, and 30-80% for PM<sub>10</sub>. Clearly, these reductions provide substantial “headroom” for local emissions increases within the confines of the AAQS. Furthermore, these reductions appear to represent the most significant influence on forecasted pollutant concentrations in the years 2005 and 2015.

The overall sensitivity of the air quality analyses to the background concentration reduction is perhaps best recognized in examining the forecasted 2015 pollutant concentrations. Despite the 50% background concentration reductions for NO<sub>2</sub>, annual average on-site NO<sub>2</sub> concentrations are forecasted to increase between 1996 and 2015. While the forecasted increase is not sufficient to cause a violation of the NO<sub>2</sub> AAQS, that may be entirely the result of the reduced background concentrations resulting from the flawed methodology employed. Clearly, the integrity of the AAQS compliance status hinges on the proper demonstration of background concentration propriety. Since this is the case, it is critical that assumed background concentrations be supported with appropriate analyses, and those analyses are currently lacking in both the DEIR and SEIR.

B. The SEIR Understates Aircraft Emissions.

Aircraft emissions are understated in the SEIR through utilization in the analysis of: (1) incorrect aircraft PM<sub>10</sub> factors; (2) incorrect taxi times; (3) incorrect default aircraft engine assignments; and (4) omission to consider reverse thrust emissions.

1. The SEIR Air Quality Analysis Utilizes Incorrect Aircraft PM<sub>10</sub> Emission Factors.

As set forth in Attachment 1 to this letter, the DEIR’s air quality analysis was based on incorrect PM<sub>10</sub> emissions factors. As nothing has changed in the SEIR, this issue is again worthy of note. PM<sub>10</sub> emission factor estimation in the DEIR shows that the basic estimation approach yields an emission factor that only considers the basis nonvolatile portion of the particulate. An adjustment factor (that varies with fuel sulfur content) should be used to correct the estimate to total PM. As set forth in Attachment 1, this factor is estimated to be approximately 2.6 for low sulfur (about 70 PPMW) jet fuel and 14.7 for high sulfur (about 675 PPMW) jet fuel. As EPA

data demonstrates that U.S. jet fuel averages about 600 PPMW sulfur, the appropriate adjustment factor for the SEIR would be about 13.2. However, as the SEIR uses unadjusted emissions factors, PM<sub>10</sub> emissions are underestimated by a factor of 13.

This alternative approach to PM emission factor estimation is based on a strong statistical relationship between measured PM and the inverse of measure NO<sub>x</sub> (with co-efficients significant at 99+% confidence levels). With such a relationship, the entire existing database of aircraft NO<sub>x</sub> emissions rates can be evaluated to develop aircraft engine and operating mode specific PM emissions rates. This approach produces PM emissions rates that range from 4 to 37 times higher (depending on operating mode) than those used in the DEIR and SEIR. The smallest differentials are observed at the highest thrust modes. For a typical landing/takeoff (“LTO”) cycle at LAX (*i.e.*, using local times in mode), the SEIR appears to underpredict the aggregate PM emission factor by a factor of about 17. The effect on related PM air quality analysis is obvious.<sup>6</sup>

Interestingly, if the appropriate carbon-to-total PM emission factor correction of 13.2 is applied to the emissions rates used in the DEIR and SEIR, the differential between the two emissions factor estimation approaches is dramatically reduced, from a factor of 17 to a factor of 13. However, even this differential is worthy of investigation since mode specific differences are in and of themselves significant and the overall air quality impact depends on how individual mode significance changes over time.

## 2. The SEIR Inaccurately Represents Aircraft Taxi Times.

The DEIR did not present any aircraft to taxi/queue times. The SEIR, however, does present a single set of taxi/queue times that are stated to have been “used to estimate aircraft emissions for all alternatives in both horizon years”. SEIR, App. S-E, p. 10. However, based on analysis of the data set forth in SEIR App. S-E, this statement does not appear to be accurate. As shown in Table 1 below, the main benefit ascribed to Alternative D is a reduction in taxi times.

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<sup>6</sup> Inglewood acknowledges that the available PM emissions testing database is both small and dated. It does not, however, agree with the DEIR that the age of available testing data renders it valueless. While engine technology has advanced relative to the engines represented in the database, the fundamental combustion characteristics that give rise to PM formation have not. Further, the claim that the existing aircraft emissions factors are not of value since they reflect total PM as opposed to PM<sub>10</sub> is also without merit. Virtually 100% of combustion related PM is PM<sub>10</sub>, so any error resulting from the substitution of total PM for PM<sub>10</sub> is insignificant relative to the analysis errors contained in the DEIR and SEIR. Ironically, the PM emission factor estimation approach employed in both the DEIR and SEIR requires the very same assumption of equivalency between total PM and PM<sub>10</sub>.

TABLE 1

	NO <sub>x</sub> (tpy)	VOC (tpy)	CO (tpy)	SO <sub>2</sub> (tpy)	PM-10 (tpy)
Taxi Emissions - NA/NP Alternative	723.3	794.9	4,381.6	89.9	17.8
Taxi Emissions - Alternative D	659.2	707.6	3,956.6	80.9	14.6
Taxi Emissions Difference	-64.1	-87.3	-425	-9	-3.2
Aircraft Emissions - NA/NP Alternative	5,154.9	1,204.1	6,668.7	232.5	70.2
Aircraft Emissions - Alternative D	5,171.7	1,111.2	6,240.7	223.7	62.0
Aircraft Emissions Difference	16.8	-92.9	-428.0	-8.8	-8.2
Percent of Total Difference Due to Taxi	-382%	94%	99%	102%	39%

As also shown in Table 1, with the exception of PM<sub>10</sub>, changes in taxi related emissions account for virtually 100% of the claimed reductions in aircraft emissions from Alternative D. Therefore, it would be methodologically unlikely that the same taxi times were used for all airport alternatives, because if that were so, the differences between the alternatives would be far less distinguishable.

As the bulk of aircraft VOC and CO emissions are generated during taxi; and although NO<sub>x</sub> emissions rates are low during taxi, the amount of time spent in taxi mode results in a significant contribution to overall aircraft NO<sub>x</sub> emissions, it is important that taxi time be accurately modeled. The SEIR contains insufficient information to allow an appropriate evaluation.

3. The SEIR Utilizes Incorrect Default Aircraft Engine Assignments.

The SEIR sets forth the assumed aircraft engines for all modeled airframes. It appears that these assumptions reflect the EDMS version 4.11 Default Engine Assignments without exception. While such an assumption would not affect the relative impacts of the various LAX alternatives, it can have a significant impact on the absolute level of aircraft emissions and the magnitude of associated ambient concentrations. The EDMS default engine reflects the “most popular” engine for an airframe based on total airframe sales. For a particular airport, total airframe sales may or may not be an accurate indicator of local conditions due to variations in airline specific activity (*e.g.*, local vs. national). Different airlines favor different airports and the associated traffic into and out of those airports is biased toward local airline distributions. Thus, aircraft engine assignments should, at a minimum, be conducted on the basis of the local airline mix, which is unlikely to be consistent with EDMS default assumptions. The SEIR does not contain an analysis based on local airline mix and, thus, its conclusions with regard to aircraft emissions are not definitive.

4. The SEIR Air Quality Analysis Does Not Include Reverse Thrust Emissions.

The SEIR, like the DEIR, omits from its air quality analysis emissions from aircraft reverse thrust operations, on the ground of lack of adequate emissions factors and short usage times. Both of these claims are, however, misleading. Reverse thrust is essentially a high thrust operating mode and emissions factors for such modes (*i.e.*, climb out and takeoff) are readily available. Common practice utilizes takeoff emission factors. It is true that the time in mode for reverse thrust operations is short. However, high thrust modes produce very high NO<sub>x</sub> per unit time relative to other operating modes such as aircraft taxi. For example, at a commonly utilized reverse thrust mode time of 15 seconds, overall effective takeoff time would increase by approximately 25% (approximately one minute standard takeoff time plus 0.25 reverse thrust minutes vs. one minute without reverse thrust). This, in turn, increases NO<sub>x</sub> by 25% relative to takeoff alone. Since takeoff accounts for about 35% of total aircraft NO<sub>x</sub> under all alternatives, including the No Project alternative, the overall aircraft NO<sub>x</sub> inventory could increase by about 10% simply due to the inclusion of reverse thrust related emissions. Without some enforceable measure prohibiting reverse thrust operations, there is no supportable rationale for excluding reverse thrust emissions from the air quality analysis.

C. The SEIR Overstates Emissions Benefits from Electrification of Aircraft Ground Support Equipment and the Use of Gate Based Power.

As a threshold matter, emissions factors employed in the DEIR for off road engines, including, but not limited to, construction equipment and aircraft GSE were significantly underestimated by the use of outdated emissions factor sources. The SEIR purports to have corrected that flaw through the use of emissions factors for off road construction equipment derived from the California Air Resources Board ("CARB") OFFROAD Emission Factor Model. This would be the correct approach. However, it is not possible to confirm that the revised emissions factors are derived from the OFFROAD model, as the SEIR contains only an aggregate emissions summary (as opposed to the DEIR's actual emissions factors for comparison).

With respect to GSE, the SEIR relies on emissions factors derived from the latest version of the FAA's EDMS model (updated since the DEIR). While the emissions factors in the SEIR also appear consistent with those contained in EPA's NONROAD Emission Factor Model, the SEIR still raises significant concerns regarding the overall propriety of the GSE emissions analysis.

1. The SEIR Does Not Validate the Assumptions Contained in FAA's EDMS Model with Real Data.

Like the DEIR, the SEIR continues to rely on the FAA's EDMS model to estimate the LAX GSE population and equipment characteristics (*e.g.*, horsepower, hours of use, load factor). Given that the current GSE population and most of the associated operating parameters for LAX are already known, it is appropriate to validate the EDMS model assumptions with actual LAX conditions. Ideally, the current assumptions should be replaced in their entirety with known LAX data. At a minimum, consistency should be demonstrated. The FAA has facilitated the use of actual airport data through their latest release of the EDMS model (Version 4.11, identical to that used to support the SEIR) by allowing users to replace aircraft based GSE activity assumptions with airport specific "census" data. The analysis in the SEIR should take advantage of this opportunity to establish the air quality analysis' accuracy.

2. The SEIR's Assumption That Alternative D Will Involve GSE Electrification and the No Project Alternative Will Not is Groundless.

Like the DEIR, the SEIR posits a wide spread GSE electrification program under all four build alternatives, while retaining a large percentage of fossil fuel powered GSE under the No Project alternative. While this GSE electrification program is asserted to be the most effective mitigation measure set forth in the SEIR, there are no grounds to assume that GSE will not be similarly electrified under the No Project alternative, thus, eliminating any differential resulting from the use of fossil fuel powered GSE between the No Project and build alternatives.

First, it is arbitrary to apply GSE electrification only to the build alternatives, as there are no specific constraints to implementation under the No Project alternative. Moreover, electrification of GSE is cost effective from a market standpoint today so whatever incentive or mandate will be offered under the build alternatives to move toward electrification could just as easily be applied today to generate emissions reductions under a No Project alternative.

Even ignoring the tenuous relationship between the build alternatives and GSE electrification as a mitigation measure, by far the most troubling issue is that GSE electrification appears to be accounted for in the "unmitigated" emission estimates for all build alternatives. If this is a correct assessment, no additional emissions reductions will be achieved through GSE electrification. For example, unmitigated GSE emissions for Alternative D and the No Project alternative (from SEIR App. S-4, Attachment N), are virtually identical in terms of aircraft and, thus, GSE activity. Although there is no reason set forth in the SEIR to expect GSE to emit any differently between an unmitigated implementation of Alternative D and the No Project alternative, the data in Attachment N demonstrates that Alternative D presents a substantial reduction in emissions of all pollutants over the emissions in the No Project alternative.

TABLE 2

	NO <sub>x</sub> (tpy)	VOC (tpy)	CO (tpy)	SO <sub>2</sub> (tpy)	PM-10 (tpy)
NA/NP Alternative	618.7	240.4	5,685.9	11.4	24.0
Alternative D	135.5	88.1	1,523.2	1.4	30.8
Percent Change	-78%	-63%	-73%	-88%	28%

There are only two possible explanations for the reported differences. Either the Table in Attachment N is incorrectly labeled, and actually reflects mitigated emissions differentials, or the GSE electrification is included in the “unmitigated” emissions from the Project.

In the final analysis, it is clear that the reason air quality impacts under Alternative D are reported to be less than those of the No Project alternative can be traced almost entirely to emissions reductions associated with GSE and aircraft taxi times. In fact, impacts for all other emissions sources under Alternative D are either null or negative compared to the No Project alternative.

TABLE 3

	NO <sub>x</sub> (tpy)	VOC (tpy)	CO (tpy)	SO <sub>2</sub> (tpy)	PM-10 (tpy)
NA/NP Alternative	6,278.8	1,775.0	14,413.1	251.8	170.0
Alternative D	5,746.5	1,625.0	9,660.3	246.4	187.1
Total Emissions Difference	-532.3	-150.0	-4,752.8	-5.4	17.1
GSE Emissions Difference	-483.2	-152.3	-4,162.7	-10.0	6.8
Percent of Total Difference Due to GSE	91%	102%	88%	185%	40%
Aircraft Taxi Difference	-64.1	-87.3	-425.0	-9.0	-3.2
Percent of Total Difference Due to Taxi	12%	58%	9%	167%	-19%
Percent of Total Difference Due to GSE and Taxi	103%	160%	97%	352%	21%

If that conclusion is correct, then all air quality benefits accruing from GSE electrification in Alternative D could just as readily be applied to the No Project alternative, rendering any air quality benefits from Alternative D ephemeral at best.

#### 4. The SEIR Overstates the Emissions Benefits of Gate Based Power and Understates the Potential for Auxiliary Power Unit Emissions.

Like the DEIR, the SEIR assumes that 100% of air carrier gate power and conditioned air needs will be satisfied by gate-based electrically powered systems, as opposed to fossil fuel powered Auxiliary Power Units (“APU”) or GSE. This assumption is overly optimistic because,



even under conditions where gate based equipment is available, not all airlines or aircraft will utilize it consistently. Although the assumption of 100% availability and usage affects the No Project alternative and build alternatives equally, it is necessary to account for the full range of expected emissions in order to determine AAQS compliance. Without some enforceable policy requiring that gate base systems (both air and power) be used, and that any onboard APU be shut down until needed for main engine startup, a more realistic assumption for aircraft emissions purposes would be to base the fraction of aircraft that rely on gate base systems on the system usage rate for currently equipped gates at LAX.

Moreover, perhaps as a result of the assumption of universal use of gate based power, the SEIR assumes an emission factor of zero for all APU. While the impact of this assumption is buffered by the assumption of limited APU usage, APUs are still assumed to operate for seven minutes, at the time of main engine startup and shut down, and emissions during this period should be fully considered. Further, if the APU usage rate is corrected to better reflect actual gate based system usage, APU emissions could increase to 40 minutes or longer for a wide bodied aircraft, a level which would more properly reflect maximum short term emissions rates and maximum short term ambient concentration impacts. Without inclusion of APU emissions, it appears that the SEIR's air quality analysis is flawed.

5. The SEIR Relies on Outdated Load Factors for Off Road Equipment.

While the SEIR utilizes revised emissions factors derived from ARB's OFFROAD Model to assess the emissions impacts of off road construction and other equipment, it does not similarly employ revised operational load factors. Instead it relies on load factors derived from the CEQA Air Quality Handbook published in 1993. As considerable information has been collected in the last decade, relying on load factors from 1993 is likely to skew the air quality analysis in ways it is not possible to anticipate without the provision of relevant data.

6. The SEIR's Air Quality Analysis Omits Heavy Duty Trucks From Its Fleet Mix.

Perhaps the most surprising omission from the SEIR's air quality analysis is from the assumed fleet mix for vehicles on all airport roadway links, set forth in SEIR, App. S-4, Attachment J, which lacks any accounting for heavy duty truck travel. As Alternative D includes 3.1 million square feet of cargo space on airport property, not to speak of the cargo space that may be utilized off airport by cargo carriers; as Federal Express and other cargo carriers operate substantial fleets of heavy duty diesel trucks; and as heavy duty diesel trucks are large emitters of NO<sub>x</sub> and other pollutants, omission of heavy duty trucks from the on road fleet mix will have a substantial impact on the estimation of NO<sub>x</sub> emissions from Alternative D and other build alternatives which may render the SEIR's air quality analysis inadequate.

D. The SEIR, Like the DEIR, Improperly Defers the Requisite Conformity Analysis.

The SEIR acknowledges the applicability of Federal conformity requirements, as set forth in Clean Air Act, 42 U.S.C. § 7506, and its implementing regulations, but, like the DEIR, defers both the conformity analysis and potential conformity determination to a final EIR/EIS. Such an approach makes it impossible for the public to comment constructively on either potential emission mitigation measures or the conformity process, since these processes and their result will be released for comment only after the underlying decision making has been finalized.<sup>7</sup>

Moreover, the absence of a draft conformity analysis in the SEIR has more fundamental impacts. The Clean Air Act specifies, in pertinent part, that “no department, agency, or instrumentality of the federal government shall engage in, support in any way or provide financial assistance for, license or permit, or approve, any activity which does not conform to an implementation plan after it has been approved . . .” Clean Air Act § 7506(c)(1). Without at least a preliminary conformity analysis, it is impossible to document Alternative D’s potential compliance or noncompliance with state air quality implementation plan (or verification that the project is already included in the State Implementation Plan). Absence of at least a draft conformity analysis at this stage of the Project’s documentation violates the most fundamental goal of CEQA, *i.e.*, “to encourage informed public information and decision making,” and, consequently, may constitute a fatal flaw in the SEIR.

V. THE SEIR’S ANALYSIS OF SURFACE TRAFFIC IMPACTS IS INCOMPLETE.

The SEIR’s analysis of Alternative D’s surface traffic impacts, like the more global analysis of Alternatives A through C in the DEIR: (1) omits analysis of certain critical intersections, and reaches conclusions based on data absent from the SEIR, or inconsistent with data contained in other planning documents for the same areas; (2) omits analysis of the traffic impacts, either beneficial or detrimental, of proposed off airport FlyAway terminals; (3) provides incomplete explanation of the Project’s trip generation potential, including trip distribution and its potential impact on Inglewood; (4) fails to explain the way in which the proposed mitigation for the traffic impacts of construction, and the ultimate buildout of the Northside project, will be effectively implemented; and (5) fails to address the direct as well as cumulative traffic and parking impacts on Inglewood of the construction and subsequent utilization of the GTC.

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<sup>7</sup> Inglewood hereby reserves its right to comment on the Draft and Final Conformity Analyses and/or determination for the Project.

A. The SEIR's Analysis of Baseline, as Well as Current, Intersection Traffic Levels Lacks Analytic Support.

The SEIR's analysis of 1996 and 2001 updated baseline intersection traffic levels, for comparison with Alternative D's influence on traffic impacts at selected intersections, omits or obscures critical information which makes verification of the SEIR's conclusions difficult, if not impossible.

1. The SEIR's Conclusions Regarding the Continuing Relevance of the 1996 Baseline for Traffic Purposes is Unsupported.

SEIR, Section 4.3.2.3 contains an analysis of 38 intersections, updating traffic conditions reflected in the 1996 environmental baseline, apparently for the purpose of determining the continuing applicability of the 1996 base year. The updated data purportedly show a "combined" average annual growth rate for all intersections analyzed of "approximately 1.5%" and "1% for the a.m. and p.m. peak hours respectively." SEIR, Section 4, p. 4-244. On that basis, the SEIR concludes that: (1) the traffic growth rate is consistent with general population growth rate in the area; (2) that it is a "small" growth rate; and (3) 1996 is still the applicable environmental base condition.

The above conclusions are problematic. First, no background data are provided to support them. Second, the analysis purports to be of "combined intersections", but no methodology is set forth to explain the means by which the intersections were "combined" for statistical purposes, or, more fundamentally, the meaning of the term "combined" (*e.g.*, statistically, arithmetically, other). Since the essence of traffic analysis is the determination of differential traffic impacts at different intersections, and as no such analysis is set forth in the SEIR, the integrity of this "combined" approach remains unestablished.

Third, as a result, there is no data with which to verify the SEIR's conclusion regarding consistency with the growth rates of the surrounding area, nor can the SEIR's conclusion that this is a small growth rate be substantiated. In fact, assuming the 1% growth rate in a.m. and p.m. peak hours is accurate; and assuming (for ease of computation only) the "combined" traffic at all 38 intersections totals 10,000 cars in each peak hour, the increase in the number of cars over the designated five year period is 510, or over 5%. Thus, even if 5% is deemed "small", if the total number of peak hour vehicles substantially exceeds 10,000, which it is more than likely to do, the actual traffic growth will not be small, casting doubt on the utility of the 1996 baseline for traffic comparison purposes.

2. The SEIR's Analysis of Traffic Impacts at Individual Off-Airport Intersections Conflicts with That of Other Contemporaneously Prepared Environmental Documents for Other Projects in the Same Area.

The SEIR was not prepared in a vacuum. It acknowledges that other projects are being planned and will be carried out contemporaneously with Alternative D. The environmental documentation for one of those cumulative projects, the Village at Playa Vista, was published as late as August, 2003. A comparative analysis of the Playa Vista EIR with the SEIR reveals significant discrepancies between the analyses of what are substantially the same relevant areas.

For example, the Playa Vista EIR identified two intersections not mentioned in the SEIR: (1) Centinella at La Brea; and (2) La Brea at Manchester, both apparently within the analysis area for the SEIR. Both intersections were identified as level of service F for both a.m. and p.m. hours, even without the Project. Since both the LAX and Playa Vista projects are geographically proximate, the baseline traffic analysis should use substantially the same assumptions and data, with the same results.

However, even intersections that are analyzed in both the SEIR and the Playa Vista EIR had notably different volume to capacity ratios and levels of service. The SEIR contains a table of the projected traffic in 2008 for Alternative D. The Playa Vista EIR provides similar information for the horizon year 2010. The following Table compares the levels of service for those two projections.

TABLE 1  
COMPARISON  
LEVEL OF SERVICE PROJECTIONS

Intersection	A.M. Peak		P.M. Peak	
	LAX	Playa Vista	LAX	Playa Vista
Aviation - Arbor Vitae	D	B	B	D
La Cienega – Arbor Vitae	E	B	E	C
Aviation – Manchester	F	F	D	E
La Cienega – Manchester	C	E	D	E
Interstate 405 NB – Century	B	F	A	B

The discrepancies in projected levels of service, *i.e.*, the lower levels of service reflected in the Playa Vista EIR, are not explained by any data or analysis contained in the SEIR.

B. The SEIR Contains No Analysis of the Traffic Impacts of the “FlyAway” Terminals.

The SEIR indicates that a series of new “FlyAway” locations are incorporated into Alternative D. Section 4.3.2.9.2 states that “the development of several new FlyAway away remote terminals is proposed to reduce the amount of vehicle traffic associated with travel to and from LAX,” and that development of the “FlyAway” remote terminals would depend largely on the existing use and land use setting of the proposed site. The SEIR does not, however, designate the location of those proposed “FlyAway” remote terminals, nor does it analyze their impacts on traffic, either at LAX, or at their remote sites. Further, the SEIR does not indicate the amount of traffic which would be diverted from LAX by the use of these remote facilities.

Finally, the SEIR does not acknowledge that the use of remote sites does not eliminate the effects of traffic, but simply moves them to another location. As one of the suggested locations for a “FlyAway” terminal is in Inglewood, Inglewood has a cognizable interest in the anticipated traffic impacts of the use of remote sites, and as they are an integral strategy of Alternative D, the designated information is not “too speculative” to provide for public review at this point.

C. The SEIR Fails to Adequately Analyze the Trip Generation Potential of Alternative D, its Construction, or its Projected Ancillary Development At, among Others, LAX Northside.

The SEIR fails to address at least three issues fundamental to the analysis and projection of Alternative D’s trip generation potential.

First, the SEIR does not explain why, with roughly the same passenger and cargo activity, the No Project alternative and Alternative D generate different trip levels. The EIR states that facilities that comprise Alternative D were designed to serve an activity level similar to the scenario adopted by Southern California Association of Governments for the 2001 Regional Transportation Plan. This is an activity level of 78.9 million annual passengers. The No Project alternative assumes 78.7 million annual passengers. Nevertheless, even with the roughly equivalent numbers of passengers, a.m. and p.m. peak hour traffic volumes with Alternative D are projected to decrease, while they are projected to increase under the No Project alternative.

Second, the SEIR fails to explain the way in which a fundamental traffic mitigation measure, the trip cap on the Northside project, can be effectively implemented. The entire off-airport surface traffic assessment turns on the conclusion that there will be less traffic in the future as a result of the Project than there will be if the Project is not approved. The basis for this prediction is the reduction in traffic for “collateral trips”. For example, for Alternative D, p.m.

peak hour passenger and related trips are anticipated to increase by 1,198. However, there is a projected reduction of 7,825 collateral trips, resulting in a net decrease in trips of 6,627.

The source of the collateral trip reduction is, apparently, the change in the land use for the projected Northside and Continental City projects. SEIR, Appendix S-2b provides the basis for the projected reduction in collateral trips.

	A.M. Peak			P.M. Peak		
	No Project	Alt. C	Alt. D	No Project	Alt. C	Alt. D
Northside	7,217	3,922	3,922	7,131	4,423	4,421
Continental City	5,323	0	0	5,348	0	0
Manchester Square	0	212	212	0	233	233
TOTAL	12,540	4,134	4,134	12,479	4,656	4,654

The issue associated with the “collateral trip” reduction is the discretionary actions needed to modify the allowable land uses on the Northside and Continental City properties.

SEIR Section 4.2, Land Use, sets forth a “master plan commitment” that states:

“to the maximum extent feasible, all [Q] conditions from City of Los Angeles Ordinance No. 159.526 that address the LAX Northside project area will be incorporated by LAWA into the Zoning Code Amendment and LAX Master Plan implementing Ordinance for the Westchester south side project. Accepting that certain conditions may be updated, revised, or determined infeasible as a result of changes to the LAX Northside project, the final [Q] conditions for the Westchester south side project will insure that the level of environmental protection afforded by the full set of LAX Northside project [Q] conditions is maintained.”

“CEQA requires agencies to implement feasible mitigation measures or alternatives identified in the EIR.” *Fairview Neighbors, supra*, 70 Cal.App.4th at 243. Further, as set forth above, “it is improper for lead agencies to defer formulation of possible mitigation measures by simply requiring future studies to see if mitigation may be feasible.” *Id.* at 244. Thus, the suggestion that the trip cap on the Northside project, the principal mitigation measure for Alternative D’s off airport surface traffic impacts, may, at some future time, for reasons as yet undisclosed, be deemed infeasible, is unacceptable under CEQA.

In fact, it is readily ascertainable even now that the trip cap may not, in fact, be feasible. First, both the Northside and Continental City projects have approved entitlements, allowing 4.5 million square feet of development in the Northside project alone. Alternative D has no impact

on this entitlement. Thus, the SEIR's projection that the Northside project, while remaining at the same density but, in some undisclosed manner, generating fewer trips than it would have before Alternative D, is unsupported.

Finally, the SEIR appears to double count the traffic benefits of the trip cap. On the one hand, the SEIR relies on the mechanism of "land acquisition" for a reduction in traffic of 2,150 vehicles per hour in the a.m. peak hour, and 1,973 vehicles per hour in the p.m. peak hour. On the other hand, the SEIR contemplates that "space would be available in the LAX Northside development to accommodate compatible businesses displaced by Alternative D [land acquisition]", SEIR, p. 3-49. The SEIR, thus, subtracts traffic from peak hour totals due to land acquisition; relocates the "compatible" businesses to the Northside project; and, ultimately, imposes a trip cap that allegedly accounts for additional traffic reduction, even though the reduction in traffic attributable to the acquisition of certain businesses is apparently mooted by their relocation to the Northside development. By that means, the SEIR takes advantage of two potential mitigation measures: (1) the traffic reduction due to elimination of certain businesses; and (2) the traffic reduction due to the Northside project trip cap, neither of which, the SEIR acknowledges, may ultimately be realized.

D. The SEIR Fails to Adequately Document the Mitigation of Off-Airport Construction Traffic Impacts.

The SEIR is emphatic that "... the project would be managed to ensure that there would not be any notable construction-related traffic generated by the project during those critical [a.m. and p.m. peak] hours." SEIR, p. 4-264. [Emphasis added.] In fact, the SEIR claims that construction traffic would be actually eliminated during the a.m. and p.m. peak hours, and virtually eliminated during the airport peak hour.

The SEIR, however, contains no discussion of the way in which "management" ensures this beneficial hourly redistribution of construction traffic. For example, there is no explanation of the way in which 2,449 employee trips will arrive by 7:00 a.m. but there will be no truck arrivals or departures until 11:00 a.m. Similarly, there is no explanation of the way in which "management" will ensure that there are no truck trips between 4:00 p.m. and 7:00 p.m., while allowing 120 trips per hour between 7:00 p.m. and midnight. Further, there is no indication of the way in which "management" will ensure that construction related truck trips will not divert onto residential surface streets in the vicinity of the project, absent constant monitoring by police or other kinds of security.

In short, the mitigation measures for construction related traffic are conceptual at best. Absent more information concerning the way in which they will be implemented and enforced, proposed mitigation measures, while generous in origin, must be considered largely infeasible.

E. The SEIR Does Not Address the Way in Which Traffic Impacts from Utilization of the GTC Independently, or Cumulatively With Construction Traffic, Will be Mitigated.

The SEIR acknowledges that the GTC is located as close as 1,000 feet across the I-405 freeway from residences in the City of Inglewood, and, further, that the GTC will be the “primary access point for all passenger drop-off and pick-up and vehicle parking”, SEIR, p. ES-19, under the assumptions of Alternative D. The SEIR further acknowledges that vehicles would access the GTC from, among others, eastbound Century Boulevard, and that direct access to Century Boulevard would be available for west bound traffic. SEIR Section 4.3.1.6.1.2, p. 4-226, 227. It is, therefore, reasonable to assume that the greatest preponderance of all LAX-bound traffic (847,394 vehicles in the year 2000, SEIR, Table S4.3.1-2) will terminate as close as 1,000 feet from the homes of Inglewood citizens. Moreover, the SEIR further acknowledges that demand for parking will exceed parking capacity under Alternative D, SEIR, Table S4.3.1-7, p. 4-235. Nevertheless, the SEIR gives short shrift to the potential surface street impacts of travelers looking for parking in lots that are already full, as well as those reluctant to pay the price of parking on City owned lots, or attempting to avoid delays in accessing crowded parking facilities.

As important, the SEIR fails to fully address the construction traffic impacts on proximate surface streets in Inglewood. While it acknowledges that “when the ITC comes on line, there is expected to be a substantial shift in airport traffic patterns”, SEIR, Section 4.3.2.6.2.2, p. 264, and that “the SEIR’s general approach and methodology does not account for construction traffic for the three primary peak hours”, SEIR, Section 4.3.2.6.2.2, p. 264 [emphasis added], the SEIR does not similarly acknowledge the same potential impact resulting from the opening of the GTC. Instead, it states only that “the facility is not expected to be opened until after 2008, at which time most of the final mitigation plan should be in place.” SEIR, Section 4.3.2.6.2.2., p. 264 [emphasis added].

The SEIR misses the point. The only mitigation offered is that “the project would be managed to ensure that there would not be any notable construction related traffic generated by the project during those critical hours.” SEIR, Section 4.3.2.6.2.2., p. 4-264, 265. Therefore, the SEIR does not offer sufficient firm mitigation to compensate for the potential adverse impacts arising from the normal but unanalyzed operation of the GTC, let alone the cumulative surface traffic impacts arising from Project construction, which is anticipated to last a minimum of seven years and perhaps as many as 12-13 years after the 2008 anticipated completion of the GTC.

In summary, the SEIR ignores Alternative D’s surface traffic impacts on Inglewood, arising not only from traffic accessing the GTC, but from parking and construction traffic as well.



VI. THE SEIR'S ATTEMPT TO COMPLY WITH THE FEDERAL ENVIRONMENTAL JUSTICE PROGRAM IS PATENTLY INADEQUATE.

The Environmental Justice Section [Section 4.4.3] of the SEIR falls far short of the mark for compliance with the Federal Environmental Justice Program. Executive Order 12898 and the Department of Transportation's ("DOT") implementing order, DOT Order 5610.2, require that, in the planning and development of any program or activity receiving Federal financial assistance, project proponents must not only identify disproportionately high and adverse environmental and health risk effects of the project on minority and low-income populations, but also ensure that those effects are avoided, minimized or mitigated. [ DOT Order 5610.2, 5.d; 6.b.(2)]

DOT Order 5610.2 further mandates that DOT programs and activities that will have a disproportionately high and adverse effect on populations protected by Title VI be carried out only if, among other things: (1) alternatives that would avoid or reduce the disproportionately high and adverse effects are not practicable, taking into account the social, economic and environmental effects of avoiding or mitigating the adverse effects [DOT Order 5610.2 §7.c]; and (2) alternatives that would have less adverse effects on protected populations (and still satisfy the need for the program) would either (i) have other adverse social, economic, environmental or human health impacts that are more severe, or (ii) involve increased cost of extraordinary magnitude. [Order 5610.2. §7.d.(2)]. "The findings, determinations and/or demonstration made in accordance with [DOT Order 5610.2, Section 7] must be appropriately documented, normally in the environmental impact statement . . ." DOT Order 5610.2 § 7.(f.)

The SEIR acknowledges that the LAX Master Plan Project will have overwhelmingly disproportionate Land Use and Relocation, Airport Noise, Air Quality and Health Risks impacts on minority and low-income communities located east of LAX, specifically including the City of Inglewood. [SEIR, Section 4.3.3]. However the SEIR: (1) fails to address project alternatives that would reduce or avoid those impacts; (2) incorrectly concludes that construction noise impacts will not fall disproportionately on minority and low-income communities east of LAX; (3) fails to propose a viable jobs benefit program to compensate for the Project's adverse environmental impacts including those of construction which will in fact fall disproportionately on minority and low-income communities; and (4) fails to explore mitigation measures which would have fewer disproportionate adverse environmental impacts on minority and/or low-income communities located east of the Airport. In addition, Section 4.4.3.4 states that no Master Plan Commitments for environmental justice are proposed. [SEIR, p. 4-138]

In Section 4.4.3.6, the SEIR states that LAX will work with the FAA and affected communities to develop mitigation programs and if, after those programs receive further input, the FAA concludes that disproportionately high and adverse human health and environmental effects on minority and low-income populations would still occur, "findings under the DOT

Order would have to be made prior to project approval and the Final EIS/EIR would disclose those findings.” [p. 4-335] However, as set forth above, it is “improper for lead agencies to defer formulation of possible mitigation programs by simply requiring future studies to see if mitigation may be feasible.” *Fairview Neighbors, supra*, 70 Cal. App. 4<sup>th</sup> at 244. Moreover, the SEIR does not need additional studies as it already concludes unequivocally that, despite the proposed mitigation, the adverse environmental and human health impacts of the Project, under any alternative, will fall disproportionately on minority and low-income communities east of the Airport. [See, e.g., SEIR, pp. 4-321, 4-323, 4-424, 4,329]

Finally, the SEIR relies in part on a Memorandum of Understanding (“MOU”) between Los Angeles and Inglewood for compliance with the mitigation requirements of the Environmental Justice Program [p. 4-337]. The SEIR does not disclose, however, that the MOU, which addresses measures involving residential noise insulation, air conditioning and studies to improve compliance with over-the-ocean takeoff and night-time over-ocean procedures, is terminable at will, by either City, and will expire by its own terms in February, 2011, at least four, and more likely 10 years before final implementation of the Project. Therefore, MOU, like the remainder of the suggested mitigation measures, does not create a sufficient commitment to Inglewood to comply with the mandates of Executive Order 12898 and DOT Order 5610.2.

A. The SEIR Fails to Adequately Address Avoidance or Minimization of the Project’s Adverse Environmental and Health Risks Impacts Which Would Fall Disproportionally Low Income and Minority Communities Including Inglewood.

The SEIR acknowledges that the Project will have overwhelmingly disproportionate adverse impacts on Inglewood, a predominately minority and low-income community, in the areas of Land Use and Relocation, Airport Noise, Air Quality and Health Risks. The SEIR fails, however, to address avoidance or minimization of those impacts.

Environmental Justice Section 4.4.3.5.1 acknowledges that noise impacts associated with all alternatives will fall disproportionately on minority and low-income communities and that, under Alternative D, by Year 2015, approximately 93 percent of those newly exposed to high noise levels [4,030 residents] will be minority and/or low-income residents [SEIR, p. 4-324], and 85 percent of those newly exposed to single event noise awakening [15,340 residents] would be located within minority and/or low-income communities. [SEIR, p. 4-324].

The effects of aircraft noise on public schools will also fall on schools located predominately within minority and/or low-income communities. Eleven of the 12 public schools that will be newly exposed to the adverse impacts of increased aircraft noise levels or the 94 dB SEL noise contour by 2015 are located within the Inglewood Unified School District. [SEIR, p. 4-324]

Despite recognition of these severely disproportional noise impacts on minority and low-income communities, including Inglewood, and an acknowledgment that proposed mitigation will be inadequate where, after sound insulation, minority and low-income communities will still be faced with adverse effects of high outdoor noise levels [SEIR, p. 4-329], the SEIR does not address avoidance or minimization of those impacts, as required by the Federal Environmental Justice Program.

For example, Environmental Justice Section 4.4.3.5.5.1, Relocation of Residences or Businesses, states that, under Alternative D, “No residential acquisition is proposed, and the number of businesses that would need to [be] acquired and relocated would be reduced to 38.” [emphasis added]. In that terse sentence, the SEIR eliminates from consideration a viable means for avoiding Project impacts on low-income and minority communities. As neither LAX nor its surrounding communities can be conveniently moved, the feasible option is to move those residents who are adversely impacted.

Moreover, the SEIR is internally inconsistent on this issue. Land Use Mitigation Measure MM-LU-1 calls for mitigation of land uses that would be rendered incompatible by the noise impacts of the Project by means of sound insulation or acquisition of residences, schools, hospitals and churches within the highest CNEL measurement zone. [SEIR, p. 5-19] Mitigation Measure MM-RBR-2 calls for coordination with Inglewood to identify residential land uses where acquisition and conversion to compatible uses is contemplated or deemed appropriate. [SEIR, p. 4-339] Acquisition of residences for the purpose of converting residential to more compatible uses, and thus avoiding noise impacts on affected minority communities, necessarily implies relocation of displaced residents of the acquired properties.

Further, Mitigation Measure RBR-1, which applies to all alternatives, proposes preparation of a Residential and Business Relocation Plan and expansion the current relocation program. [SEIR, p. 5-6] The SEIR’s relocation objectives include informing Project area residential occupants [in Spanish and other languages] about matters such as relocation assistance and benefits, replacement housing and housing referrals, notices to vacate, displaced persons assistance, applications and claims for relocation benefits, evictions and property management, and grievance procedures for relocatees. [SEIR, pp. 5-6 - 5-7] In direct contradiction to RBR-1, however, Section 4.4.3.5.5.1 disclaims any residential relocation plans, and fails to mention, much less address, avoidance or minimization of relocation impacts on minority and low-income residents, as required by Federal Environmental Justice statutes.

Finally, Section 4.4.3.5.2 states that the environmental impacts of air quality under Alternatives A, B and C have not materially changed, but, that under Alternative D, airport activity would be focused in areas at the east side of the airport, resulting in greater emissions east of the airport [SEIR, p. 4-329]. Most of those effects would remain adverse following implementation of proposed mitigation measures. Specifically: minority and low-income

populations may be more severely affected because they may be more susceptible to asthma and other chronic respiratory illnesses trigger by the high O<sub>3</sub> levels in the area; children within minority communities may be particularly susceptible to health effects of PM<sub>10</sub>, ozone and NO<sub>2</sub>, and thus may be more severely affected than other communities exposed to equivalent level of those pollutants; and children living in poverty who lack access to adequate health care may be especially at risk. [SEIR, p. 4-330]

Despite these acknowledged severe project impacts, and perhaps because of the further claim of the purported utility of proposed aggregate air quality mitigation measures, the SEIR fails to explore further minimization of specific effects, by feasible means such as committing to air condition homes and schools affected, see *Los Angeles Unified School District, supra*, 58 Cal.App.4th at 1029-30, or relocating impacted populations.

B. The SEIR's Proposal to Provide Job Benefits to Minority And/or Low-Income Communities Is Inadequate Where it Is Contingent on FAA Approval of the Use of Airport Revenues and Ignores the Projected Decrease in LAX Related Jobs under Alternative D.

DOT Order 5610.2 § 6.b.(2) requires that measures be proposed to provide offsetting benefits and opportunities to enhance communities, neighborhoods and individuals affected by DOT programs. The "Benefits" section [unnumbered] of the SEIR states that jobs are one of the economic benefits directly and indirectly attributable to LAX [p.4-339], and that LAX is working to create job recruitment, job training and job placement programs that will enable local youths and adults to more easily access jobs at and around LAX in the future. [SEIR, p. 4-339 - 4-340] However, the jobs related proposal is a house of cards where: (1) adoption and implementation of job recruitment, training and placement programs are subject to FAA approval of the use of airport revenue to fund such activities; and (2) even if use of airport revenues is approved for recruitment and job training, job placement under Alternative D will be difficult, where the SEIR acknowledges that Alternative D would have no meaningful contribution to job growth. [SEIR, p. 4-351]

The SEIR proposes to expand existing programs and create new programs at its Jobs Outreach Center which would be primarily focused on minority and/or low-income residents located east of LAX, including Inglewood. [SEIR, p. 4-340] Inglewood, as acknowledged in the SEIR is already disadvantaged with respect to employment at LAX, where only 2,304 (3.9%) of the 59,000 badged employees at LAX reside in Inglewood. [SEIR p. 4-339, fn. 100]. The SEIR's job creation proposal contains some giant loopholes. For example, funding for the proposed jobs related programs is totally contingent upon FAA approval of diversion of airport revenues for that purpose. The SEIR contains no evidence that LAX has made application for FAA approval, provides no information to the public on the likelihood that FAA approval will be granted, and offers no alternative plan for funding jobs programs if the FAA does not approve

the use of airport revenues for jobs programs. In other words, if the FAA does not approve the use of airport revenues, the entire jobs program collapses.

Even if funds are approved by the FAA, and local minority and low-income residents are trained in aviation related skills, job placement under Alternative D will be difficult, where Alternative D would result in a net decrease of approximately 23,000 jobs within a ten-mile radius of LAX by 2015 [SEIR, p. 4-339]. Alternative D is projected to support roughly the same level of employment as the No Action/No Project Alternative in 2015, and would have no meaningful contribution to job growth [SEIR, p. 4-351].

C. The SEIR's Conclusion That Construction Impacts Would Not Fall on Minority Communities Is Unsupported by Any Analysis of the Project's Cumulative Noise Effects.

The SEIR's conclusion that construction noise effects would not fall on minority and/or low-income communities [SEIR, p. 4-333] is unsupported by any analysis of the cumulative effects of the Projects's ground traffic, aircraft and construction noise on communities located east of LAX. In reaching that conclusion, the SEIR makes the erroneous assumption, as set forth in detail above, that road traffic and aircraft noise will drown out construction noise, and that construction noise impacts on Inglewood residents will therefore be less than significant. However, as also set forth in more detail above, the SEIR's reliance on this "ratio theory" to discount the effects of construction noise improperly masks the palpable adverse impacts of Project construction on communities to the east of the airport, particularly where Alternative D proposes more construction on the eastern portion of the airport, which, in turn, results in hitherto unanalyzed construction noise, air quality and traffic impacts.

D. No Effective Mitigation is Provided to Ameliorate the Project's Adverse Impacts.

Despite the SEIR's acknowledgment that the project will have a grossly disproportionate impact on minority communities, it contains few measures, and no certain, binding commitments to ameliorate impacts of construction or Project implementation on affected communities including Inglewood. Such measures should include, but not be limited to:

1. OPERATIONAL MITIGATION.

In addition to all other operational mitigation specified in the DEIR and SEIR, the Part 161 Application to the FAA should be expanded to provide that no operations shall take place over Inglewood between the hours of 11:00 p.m. and 6:00 a.m.; and that where "over-water" operations are not feasible for reasons of wind, weather or other safety related conditions during those hours, operations will either be held in place, in the case of departures, or sent to other airports in the case of arrivals.

2. NOISE COMPATIBILITY PLANNING AND IMPLEMENTATION.

(a) COMPLETION AND EXPANSION OF RESIDENTIAL SOUND INSULATION PROGRAM - A firm, binding commitment to: (1) provide funding to complete the existing residential sound insulation program provided in the ANMP and MOU between Inglewood and Los Angeles; (2) expand that program to include residences in the 60 CNEL contour and the 94 dB SEL “awakening” contour as set forth in the SEIR; and (3) maintain 45 dB interior noise levels over time in all properties subject to the residential sound insulation program, including, but not limited to, replacement of equipment and improvements that malfunction due to age or environmental factors, or become obsolete due to increases in noise levels applicable to the properties.

(b) RELOCATION OF SCHOOLS - A firm, binding commitment, not contingent on the results of future studies, to relocate schools currently and newly impacted by noise resulting from the implementation of the project to sites specified by Inglewood;

(c) IMMEDIATE SOUND ATTENUATION OF ALL SCHOOLS, CHURCHES AND OTHER PUBLIC PLACES THAT CANNOT BE RELOCATED - A firm, binding commitment to sound attenuate, not contingent on further studies, all of the schools identified as impacted by the project in any way that cannot be relocated, as well as noise impacted churches and other public gathering places including medical and rehabilitation facilities;

(d) LOCATION OF A FLY AWAY FACILITY - A firm, binding commitment to locate a fly away facility at the proposed location of the corner of Prairie Avenue and Century Boulevard in Inglewood;

(e) ADDITIONAL ROAD AND STREET IMPROVEMENTS - A firm, binding commitment to improve streets used heavily for access to LAX and the new remote fly away facilities including, but not limited to, Century Boulevard, Manchester Boulevard, Arbor Vitae Street and Florence Avenue;

(f) GENERAL PLAN - Binding commitment to provide funding for the development of a General Plan for the City of Inglewood to supercede its currently outdated land use element, and enable Inglewood to plan compatibly with airport operations;

(i) CENTURY BOULEVARD SPECIFIC PLAN - Development of a Specific Plan for the half mile length of Century Boulevard between La Cienega Boulevard and Inglewood Avenue in order to exploit its unique location to create a focused airport-patron environment predominantly composed of hotel and restaurants, with supportive retail and office uses, thus enhancing the primary portal into LAX from the freeway;

(ii) FUNDING FOR CENTURY BOULEVARD CORRIDOR IMPLEMENTATION PROJECT - A firm, binding commitment to provide funding to complete the major study and improvement design for the Century Boulevard corridor, particularly between La Cienega and Prairie Avenue, including conversion of currently noise impacted single and multi-family residential buildings to commercial uses;

(iii) BUSINESS PARKS - A firm, binding commitment to provide planning and development funds for business and industrial parks, consistent with the development study currently underway by HNTB and the recently completed economic impact analysis by Kosmont Partners, along Century Boulevard between I-405 and Prairie Avenue, with specific emphasis on the area closest to the new GTC;

(iv) PUBLIC PARKS, GOLF COURSE, NATURE CENTER - A firm, binding commitment to provide funding for conversion of incompatible residential and other uses, other than those redeveloped for commercial purposes to public parks, a municipal golf course, and/or nature center;

(v) BRANDING, SIGNAGE AND WAY FINDING - A firm, binding commitment to provide adequate signage for those accessing LAX and the amenities of the City of Inglewood including Hollywood Park and Daniel Freeman and Centinella Hospitals.

(vi) LIBRARIES - A firm, binding commitment to fund the replacement of libraries to be impacted by the project, and the expansion of Inglewood's library system to accommodate increased student populations;

(vii) YMCA - A firm, binding commitment to fund the replacement of the existing YMCA at 102<sup>nd</sup> Street and Prairie Avenue;

(viii) HEAD START CHILD DEVELOPMENT FACILITIES - A firm, binding commitment to fund the development of new childcare and education centers in compliance with the requirements of the new General Plan;

(ix) SENIOR CITIZEN HOUSING - a firm, binding commitment to fund new senior housing and assisted living communities consistent with the requirements of the new General Plan.

(g) PROVISION OF FUNDS FOR ACQUISITION AND RELOCATION - A firm, binding commitment to provide funding for the acquisition of all properties falling within any of the criteria of significant noise impact in the SEIR and of funding for relocation housing and expenses;

(h) JOB TRAINING - A firm, binding commitment to begin immediate training of Inglewood residents in: (a) construction related skills necessary to participate in the construction phase of the project; and (b) skills necessary to obtain long term employment at LAX, including, but not limited to, the creation of a new vocational school dedicated to preparing students for careers in aviation industries and emerging hi-tech industries of aviation maintenance, as required in concept by the MOU;

(i) FUNDS FOR JOB TRAINING - A firm, binding commitment to provide local funding for jobs training programs, either to augment Federal funds provided for training, or to fund the training program in its entirety if the FAA does not authorize the use of airport revenue for training purposes;

(j) MODIFICATION OF THE MOU - A firm, binding commitment to extend the MOU at least through the year 2015, concurrent with the implementation of the LAX Master Plan, including, but not limited to, the abrogation of the requirement to dedicate aviation easements; acknowledgment that easements as yet unrecorded will not be re-recorded at the expiration of the MOU, and the reconveyance of all easements previously recorded.

3. ADDITIONAL RESEARCH.

In addition to all other studies specified in the DEIR and SEIR, a study be conducted of the incidence of air pollutants, resulting from aircraft operations, traffic and other sources related to LAX, and their health effects, both generally and on residences of the City of Inglewood specifically.

In summary, while Inglewood appreciates the efforts that have been made by Los Angeles to cope with the difficult problems of limitation of airport operations and environmental compatibility with surrounding communities, more clearly needs to be done to remedy the problems that fall squarely on the shoulders of Inglewood and particularly its low income and minority residents. Inglewood looks forward to continuing its ongoing cooperation with Los Angeles in fostering both economic growth and improved quality of life for all citizens of Los Angeles and its neighboring communities.

Inglewood thanks Los Angeles for this opportunity to comment.

Sincerely,



## ATTACHMENT 1

### DRAFT ENVIRONMENTAL IMPACT STATEMENT/ ENVIRONMENTAL IMPACT REPORT, LOS ANGELES INTERNATIONAL AIRPORT PROPOSED MASTER PLAN IMPROVEMENTS - COMMENTS RE: ALTERNATIVES A THROUGH C

The following constitutes comments, pursuant to the requirements of the California Environmental Quality Act, Public Resources Code § 21000, et seq., (“CEQA”) and the National Environmental Policy Act, 42 U.S.C. § 4321, et seq., (“NEPA”), concerning the Draft Environmental Impact Statement/Environmental Impact Report (“Draft EIS/EIR”) for the Los Angeles International Airport (“Airport”) Proposed Master Plan Improvements (“Project”), prepared jointly by the Federal Aviation Administration (“FAA”) and the City of Los Angeles (“Los Angeles”),<sup>1</sup> and Alternatives A through C presented therein.

The issues raised by these comments fall into seven general categories, although they are not limited only to those categories:

- (I) the baseline used in the Draft EIS/EIR, against which the various environmental impacts of the Project are compared, is not properly designated;
- (II) the discussion of the Project’s surface traffic impacts is misleading;
- (III) the noise impacts of the Project are inadequately addressed;
- (IV) the potential air quality impacts of the Project are not fully disclosed;
- (V) the Draft EIS/EIR does not explore all reasonable alternatives, and, thus, paves the way for its ultimate conclusion that expansion of the Airport’s airside and groundside facilities are the sole way to meet future demand;
- (VI) the LAX Master Plan and Draft EIS/EIR fail to satisfy applicable law because they do not conform to other relevant plans;
- (VII) the Draft EIS/EIR fails to adequately specify mitigation measures or methods to enforce them;

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<sup>1</sup> The FAA and Los Angeles shall, for the remainder of these comments, be referred to collectively as “Project Proponents”.

(VIII) the recently articulated project goal of increasing safety obscures the Project's clear capacity-enhancing purpose. As a result of these defects, the Draft EIS/EIR cannot meet the high standards of disclosure that are the gravamen of both CEQA and NEPA;

(IX) the Draft EIS/EIR does not meet environmental justice requirements; and

(X) the Draft EIS/EIR fails to adequately account for human health risks.

**I. THE DRAFT EIS/EIR DOES NOT PROPERLY DESIGNATE THE BASELINE FOR ANALYSIS.**<sup>2</sup>

The specification of a baseline for comparison with Project impacts is a critical component of analysis under CEQA, because without an accurate specification of the baseline, "analysis of impacts, mitigation measures and project alternatives becomes impossible." County of Amador v. El Dorado County Water Agency, 76 Cal.App.4th 931, 953 (1999). A central concept of CEQA is that "a baseline figure must represent an environmental condition existing on the property prior to the project." Save Our Peninsula Committee, et al. v. Monterey County Board of Supervisors, et al., 87 Cal.App.4th 99, 124 (2001). The regulations implementing CEQA, 14 Cal. Code Regs. § 15000, et seq., ("CEQA Guidelines") are specific as to the definition of "prior to the project":

"An environmental impact report must include a description of the physical environmental conditions in the vicinity of the project, as they exist at the time the Notice of Preparation is published, or, if no Notice of Preparation is published, at the time the environmental analysis is commenced . . . This environmental setting will normally constitute the baseline physical conditions by which a lead agency determines whether an impact is significant." CEQA Guidelines § 15125(a).

While the courts have taken the position that the "date for establishing a baseline cannot be a rigid one", Save Our Peninsula Committee, supra, 87 Cal.App.4th at 125, they have also held unequivocally that "an EIR must focus on impacts to the existing environment, not hypothetical situations", County of Amador, supra, 76 Cal.App.4th at 955. The baseline for analysis in the Draft EIS/EIR does not meet these tests.

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<sup>2</sup> Later sections II, III and IV more fully discuss the pitfalls arising from the use of the three separate and distinct baseline assumptions used in that analysis; Environmental Baseline, Adjusted Environmental Baseline, No-Project/No-Action.

A. The Draft EIS/EIR's Base Year Does Not Reflect the Physical Conditions on the Project at the Time of the Publication of its Notice of Preparation.

The Airport Master Plan, November, 2000, Technical Analysis ("Master Plan") is the basis of the analysis contained in the Draft EIS/EIR (Master Plan, Preface, page i). The analyses contained in Master Plan, Chapter II, Existing Conditions Working Paper, 4/19/96, use data from the base year 1994 (see, e.g., § 2.3.1, page II-2.1, re: Annual Weather Conditions; Figure II-2.17, page II-2.53, re: Design Day Hourly Distribution of Operations and Tables following). The Notice of Preparation, however, was published in July, 1997 (Draft EIS/EIR, page ES-2), almost three years after the conditions reflected in the original Master Plan data and analysis. Courts have consistently taken the position that a baseline should not "be set a number of years earlier than the commencement of the current project". Save Our Peninsula Committee, supra, 87 Cal.App.4th at 127.

Moreover, the Master Plan and Draft EIS/EIR contain multiple inconsistent base years such that it is impossible for the public to ascertain which base year is used for a given purpose. On the one hand, the Draft EIS/EIR (page ES-2) states that the environmental analysis normally describes existing conditions as of the July, 1997 date on which the Notice of Preparation was published (even though none of the data in the Master Plan upon which the Draft EIS/EIR is based reflects a 1997 origin). On the other hand, the Draft EIS/EIR states that, where a full year's worth of data is needed, data from 1996 is used (see, e.g., Draft EIS/EIR Technical Report on Surface Traffic), and sometimes earlier years [unspecified], and sometimes even data from the later years 1999 and 2000 (even though these latter are more than two years after the publication of the Notice of Preparation). Additionally, the Master Plan is unclear as to whether 1994 or 1995 data is used. Finally, different base years are used for different components of the analysis, e.g., 1996 for surface traffic and noise, 2000 for water resources.

Such selective shifting of baselines has substantive consequences. For example, the use of a 1994 (or even 1996) baseline in analysis of aircraft noise impacts artificially elevates the baseline for analysis by incorporating noise from the larger numbers of Stage 2 aircraft in the fleet in 1994/96. These aircraft were totally phased out of the United States fleet by the year 2000. Further, the use of a 1994 (or 1996) baseline year in the air quality analysis potentially overstates the baseline level of criteria pollutants in the L.A. region which has since come into attainment for all criteria pollutants except Ozone and Particulate Matter.<sup>3</sup> In short, the

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<sup>3</sup> The Draft EIS/EIR also states that its use of earlier years results in a more "conservative" analysis, because there were fewer passengers and operations in earlier years, and, thus, less noise and fewer emissions to compare against those generated by the Project. This claim is inaccurate at least with respect to noise and air quality analyses as set forth below. In any event, it does not account for the opposite effect of using later years 1999/2000 as the baseline, which would, by the logic used in the Draft EIS/EIR, artificially elevate the baseline and, consequently minimize the environmental impacts of the Project. As neither the Master Plan nor Draft EIS/EIR are specific as to the distribution of various baseline years throughout the

nonspecificity of both the Master Plan and Draft EIS/EIR with respect to the base year for analysis renders the results of their analyses questionable.

B. The Master Plan and Draft EIS/EIR Baseline Analyses Are Based On Incomplete and/or Inaccurate Data.

The Master Plan defines the capacity of the Airport's existing airside facilities as "the number of aircraft operations, arrivals and departures, that the Airport can accommodate with a reasonable amount of aircraft delay." (Master Plan, § 2, page II-2.1) The correct determination of existing airside capacity is critical to identification of the Airport's potential to accommodate future air traffic demand and plan future airport's development. (Master Plan, Chapter 2, page II-2.1) Various independent variables are used in the modeling of existing airport capacity, including, but not limited to: (1) runway operating configurations; (2) noise abatement procedures; (3) airspace operating assumptions; and (4) airfield operating assumptions. (Master Plan, § 2.3, page II-2.21) Delay is also apparently a contributing variable. The relationships within the model are such that, if the definition of a given variable, or the value assigned to it, are questionable, the capacity determination resulting from the model is prejudiced.

Here, even if, for argument's sake, the Draft EIS/EIR had specifically and accurately designated a base year, critical data used in the Master Plan baseline demand/capacity/delay analysis is incomplete or in some cases inaccurate.

As a threshold matter, the Master Plan demand/capacity/delay analysis is predicated on Aircraft Communications, Addressing and Reporting System ("ACARS"), and Official Airline Guide ("OAG") data sources. These two data sources exaggerate, or, inaccurately characterize, true (airport capacity related) delay. The Master Plan defines delay as "the difference between the actual time it takes an aircraft to perform an arrival or departure and the normal time it would take to perform the same operation with no interference from other aircraft." (Master Plan, § 2.1, page II-2.2) ACARS data is generated by the airlines, and is based on activities such as push back, parking at the gate, or opening or closing cabin doors. ACARS data includes information about on-time performance, based on the arrival and departure times developed by each airline for each segment of flight. Since the data is airline-generated, airline definitions of delay are automatically built into the report.<sup>4</sup>

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analysis, it is impossible to ascertain the degree of distortion that may have occurred through the use of these alternate baselines.

<sup>4</sup> When an aircraft pushes back from the gate or closes the cabin door, the aircraft could be late for a variety of reasons. Many delays are due to factors that are airline-controllable such as late boarding of passengers, customer service delays, maintenance delays, late arriving equipment, catering, fueling, baggage and the unavailability of crew members, to name but a few. Other types of delay would be attributable to airport, runway or taxiway design, airport acceptance rates, airport construction, noise abatement regulations, air traffic control restrictions

Further, the OAG is published for the express purpose of identifying the arrival and departure times of various airlines. When the airlines set up their schedules, they factor in the average delay for each leg of flight between city pairs. Thus, the OAG also builds delay into the departure and arrival times based on each airline's historical data and operating experience for each flight segment.

In summary, ACARS data is not original source data but is the product of third party intervention. It is manipulated by various airline functionaries before a final report is released. Similarly, OAG data is manipulated to include delay not after, but before the fact. Therefore, because both sources of data already include a delay factor, their use in the Master Plan's modeling, as set forth below, is likely to cause a double counting of delay.<sup>5</sup>

Instead of ACARS or OAG data, the Master Plan should have relied on radar data. Radar data is a memorialization of the movement of arriving aircraft from a specified distance outside the terminal control area until touchdown and, conversely, for departing aircraft, from the aircraft's lift-off from the runway to the same distance outside the airport's control area. Every operation is tracked in real time without the intervention of third party interpretation, manipulation, or extraneous factors, unrelated to the operational capacity of airport infrastructure.

The effects of this confounding of substantive with non-substantive delay factors are reflected in the Master Plan's modeling of demand/capacity/delay. The FAA's Simulation Model ("SIMMOD"), Version 2.1, was apparently used in the Master Plan's demand/capacity/delay analysis. SIMMOD simulates the movement of arriving and departing aircraft from their entry/exit into the Los Angeles Terminal Air Traffic Airspace through approach and landing phase, or taxi and takeoff, to their exit from the terminal air traffic airspace. Proper calibration of SIMMOD is essential since the resulting statistics depend upon the data used to develop the baseline assumptions and operating instructions for the model. In this case, ACARS and OAG data were used to calibrate SIMMOD. Because of the potential double counting inherent in these data sources, and the consequent exaggeration of delay in the model, the principal conclusion that is drawn from SIMMOD is that the only way to remedy delay is to build additional airport infrastructure. The most obvious flaw of such an analysis is that it eliminates, at the outset, opportunities to gain efficiency through improvements in operating practices and minor modifications to the air traffic system. Thus, what seems like a relatively minor data collection/designation problem pervades the demand/capacity/delay

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and weather. These items are also introduced and incorporated into the ACARS report as a delay factor.

<sup>5</sup> In addition, the Master Plan analysis relies on numerous sources other than ACARS or OAG data including personal observations, a small sampling of users and an unique determination of aircraft speeds and routes, none of which is suitable, let alone optimal, for developing baseline analyses or formulating assumptions. (See, e.g., Master Plan, § 2.1.3, pages II-2.5 - II-2.6)

modeling upon which the Draft EIS/EIR's environmental analysis is based, and subtly biases the results.

C. The Draft EIS/EIR is Based on Implausible Modeling Assumptions.

The accuracy of SIMMOD's results depends on an accurate "description" of the "airport's operating environment". (Master Plan, § 2.1, page II-2.2) Both the Master Plan and Draft EIS/EIR acknowledge that the "description" is made up not merely of data purporting to represent actual current conditions, but also assumptions arising from that data (see, e.g., Master Plan, § 2, page II-2.1). Therefore, to the extent data and assumptions are incorrect or incomplete, so too will be the results of the model. In addition to the data problems specified above, SIMMOD, as used in the Master Plan, incorporates implausible, or biased, assumptions which, in turn, call into question the integrity of its output.

1. Assumptions Concerning Aircraft Delay Are Unexplained and Unsupported.

The Master Plan's (and Draft EIS/EIR's) definition and description of the delays at the existing (pre-Project) Airport are based on consultants' opinions and not on factual information. First, while the Master Plan acknowledges that "a standard definition of acceptable delay is not used in the industry" (Master Plan, § 2.1.3, page II-2.5), it then concludes that "delay levels of six to ten minutes indicate the need for additional facilities"; that "as average aircraft delay increases above six minutes, passengers tend to perceive service reliability problems"; "as delay approaches ten minutes per operation, further increases in demand are limited", and, "flight cancellations were assumed when delays exceed 20 minutes per average annual aircraft operation." (Master Plan, § 2.1.3, pages II-2.5 - II-2.6) These assumptions are apparently based on information derived from prior studies by the Master Plan consultants at airports other than Los Angeles, in years as early as 1988. In other words, the delay standards relied upon in the Master Plan are based on outdated data concerning potentially irrelevant subject airports. All of these have unique characteristics that may have influenced creation or perception of delay, and none of them are discussed in the Master Plan or Draft EIS/EIR.

Further, these unsupported assumptions do not reflect an understanding of the diverse ways in which delay is determined by the airlines, Air Traffic Control and the Department of Transportation. First, a typical airline will develop performance criteria for each phase of flight based on company goals and performance percentages, including arrival and departure delay. Airlines use "zero variance" as a standard for "on time" performance (i.e., zero difference between arrival and/or departure times and published schedules). The percentage goal for each activity will be based on the level of performance the airline hopes to, or, in some cases, must attain in order to remain competitive. Some airlines track on time performance plus five minutes and most will track on time performance plus 14 minutes.

FAA Air Traffic Control, on the other hand, computes delay based on actual delay time en route. An arriving aircraft is considered delayed only if the aircraft is held en route to the destination for 15 minutes or more at any given moment during the flight. It is possible that these aircraft could be held at more than one interval during a flight. However, if each holding period does not exceed the 15 minute threshold, no delay is recorded, even though the total delay might well be in excess of 15 minutes. Further, inbound delay is kept separate from outbound delay. A departing aircraft is not counted as delayed until: (1) the average taxi time for the airport; (2) the time from the gate to the runway; and (3) 15 minutes have cumulatively elapsed. Air Traffic Control delays do not consider airline schedules or internally generated delays in their reporting system. The majority of Air Traffic Control delays are as a result of weather and not system capacity. Finally, the Department of Transportation grades airline performance on the time of arrival at the destination airport within 14 minutes of the scheduled arrival time. The Master Plan utilizes none of those benchmarks. Thus, the Master Plan fails to adequately explain the basis for its demand/capacity/delay analysis.

2. The Master Plan's Assumptions Concerning Turboprop Operations are Manifestly Inaccurate.

Referring to its analysis of existing noise abatement procedures as they pertain to the creation or maintenance of demand/capacity/delay, the Master Plan states that "based on actual information obtained by the Los Angeles Noise Management Bureau, turboprop departures were permitted to turn slightly earlier than jet departures at the Airport VOR, which is located between runways 7L and 7R, west of Pershing Drive" (Master Plan, § 2.3.3, page II-2.31). In addition, Figures II-2.11 and II-2.12 indicate that, when the Airport is operating on a west flow, turboprop aircraft turn at the VOR.

These representations are inaccurate and lead to incorrect assumptions about flight paths. In fact, if such a turn were permitted, it would occur prior to the shoreline, contrary to current noise abatement procedures. Turning the turboprops early allows faster aircraft to depart behind the turboprops at a more accelerated rate than is currently allowed, thus allowing more aircraft to depart in a given interval. The results of this inaccurate assumption are that: (1) the baseline departure capacity is artificially elevated to a level higher than would be realized had actual air traffic data been used and the noise abatement procedures modeled as they are actually used; and (2) turboprops, as depicted in the Master Plan and Draft EIS/EIR, are directed over noise sensitive areas not previously overflowed, and, as a result, elevate the baseline noise levels, thereby concomitantly reducing the apparent noise impacts of the Project.

3. The Master Plan's Flight Schedule Assumptions Are Outdated.

The Master Plan reports the results of a SIMMOD analysis conducted in 1994, using 1994 data and 1994 assumptions. In addition to this obsolete data, the ACARS data upon which the SIMMOD analysis is based includes less than 51% of commercial operations and more than 46% of the total operations in the design day flight schedule. As: (1) operational configurations

long pre-date the commencement of the environmental process; (2) current schedules were not used (although available), the assumptions concerning a typical day's traffic are substantially unsupported; and (3) not all of the aircraft operators were considered, the assumptions concerning a typical day's traffic are substantially unsupported.

4. The Master Plan's Fleet Mix Assumptions are Inaccurate.

The Master Plan relies on a fleet mix distribution derived from "August 11, 1994 OAG, NMB Do Daily Operations Records and LADOA 1994 Monthly Air Traffic Volumes" (Master Plan, Table II-2.16, page II-2.58). This 1994 fleet mix distribution is outdated and, thus, inadequate for use in SIMMOD. Specifically, it includes a large number of Stage 2 aircraft which are no longer in operation at the Airport. Not only are Stage 2 aircraft noisier, but they have different emissions characteristics from the newer high bypass ratio, Stage 3 aircraft. If a more recent base year had been selected, the proportion of Stage 2 aircraft would have been smaller, and the noise baseline lower, and, thus, more accurate.

5. The Master Plan's Assumptions Concerning Aircraft Speed Are Inaccurate.

The Master Plan's assumptions concerning aircraft speeds were apparently inflated to fit the underlying assumption of unconstrained aircraft flows. The Master Plan model calls for all aircraft to operate at the same constant air speed before proceeding to the Airport and landing. The model further assumes that all aircraft exit the runway at the same point and within the same amount of time in order to reach the modeled flow rate. In actual conditions, the speeds of the aircraft vary, with high airspeed greatly reduced as the aircraft approaches the airport. Nor would all aircraft exit the runway at the same location. In short, this assumption of high constant speed will have an as yet unascertained impact on the model's results but would tend to overstate capacity of the existing facility, and, thus, the baseline for comparison with the Project's improvements.

D. The Master Plan's Model Omits Critical Variables.

Another crucial issue revolves around variables the Master Plan fails to include in its model. Specifically these include: (1) the capacity of the airspace beyond the Airport Terminal Control Area ("TRACON"); and (2) gate capacity for future scenarios.

1. The Master Plan Should Have Considered Airspace Capacity Beyond The Airport's Terminal Area Airspace.

According to the Master Plan, airspace considerations were limited to entry (and exit) from the Airport's TRACON airspace. (Master Plan, § 2.1.1, page II-2.3) The failure to consider airspace capacity beyond that point is a material omission from the analysis. This is because the majority of aircraft delays are absorbed in the en route environment before an aircraft



arrives in TRACON airspace. By modeling only the terminal area, the results of the model are skewed for both arriving and departing aircraft. For departing aircraft, if the model does not consider the inherent constraints of the en route air traffic system, including differences in aircraft performance and the impacts of other air traffic transiting the area for other airports, the departure flow pictured in the model will remain unconstrained and aircraft can take off at a constant, predetermined rate. When reaching the boundary, the aircraft are dropped from the scenario, and the model does not further consider constraints of the en route system which naturally impact the TRACON airspace. Unfortunately, this unconstrained flow scenario is not normally possible in today's complex air traffic control system.

Similar problems exist in modeling arrivals without consideration of airspace outside the TRACON. Inbound aircraft are assumed, in the Master Plan model, to be at the entry point of terminal airspace when required by the model. Aircraft proceed inbound at a set speed, reduce speed at a predetermined point, land and proceed unimpeded to their gate. This is not a reasonable representation of a typical aircraft arrival. In fact, there is almost no likelihood that aircraft can be delivered to the terminal inbound fix at a rate consistent with the model's assumptions.

Instead, the Master Plan's arrival model appears to have been developed to insure that an arriving aircraft would be at the inbound fix at the specific time required in order to maximize the arrival rate for the airport. Although Air Traffic Control consistently tries to keep the aircraft sequenced as closely as possible "in-trail", it is not possible to consistently space aircraft a set distance apart for extended periods of time. The availability of aircraft to fit into the sequence, aircraft speeds, the mix of large and small aircraft, a lack of demand, aircraft deviations due to weather, in-trail restrictions through an en route sector or in-trail restrictions required for an airport approach control facility and other variables cause the in-trail spacing of arrival aircraft to be inconsistent. As a result of these and many other factors, there is unused capacity in each of these arrival sequences. In summary, the Master Plan's failure to adequately consider constraining factors outside the TRACON airspace calls into question the validity of the model's result.

## 2. The Master Plan Should Have Modeled Gate Capacity.

The Master Plan did not include in its modeling aircraft gate operations for future activity levels, allegedly because of the inability of the existing gate facilities to accommodate the higher activity levels.<sup>6</sup> (Master Plan, § 2.5.3, page II-2.104) The Master Plan disclaims the importance of this omission ["The inability to model gate operations in detail does not impact the results of

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<sup>6</sup> Performance measures contained in the Master Plan, § 2.5.1, include "outbound ground delay" which, in turn, appear to include gate related variables such as "gate push-back delay". This performance measure was apparently used in the modeling of existing gate operations but not future ones. (Master Plan, § 2.5.1, page II-2.97)

the airside capacity analysis since at higher activity levels the runway system tends to be the primary constraint . . .” Master Plan, § 2.5.3, page II-2.110]. The Master Plan is in error.

If an aircraft cannot get to the gate unimpeded, the resulting delay must be factored into the analysis. In the Master Plan, taxi patterns are consistent and aircraft are dropped from the model when they reach the gate area. The model does not capture any delays in the gate area or any delays that might occur in reaching the gate due to congestion on the ramp. The same is true for departing aircraft. If a departing aircraft cannot leave the gate due to inbound traffic or other traffic in the gate area, the departure demand at the airport may not be as regular as is assumed in the Master Plan’s model.

The importance of this omission is that it precludes development of a clear picture of the delay reduction, and consequent capacity enhancing, attributes of the Project. Without estimation of the potential groundside/terminal structure constraints on operations (capacity), the actual delay reducing, and capacity enhancing, benefits of the Project as a whole cannot be accurately ascertained.

### 3. The Master Plan Should Have Considered Currently Implemented Air Traffic Procedures.

While the Master Plan acknowledges the existence of the current Dual Civet Arrival procedure, it fails to analyze its delay reducing, or consequent capacity enhancing efficiencies. The procedure is mentioned, then drops off the “radar” screen. The Dual Civet Arrivals, however, have so greatly reduced arrival delay at the Airport that no national delay program for the airport has been established since the procedure’s implementation. Ignoring the impacts of Dual Civet Arrivals results in an exaggeration of existing delay and a consequent exaggeration of the Project’s delay reducing, and capacity enhancing benefits.

#### E. Demand, as Defined in the Master Plan, is an Identity with Capacity.

Inaccurate data and assumptions are not alone in influencing the outcome of a modeling effort. Inadequate specification of a variable may also lead to an unrepresentative result. In this case, the independent variable, demand, as defined, is not independent but is virtually synonymous with, or surrogate for, the dependent variable, capacity. Thus, the demand variable has an interactive relationship with the dependent variable which influences the model’s outcome in significant ways.

For example, the Master Plan defines aircraft demand as “a 24-hour flight schedule representative of design day activity.” (Master Plan, § 2.1.2, page II-2.3) The “24-hour flight schedule” definition is almost identical to the definition of “capacity”, “the number of aircraft operations, arrivals and departures, that the Airport can accommodate with a reasonable amount of aircraft delay.” (Master Plan, § 2, page II-2.1) The two variables, therefore, vary together, i.e., as “capacity” increases, “demand” will also increase, rendering demand useless as a

predictor of capacity. The precise degree in which the interaction of the independent and dependent variables in the model affect the analysis cannot be ascertained at this point without re-running SIMMOD. Suffice it to say that a new surrogate for demand, derived, for example, from airline market surveys, or annual enplanements, is necessary to insure the integrity of the model's results.

## **II. THE DRAFT EIS/EIR DOES NOT FULLY ANALYZE THE PROJECT'S OFF-AIRPORT SURFACE TRAFFIC IMPACTS.**

While the Draft EIS/EIR's off airport surface traffic analysis adequately depicts some aspects of the Project's surface traffic generation potential, it is notably deficient in the following ways: (1) the use of the Adjusted Environmental Baseline for comparison with the Project's surface traffic impacts creates a misleading picture of the magnitude of those impacts; (2) the Draft EIS/EIR improperly equates the direct and cumulative impacts of surface traffic; (3) the Draft EIS/EIR provides inadequate information regarding the Northside/Westchester Southside Project; (4) the Draft EIS/EIR transportation planning horizon is improperly attenuated; and (5) the Draft EIS/EIR lacks a mitigation monitoring program detailing implementation of mitigation measures for the impacts of surface traffic.

### **A. The Use of the Adjusted Environmental Baseline for Comparison With the Project's Surface Traffic Impacts is Misleading.**

Three scenarios were used as baselines against which to evaluate the surface traffic effects of the proposed Master Plan improvements: (1) Environmental Baseline; (2) Adjusted Environmental Baseline; and (3) the No-Project/No-Action alternative. The Environmental Baseline is the existing condition pre-project. It includes existing roadways and land uses, and the current airport configuration. The year used in this baseline changed during the development of the Master Plan. At the initiation of the Master Plan process, the baseline year used was 1994. Information is reported in different Master Plan sections for 1994 and 1995. For the third iteration of the Master Plan, the baseline became 1996. The technical reports for the Draft EIS/EIR used 1996.

The Adjusted Environmental Baseline uses the current airport configuration but assumes that future off airport roadways and land uses already in the pipeline will be completed (see Section B.1 below). As with the Environmental Baseline, the definition of Adjusted Environmental Baseline changed with the development of the Master Plan. The existing condition section of the Master Plan (Chapter IV, Section 7) used horizon years of 2000 to 2015. The "constrained" alternatives section (Chapter V, Section 3) used the years 2005 and 2015. Finally, the No-Action/No-Project Alternative is the converse of the Adjusted Environmental Baseline and assumes that off-airport development will remain constant, but currently approved airport projects will be completed.

There are at least two issues of importance raised by reliance on the Adjusted Environmental Baseline: (1) accuracy of the Adjusted Environmental Baseline and its resulting projections; and (2) applicability of the Adjusted Environmental Baseline to the environmental impact analysis.

1. The Uncertain Definition of the Adjusted Environmental Baseline Makes the Results of its Comparison With Project Impacts Questionable.

The initial question about the Adjusted Environmental Baseline is the accuracy of the definition of “Existing Condition/Environmental Baseline” on which it is purportedly based. There are significant differences between the 1995 data concerning the “Existing Condition/Environmental Baseline” contained in the proposed Master Plan and the 1996 data contained in the Draft EIS/EIR. A comparison of Master Plan, Table II-7.2 and Draft EIS/EIR, Table 4.3.2-24, for the a.m. peak hour, shows changes in the “Existing Conditions/Environmental Baseline” between 1995 and 1996. As illustrated in the following Table, some intersections got significantly better and some significantly worse. In all but one case, the difference in V/C ratios between 1995 and 1996 exceeds thresholds used for determining significance in the Draft EIS/EIR.

Intersection	Master Plan Table II 7.2 1995 V/C*	EIS/EIR Table 4.3.2-24 1996 V/C	V/C Difference
Aviation/El Segundo	0.981(E)	0.835(D)	-.146
Aviation/Rosecrans	0.915(E)	1.121(F)	.206
Highland/Rosecrans	0.714(C)	1.069(F)	.335
Sepulveda/El Segundo	0.840(D)	0.869(D)	.029
Sepulveda/Mariposa	0.776(C)	0.730(C)	-.046
Sepulveda/Rosecrans	1.238(F)	1.220(F)	-.018
Vista Del Mar/Grand	0.755(C)	0.749(C)	-.006
Vista Del Mar/Imperial	0.821(D)	0.465(A)	-.356

\* In Master Plan Table II 7.2 the first column heading is apparently mislabeled

Moreover, the “adjustments” to the “Existing Conditions/Environmental Baseline” involved adding additional roadways and additional traffic to the system based on anticipated projects. The definitions of these “adjustments” is not consistent within the Draft EIS/EIR, or between it and the Master Plan. For example, the Draft EIS/EIR states that: “A list of approved development projects were developed . . . (Draft EIS/EIR, page 4-279)” [Emphasis added.] The traffic technical report on which the Draft EIS/EIR is based states: “A list of planned development projects was developed . . .” (Technical Report, § 3b, page 2-3)” [Emphasis added.] Master Plan, Table IV-8.3; Master Plan, Chapter V, Appendix L; and Technical Report,

3b, Table 2-3, present projected regional roadway improvements. Master Plan, Chapter V, Section 2.6 indicates that the future roadway network used in the analysis includes those projects “. . . currently funded and approved or which have a high probability for completion by 2015 . . .” Clearly, the distinction between “approved” and “planned” projects is critical to a functional definition of Adjusted Environmental Baseline. The baseline will be set much higher (and the consequent relationship of the Adjusted Environmental Baseline with the Project’s impacts much lower) if all planned projects are included in addition to all approved projects.

Finally, Chapter IV of the Master Plan (Table VI-8.1, page IV-8.5) provides a “preliminary list of related projects” that differs from the list presented in Table 2.2 of the Draft EIS/EIR Traffic Technical Report, 3b. While differences are to be expected between the 1996 version of the Master Plan and the Updated 2000 version of the Traffic Technical Report, one difference may be more crucial than others - the projected size and resulting traffic impact of the Playa Vista Project. For example, according to the Master Plan, Table IV-8.1, the Playa Vista Project will contain 13,156 single-family units and 8,262 multi-family units. Master Plan, Chapter V, Appendix L, and the Draft EIS/EIR Traffic Technical Report specifies 13,085 multi-family units and no single-family units for the same Project. There is no explanation for the change, nor any reference to the source of either number. The difference is crucial because the traffic analysis assumed three people for each single-family home, and only two for each multi-family residence. The change therefore results in a significant diminution in traffic if the latter multi-family numbers are correct. Considering the potential of over 13,000 housing units for traffic generation, a complete explanation is needed to render the Draft EIS/EIR surface traffic analysis.

## 2. The Applicability of the Adjusted Environmental Baseline to the Draft EIS/EIR Traffic Analysis is Questionable.

As set forth above, the off airport surface traffic analysis in the Draft EIS/EIR uses the Adjusted Environmental Baseline as “the basis of comparison under CEQA for future mitigation for the three build alternatives” (Draft EIS/EIR, page 4-276). The Adjusted Environmental Baseline reflects projected conditions in the years 2005 and 2015 with off airport land use activities completed and regional circulation improvements in place, but without any increased use of the airport. This approach minimizes the potential direct impact from the adoption of the proposed Master Plan because: (1) the future traffic volumes without the Project increase thereby reducing the proportional effect of the added airport traffic from the Project and (2) additional circulation system improvements provide additional capacity. While it is reasonable to assess particular impacts at the time at which they might occur, relying on this approach requires assurances that the projected circulation improvements will actually be in place. No such assurances are provided in the Draft EIS/EIR.

The Off Airport Technical Report lists circulation system improvements that were included in the modeling process. This listing provides an indication of when certain improvements are anticipated. Without these improvements, the circulation system for the

Adjusted Environmental Baseline would, apparently, be the same as for the 1996 condition, and many more intersections and roadway segments would be subject to significant adverse impacts as a result of the proposed Master Plan. It is important, therefore, that the Draft EIS/EIR traffic analysis include projected phasing of the anticipated improvements relative to the additional traffic resulting from airport use. This should include a discussion of the phasing of airport improvements as they pertain to traffic generation with respect to the circulation improvements used in the Adjusted Environmental Baseline. Limitations should be placed on airport traffic generation if anticipated circulation improvements off-airport do not occur. Once the Adjusted Environmental Baseline is accepted as accurate and the conditions to achieve it are assured, the next issue concerns the significance of surface traffic impacts and the mitigation measures needed to reduce those impacts.

B. The Direct and Cumulative Impacts of Surface Traffic Are Improperly Equated.

The surface traffic analysis uses traffic volumes from airport and non-airport projects. (See, e.g., Master Plan § 2.6.2, page V-2.279). Therefore, it is at least partially a cumulative impact analysis.<sup>7</sup> Because the surface traffic analysis is based on cumulative traffic volumes, the significance of the direct impacts and the cumulative impacts are equated. However, the use of the Adjusted Environmental Baseline makes this equation between direct and indirect effects inappropriate. While comparing the Project to the adjusted future conditions may be appropriate for assessing direct impacts, the cumulative impact is the impact of all traffic relative to the existing condition, not expected future conditions as contained in the Adjusted Environmental Baseline.

The result of this improper equation of direct and indirect effects is material. The following Table (derived from Draft EIS/EIR, Table 4.3.2-24) for the a.m. peak hour illustrates the problem. The reported change in congestion between the existing conditions and Alternative C, the preferred project alternative, is often significant, while the comparison of Alternative C with the Adjusted Environmental Baseline (which incorporates future conditions) is not.

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<sup>7</sup> “The cumulative impact from several projects is the change in the environment which results from the incremental impact of the Project when added to other closely related past, present, and reasonably foreseeable probable future projects.” (CEQA Guidelines, § 15355(b))

Intersection <sup>8</sup>	Existing V/C(LOS)	Adjusted Baseline V/C(LOS)	Alternative C (w/mit) V/C(LOS)	Difference (w) Existing	Difference (w) Adjusted
Aviation/El Segundo	0.835(D)	1.097(F)	0.865(F)*		
Aviation/Rosecrans	1.121(F)	1.164(F)	1.171(F)	+.050	+.007
Highland/Rosecrans	1.069(F)	1.211(F)	0.947(E)	-.122	-.264
Sepulveda/El Segundo	0.869(D)	1.190(F)	1.161(F)	+.292	-.029
Sepulveda/Mariposa	0.730(C)	0.772(C)	0.803(D)	+.073	+.031
Sepulveda/Rosecrans	1.220(F)	1.275(F)	1.243(F)	+.023	-.032
Vista Del Mar/Grand	0.749(C)	0.918(E)	0.729(C)	-.02	-.189
Vista Del Mar/Imperial	0.465(A)	1.098(F)	0.903(E)	+.438	-.195

\* Apparent error in Table 4.3.2-24 of the EIS/EIR (page 4-340)

Using this concept of the Adjusted Environmental Baseline, the result is that the cumulative impacts of the Project are often significant and not mitigated even when the Project's direct effects have been.<sup>9</sup>

C. The Draft EIS/EIR Inadequately Documents the Northside/Westchester Southside Project.

The Draft EIS/EIR's impact analysis for off airport surface traffic is dependent upon the assumption that there will be a substantial reduction in the number of trips generated from the Northside Project. By "reconstituting" the Northside Project into the Westchester Southside Project, the Draft EIS/EIR projects that there will be a significant decrease in collateral trips with the adoption of the proposed Master Plan.

The source of the collateral trip reduction is the change in the land use for the Northside Project and Continental City Project. Attachment A of Technical Report 3b provides the basis for the reduction in collateral trips.

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<sup>8</sup> Change in V/C Rates of .01 defines significant impact for intersections at LOS F (Draft EIS/EIR, p. 4-291).

<sup>9</sup> Note that if the comparison had been between Alternative C and the No-Project/No-Action Alternative, the difference would have been even greater, as the No-Project/No-Action Alternative provides for on-airport, potentially capacity-enhancing, improvements, but not off-airport surface traffic impact mitigation.

	AM PEAK			PM PEAK		
	Adjusted Baseline	No Project	Alternative C	Adjusted Baseline	No Project	Alternative C
Northside	0	7,217	3,922	0	7,131	4,423
Continental City	0	5,323	0	0	5,348	0
Manchester Square	0	0	212	0	0	233
Total	0	12,540	4,134	0	12,479	4,656

The issue here is the same as that concerning the Adjusted Environmental Baseline, i.e., the actions needed to insure that the reduction is achieved. The principal question is what specific discretionary actions are required to modify the allowable land uses in the Northside Project and in Continental City property, and how will compliance be assured?

The land use component of the Draft EIS/EIR and Condition LU-1 in Chapter V, Environmental Action Plan, presents a “Master Plan commitment” that:

“To the maximum extent feasible, all [Q] conditions . . . from the City of Los Angeles Ordinance No. 159,526 that address the Northside project area will be incorporated by LAWA into the Zoning Code Amendment and LAX Master Plan Implementing Ordinance for the Westchester Southside Project. Accepting that certain conditions may be updated, revised, or determined infeasible as a result of changes to the LAX Northside project, the final [Q] conditions for the Westchester Southside Project will ensure that the level of environmental protection afforded by the full set of LAX Northside projects [Q] conditions is maintained.” (Draft EIS/EIR, Chapter V, page 5-2).

Since this traffic reduction is critical to the projected Master Plan trip generation, the detail associated with this property needs to be firmly established. It is unacceptable to assume that certain conditions may be “updated, revised or determined infeasible” if they are necessary to bring about the decrease in collateral trips upon which the Master Plan projections are based. While there are some discussions of the Northside/Westchester Southside Project in the Draft EIS/EIR’s purpose and need chapter and Master Plan, Appendix Q, these are brief, general presentations lacking in specificity as to the actions needed to commit the City to limit these uses.

The importance of this lack of specificity in the definition of Project actions, as they relate to the Northside/Westchester Southside Project, is that there is no commitment by Los Angeles to insure that the traffic reduction represented by the changes in allowable land use will occur. The surface traffic capacity for the Project claimed through the reduction of traffic



generation from the Westchester Southside Project is significant. Without a more adequate demonstration of the Master Plan's ability to achieve that reduction, and a concrete commitment to meeting those goals, the Draft EIS/EIR will remain inadequate.

D. The Transportation Planning Horizon Used in the Draft EIS/EIR is Improperly Shortened So As To Minimize the Full Build Out Surface Traffic Impacts of the Project.

The Draft EIS/EIR modeled future conditions for the years 2005 and 2015. The current regional transportation plan, however, uses 2025 as the horizon year. The use of a later year between 2015 and 2025 for analysis is proper in light of the fact that the Project is anticipated to take 16 years to complete.<sup>10</sup> If the Project commences as early as 2002, it will not be completed until 2018, three years after the 2015 horizon has expired. With the year 2013 being the second greatest peak construction year (Draft EIS/EIR, page 4-270), the proposed Master Plan improvements will not be complete by the time the present horizon year of 2015 is reached. The import of the choice of 2015 as horizon year, before the Project is completed, is that the full build-out ("worst case") impacts of the Project will remain unanalyzed.

Further, while the impacts resulting from the adoption of the proposed Master Plan are generally evaluated against the Adjusted Environmental Baseline, much of the Draft EIS/EIR's discussion of surface traffic is compared to the No-Project/No-Action alternative (i.e., the alternative that assumes growth in operations and passenger demand at the Airport, along with completion of improvements already planned, but no off airport traffic or other development improvements). The comparison of the Project with two separate baselines in the years 2015 presents a misleading picture. While the reconstitution of the Northside Project may provide a reduction in the traffic generated in 2015, the existing airport improvements clearly permit growth beyond that currently possible. Therefore, the further into the future conditions are projected, the greater the effect of the proposed Master Plan improvements on traffic.

E. The Impacts of Construction Traffic Are Largely Ignored.

While the Project's construction will stretch over a period of 14 years, the impacts of the numerous construction vehicles that will be in use during that period remain unexplored. First, the Draft EIS/EIR acknowledges a volume of construction vehicles which includes 2.8 trucks per minute, 10 hours per day, 6 days per week, or 1.2 trips per minute, 20 hours per day in a 7 day work schedule (Draft EIS/EIR, page 4-319). While the Draft EIS/EIR purports to address mitigation by recommending that trucks trips be divided among four locations on the construction site, that purported mitigation does not consider the trucks' impacts on surrounding arteries even a short distance from the construction site.

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<sup>10</sup> The Draft EIS/EIR, Purpose and Need Section (Chapter 2, pages 2-12 through 2-13) indicates that the Project will be implemented in two phases. The first phase will last six years and the following phase 10 more years.

Moreover, the Project will admittedly coincide with the construction of Playa Vista, located approximately 2 miles north of the airport (Draft EIS/EIR, page 4-320). The Draft EIS/EIR contains little or no analysis of the cumulative impacts of the construction of these two projects on surface traffic on surrounding arteries and the San Diego Freeway. Moreover, the mitigation offered is slight. The Draft EIS/EIR offers to expand the “. . . Traffic Coordination Office . . .” to minimize the impacts of construction traffic (Draft EIS/EIR, page 4-320). This purported mitigation measure, even when combined with other assurances including that “construction traffic . . . can be managed . . .” (Draft EIS/EIR, page 4-320), and “traffic patterns around the airport for the general public would be largely maintained . . .” (*Id.*), does little, if anything, to assure that the manifest impacts of construction will be mitigated. The Draft EIS/EIR admits as much where it states “however, even with these commitments in place, the Project would still cause sufficient construction-related traffic to cause notable disruption of normal traffic flows near the airport.” (*Id.*) Since construction is planned to last more than 14 years, the Draft EIS/EIR is basically stating that for that entire period, traffic is expected to be disrupted, and the Project’s purported mitigation will be insufficient to restore stability.

Finally, the Draft EIS/EIR pays little or no attention to the traffic impact of vehicles used by construction workers. It states that construction employees will work in three shifts, and that the second shift will arrive before the first shift ends (Draft EIS/EIR, page 4-319). Using simple math, it appears that at some points during the day, parking would have to be provided for more than 8,000 workers when these two shifts overlap. While remote parking areas are suggested for construction employees, they are as far away as Palmdale, Van Nuys and Ontario (*Id.*). The likelihood of construction workers using such remote parking is slim to none. Therefore, the mitigation measure is largely useless. However, even if remote parking were utilized to any extent, the Draft EIS/EIR fails to discuss the traffic impacts of the shuttles which would bring the construction workers from these remote locations to the airport. In short, even though construction is expected to last for 14 years, the Draft EIS/EIR contains little, if any, analysis of the impacts of construction worker traffic which will take place on the entire street/freeway system 6 or 7 days a week during that period.

In summary, while “the general construction concept is to have many of the transportation improvements completed within the first five years after construction begins . . .” (Draft EIS/EIR, page 4-318), the LAX Expressway and northeastern portion of the ring road from the San Diego Freeway to Sepulveda Boulevard would not be available to traffic until well after the first five years (Draft EIS/EIR, Table 4.3.2-18, page 4-318). Therefore, there would be no new routes available for mitigating the above impacts during the heaviest construction period.<sup>11</sup> As a

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<sup>11</sup> The Draft EIS/EIR states that Phase 1 of the Project would be 5-6 years long and end in 2005. As the Draft EIS/EIR cannot be approved before late 2001, at the earliest, and Phase 1 of the construction could not then begin before 2002, Phase 1 could not end until at least 2007 or 2008. Similarly, Phase 2 which is estimated to extend 10 years past the completion of Phase 1, would end in 2017 not 2015, as assumed in the Draft EIS/EIR. This is important because the impacts of construction, and associated traffic, will now be extending well past the

consequence of the above omissions, the Draft EIS/EIR's analysis of construction traffic impacts is materially deficient.

F. The Draft EIS/EIR Lacks a Mitigation Monitoring Program.

The Draft EIS/EIR, Chapter V is entitled "Environmental Action Plan". It is not specific as to whether this constitutes a Mitigation Monitoring Program required by CEQA (CEQA Guidelines § 15091(d)). If it does represent a Draft Mitigation Monitoring Program, it is inadequate. The Section lacks a clear statement of the party responsible for implementing the mitigation, the mechanism for enforcement of the mitigation and the timing of implementation. Moreover, it lacks detailed explanation of the way in which the diminution of traffic from the Northside Project, as well as other surface traffic mitigation measures will be achieved.

**III. THE DRAFT EIS/EIR NOISE ANALYSIS UNDERSTATES THE PROJECT'S AIRCRAFT NOISE IMPACTS.**

A. The Draft EIS/EIR minimizes the Project's noise impacts by artificially inflating the Environmental Baseline.

As noted earlier, a threshold issue in environmental analysis is the establishment of a "baseline". The function of a "baseline" is to provide a benchmark of existing conditions against which the environmental impacts of a project may be measured. If the baseline is incorrectly designated at too high a level, the impacts of the Project will be improperly minimized. In this case, the Draft EIS/EIR utilizes three separate and distinct baselines for analyzing the impacts of the Project: (1) the Environmental Baseline (1996), i.e., the purported conditions in existence before implementation of the Project; (2) "No-Project" baseline for 2005 (and 2015) which includes "natural" growth on the airport resulting from implementation of already approved airport projects continued in the current Master Plan that purportedly would have occurred even if the Project is not implemented; and (3) Adjusted Environmental Baseline predicated on projected conditions in the years 2005 and 2015 with off-airport land use activities completed and regional circulation improvements in place, but without any improvement to airport facilities.

The Draft EIS/EIR chooses 1996 (i.e., the Environmental Baseline) as the base year for evaluation of aircraft noise impacts, and states that in 2015, the Project's horizon year, Alternative C "would reduce the total number of people exposed to aircraft noise above 65 CNEL compared to current conditions as represented by the Environmental Baseline year." (Draft EIS/EIR, page 4-11) By using 1996 as the benchmark, the Draft EIS/EIR's noise analysis artificially minimizes the apparent growth in noise impacts associated with the Project. This is because, in 1996, many noisy Stage 2 aircraft remained in the fleet (which were then phased out

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period anticipated in the Draft EIS/EIR.

in late 1999). When the Notice of Preparation was published in July 1997, the Project proponents knew with certainty at that time that some of the noisiest aircraft in its fleet would not operate after December 31, 1999, and that the removal of these aircraft from the fleet serving the Airport would reduce the size of the airport's noise exposure contours. The Draft EIS/EIR concedes that the "reduction in noise exposure is the result of a federally mandated phase out of older, noisier Stage 2 jets," and not the implementation of the Project. Despite that fact, the Draft EIS/EIR consciously skews the analysis by using 1996 as the Base Year for its noise analysis.

The Draft EIS/EIR disregards the fleet mix changes brought about by the Stage 2 phase out. The Draft EIS/EIR's "Average Annual Day Operations and Fleet Mix - Environmental Baseline" (Draft EIS/EIR, Appendix D, page 11) includes a total of 139 noisy Stage 2 aircraft in the daily operations mix. In other words, nearly 7% of the aircraft included in the calculation of the baseline noise contour analysis are high noise producing aircraft the inclusion of which will increase the size of the baseline noise contours and, thereby minimize the apparent impacts of the Project.

Courts have displayed flexibility in dealing with cases involving complex long term environmental review. They have agreed that, for lengthy environmental review such as that at issue here, the analysis of such impacts as surface traffic (and aircraft operations) which normally fluctuate over time are properly assessed against a later baseline than the time of the publication of the Notice of Preparation. (Save our Peninsula Committee, supra, 87 Cal.App.4th at 125-126) Therefore, Project proponents are not tied to the 1996 baseline, the last full year of data before the year of Notice of Preparation Publication, but should, more properly, have used a year no earlier than 1999, the last full year of data available before publication of the Draft EIS/EIR. Moreover, that data should have been updated with available data from the year 2000. Absent such an update, the Draft EIS/EIR noise analysis is incomplete and, thus, inadequate.

B. The Draft EIS/EIR Fails to Satisfy Applicable Law Because it Improperly Analyzes the Health Effects of Aircraft Noise.

1. The Draft EIS/EIR Must Consider the Health Effects of Aircraft Noise.

The Draft EIS/EIR must fully consider all of the adverse health effects of aircraft noise. LAWA admits that its LAX Master Plan will create increased noise impacts upon the residents of the City of Inglewood. "Under Alternative C, which does not add a new runway, a decrease in noise exposure would occur in the City of El Segundo and the community of Del Aire with increases in portions of the community of Westchester and the City of Inglewood." Draft EIS/EIR Section 4.24.2 page 4-1040. There is strong scientific evidence of the adverse health effects of noise pollution on humans. Studies have shown clear health effects on animals, and these studies indicate the certainty of such effects on humans as well.

“A study sponsored by the EPA, constituting one of the most notable studies of animal noise exposure, examined cardiovascular effects of noise on monkeys. This research demonstrated that monkeys subjected to industrial noise at levels between 85 to 90 dba for several months developed significant elevations of systolic and diastolic blood pressure. It is particularly notable that these changes persisted long after exposure ceased, demonstrating that noise has a chronic effect on blood pressure.”

Fred M. Svinth, Illingworth & Rodkin, Inc. “The Effects of LAX Aircraft Noise on Local Communities,” January 2001, p. 9, attached hereto as Exhibit “I”. LAWA admits that such studies exist and that noise has effects, but refused to seriously consider such reports. Instead, LAWA simply concludes that such studies are controversial and, therefore, that no in-depth analysis is required.

“Some studies suggest that there are indicators that high noise levels, particularly from aircraft, may have a detrimental effect on the cardiovascular system, mortality rates, birth defects, achievement scores, psychiatric admissions, sleep disturbance, and overall psychological well being; others show no conclusive evidence of these effects. However, the results of such studies continue to be controversial and are not accepted by the general scientific community at this time. Specifically, the scientific community has cited methodological and epidemiological problems with the studies and none of the studies has gained the universal acceptance from researchers that would allow them to be used as a basis for impact assessment.”

Draft EIS/EIR Section 4.24.2 page 4-1041.

However, LAWA argues that it is impossible to “quantify” the relationship between noise and adverse human health effects. LAWA argues that no “threshold of significance” exists:

“Although there is consensus that noise has some health effects, there is no agreement as to the degree of the effects or the level at which they become significant. The scientific community and regulatory agencies have not developed numerical thresholds beyond which the health effects of noise are considered to be significant.”

Draft EIS/EIR Section 4.24.2 page 4-1046.

In other words, LAWA takes the position that the absence of a specific threshold absolves it from having to address this issue in any meaningful way in the Draft EIS/EIR. Instead, LAWA focused on overall noise exposure caused by its expansion plan. “Since it is not possible to quantify noise health impacts for a population, such as the people who live in the vicinity of an airport, this analysis focused by necessity on quantifying overall noise exposure.” Draft EIS/EIR Section 4.24.2 page 4-1039.

LAWA’s admitted inability to fully analyze the Health Effects of Aircraft Noise itself renders the planned expansion violative of existing law. LAWA improperly fails to consider the admitted potentially significant adverse health effects of noise. “Significant and unavoidable impacts associated with aircraft noise are expected to occur. Such noise exposure is considered to pose a potential significant and unavoidable impact relative to health effects of noise, to the extent there is such a relationship between the two.” Draft EIS/EIR Section 4.24.2 page 4-1050.

“The U.S. Environmental Protection Agency (USEPA) has taken the following position: ‘Research implicates noise as one of several factors producing stress-related health effects such as heart disease, high blood pressure and stroke, ulcers and other digestive disorders. The relationship between noise and these effects has not yet been quantified.’”

Draft EIS/EIR Technical Report 14b. Health Effects of Noise Technical Report. No Master Plan Commitments for the health effects of noise are proposed. Draft EIS/EIR Section 4.24.2 page 4-1046. LAWA must fully examine the health effects of aircraft noise in order to fulfill the requirements of NEPA and CEQA.

## 2. The Draft EIS/EIR NEEDS TO ADDRESS Aircraft Noise Interference with Classroom Activities and Sleep.

The Draft EIS/EIR fails to adequately address the interference of aircraft noise upon classroom activities and sleep. Interference with classroom activities and sleep are two of the most sensitive impacts of aircraft noise. LAWA admits the problem of interference with classroom activities, but fails to analyze this problem to the degree required under CEQA. According to LAWA:

“Interference with classroom activities and learning from aircraft noise has been the subject of much recent research. Several studies have been performed, including studies at LAX, London’s Heathrow Airport, and Munich International Airport. These studies indicate that a relationship between aircraft-related noise and learning effects does exist, but that additional research is required to clarify how close the relationship is and at what noise levels the relationship appears. The relationship has been

particularly difficult to document due to the confounding factors of background noise, school quality, and socioeconomic status. Additional research is being performed to try to account for these factors.”

Draft EIS/EIR Section 4.24.2 page 4-1043. Similarly, LAWA admits but dismisses summarily the very real problem of sleep disturbance caused by aircraft noise. LAWA states:

“Generally, laboratory studies have shown considerably more disturbance than field studies, perhaps due to the subject’s lack of familiarity with the location and experience. Sleep disturbance studies have also involved the collection of cumulative data from subjects.... A review of existing studies and literature indicates that additional research is required to clarify the relationships between aircraft-related noise and sleep disturbance.”

Draft EIS/EIR Section 4.24.2 page 4-1044.

LAWA tries to minimize the sleep disturbance caused by aircraft operations at LAX. LAWA states, “LAX undertakes a different operational procedure for takeoffs and landings between midnight and 6:30 a.m. These ‘over-ocean’ procedures route both arrivals and departures over Santa Monica Bay, directing aircraft noise away from residential areas to the east of LAX during nighttime hours.” Draft EIS/EIR Section 4.24.2 page 4-1045. However, due to constraints caused repeatedly by weather conditions, residents of Inglewood and other nearby communities are subjected to late night overflights. The Draft EIS/EIR fails to adequately analyze these issues.

#### **IV. THE DRAFT EIS/EIR AIR QUALITY ANALYSIS IS INADEQUATE.**

The Draft EIS/EIR’s air quality analysis exhibits serious deficiencies, not the least of which is the total absence of a formal air quality conformity analysis required under federal law where, as here, the Project’s air quality impacts are not claimed to be insignificant (see 42 U.S.C. § 7506<sup>12</sup>). The absence of a conformity analysis necessarily renders the following comments preliminary.

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<sup>12</sup> “No department, agency, or instrumentality of the federal government shall engage in, support in any way or provide financial assistance for, license, permit or approve any activity which does not conform to an implementation plan . . .” (42 U.S.C. § 7506(c)(1))

A. The Baseline for the Draft EIS/EIR Air Quality Analysis is Not Appropriately Estimated.

The Draft EIS/EIR assumes that annual aircraft operations will be essentially identical regardless of whether the Preferred Alternative is implemented (Draft EIS/EIR, page ES-9). Under the No-Action/No-Project Alternative, total operations are expected to be 98 percent of operations under the preferred expanded capacity scenario (Alternative C). Furthermore, air passenger operations activity will actually be *higher* under the No-Action/No-Project Alternative. At the same time, the Preferred Alternative moves about 15 percent more passengers through higher aircraft load factors.

Basic economic theory, however, dictates that under free market conditions, demand will reach equilibrium for a given level of supply at a certain market cost (including time costs associated with delays, congestion, etc.). If the supply curve (for air transportation) is then shifted, as would occur under an increased capacity situation such as that proposed,<sup>13</sup> the supply/demand equilibrium for the same level of market cost will shift to a point of higher demand. This shift is often referred to as induced demand, and analyses which do not consider this effect (or which assume demand levels counter to market behavior as appears to be the case with the Draft EIS/EIR) are not accurate in general, or specifically with respect to future air quality conditions under any of the various alternatives.

Viewed from a practical rather than theoretical perspective, the Draft EIS/EIR presumes that the Airport will support over 391,000 aircraft landing and takeoff (LTO) cycles in 2015 by doing nothing other than carrying through with those projects already adopted. Although operations without the Project would be constrained by greater delays as well as excessive times to reach the airport, the Draft EIS/EIR does not account for the discouraging effects of these delays, and assumes that under the Preferred Alternative, specifically designed to relieve these problems of congestion and delay, the total number of annual LTOs will increase by less than 2 percent (to 398,000) over the No-Action/No-Project Alternative. There are only two possible explanations for this relationship: (1) either usage under the No-Action/No-Project baseline is overstated; or (2) usage under the Preferred Alternative is understated. Correspondingly, either emissions for the No-Action/No-Project baseline are overstated or emissions for the Preferred Alternative are understated. The result is an artificial (and erroneous) minimization of the difference in emissions between baseline conditions and those of the Project.

This same issue affects stationary source emissions. Increased airport capacity can be expected to attract associated industrial and commercial activity into the area. This attraction would not occur without the increased capacity and, therefore, must be accounted for if a true assessment of airport emission impacts is to be determined. Note that this commercial development is distinct from currently planned commercial development, in that it occurs due to

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<sup>13</sup> The Preferred Alternative lengthens and reconfigures runways, adds a new West Terminal, and improves traffic flow.



airport capacity expansion, but outside the formal planning process of the airport. One must recognize that the estimates of reduced emissions under the action alternatives (either the preferred or alternative scenarios relative to a No-Action/No-Project scenario) are due almost entirely to “flow” improvements in the form of reduced taxiway congestion and improved traffic movement both on and offsite. If these congestion reductions are eliminated or reduced through increased air travel or associated demand that is not properly accounted for in the Draft EIS/EIR, the predicted emissions impacts will not be accurate.

**B. Future Background Pollutant Concentrations Are Not Appropriately Estimated.**

Background pollutant concentrations are required to accurately estimate the impact of the proposed Airport expansion on National Ambient Air Quality Standards/California Ambient Air Quality Standards (“NAAQS/CAAQS”) compliance. These concentrations must account for the combined impacts of the universe of emission sources not explicitly accounted for in the airport analysis. In effect, the background concentrations determine the emissions baseline upon which Airport emissions are placed. If this base is underestimated, the overall affect of airport expansion on NAAQS/CAAQS compliance could be similarly understated. Alternatively, if the base is too high, the Draft EIS/EIR analysis could be conservative. While the Draft EIS/EIR presumes the latter (Draft EIS/EIR, Technical Appendix G, page 46), it contains no data to support such a conclusion and some reason to believe that the converse may be true.

Current short term (sub-annual) background concentrations for the Draft EIS/EIR are based on measurements taken at an onsite monitoring station located just east of the southern runway configuration. Current annual concentrations are based on data collected at a South Coast Air Quality Management District (“SCAQMD”) monitoring facility (Hawthorne) located near, but southeast of the Airport (Draft EIS/EIR, Technical Report 4, Attachment A, page 3). On the premise that measurements from these sites inherently include emissions from the Airport, the Draft EIS/EIR concludes that such emissions represent conservative background concentration baselines for air quality analysis (since Airport emissions will be added on top of a background that already includes Airport emissions).

However, the prevailing wind direction for the Airport area is southwest to northeast (Draft EIS/EIR, Technical Report 4, Attachment A, page 3). Therefore, there is probably little influence from the Airport on the offsite concentrations used as background, as well as only moderate influence on the onsite-based background concentrations. The bulk of airport activity, including all terminal and motor vehicle operations occur under the influence of a prevailing wind plume that crosses Airport property to the north of the onsite monitoring station. While certain aircraft takeoff and queuing emissions are undoubtedly accounted for in the onsite baseline concentrations, these represent only a small fraction of overall airport emissions. Comparative data for concentrations from both monitoring stations could demonstrate the validity of the claim of conservatism, (i.e., do the observed concentrations for identical monitoring periods show a higher background at the onsite station?), but the Draft EIS/EIR apparently contains no data for the offsite monitoring station (other than the specific background

concentrations used in the Draft EIS/EIR and associated documents, which are not comparable to the data for the onsite monitoring station).

More importantly, the emissions inventory rollback techniques used to forecast future background concentrations (Draft EIS/EIR, Technical Appendix G, pages 45-46) are of questionable validity for the Airport area. Background concentrations as well as future emission reduction influences around the Airport are constrained by geography. Since the prevailing wind flows from the southwest to the northeast, the Pacific Ocean represents a physical constraint that may significantly influence emission reduction impacts on background concentrations. In effect, the implemented rollback procedure to estimate future background concentrations reduces current background concentrations in proportion to expected *regional* emission inventory reductions over the same time period. Therefore, this procedure inherently assumes that inventory reductions are homogeneous throughout the region in terms of their influence on background concentrations. This is perhaps a viable assumption in instances where one part of a region has similar source characteristics with another, but the Airport region is clearly constrained to those source characteristics along the Pacific coastline to the immediate south of the Airport. It is the expected reductions from these sources in particular that should be used to adjust Airport background concentrations.

Generally background concentrations for 2005 are reduced 30 to 40 percent while concentrations for 2015 are reduced 50 to 60 percent from the current measured data (Draft EIS/EIR, Technical Report 4, Attachment A, page 4). Clearly this assumes significant emission reductions will affect coastal monitoring sites and provides substantial headroom for emissions increases within the confines of the NAAQS/CAAQS. These reductions probably represent the most significant influence on forecast pollutant concentrations in 2005 and 2015. It is critical that the propriety of the assumed background concentrations at least be supported by comparative analysis of current Airport and offsite monitoring data as well as analysis of emissions source classifications for the area immediately to the south of the Airport with the remainder of the air basin. This comparison will either provide the proper support for the currently implemented approach or suggest a more appropriate alternative.

#### C. Reverse Thrust Emissions from Aircraft Are Not Included in the Draft EIS/EIR Air Quality Analysis.

The Draft EIS/EIR makes an affirmative determination not to address emissions from aircraft reverse thrust operations, ostensibly on the basis of inadequate emission factors and short usage times (Draft EIS/EIR, Technical Appendix G, page 4). Both of these claims are misleading. First, reverse thrust is essentially a high thrust operating mode and emission factors for such modes (i.e., climbout and takeoff) are readily available. Common practice is to use takeoff emission factors. Second, it is true that the time in mode for reverse thrust operations is short, however high thrust modes produce very high unit time NO<sub>x</sub>. For example, at a commonly utilized reverse thrust mode time of 15 seconds, increased NO<sub>x</sub> emissions would be equivalent to the NO<sub>x</sub> produced by increasing overall takeoff time by 35 percent (0.7 minutes plus 0.25

minutes versus 0.7 minutes). Since takeoff accounts for about 35 percent of total aircraft NO<sub>x</sub> (Draft EIS/EIR, Technical Report 4, Attachment C), the overall aircraft NO<sub>x</sub> inventory could increase by nearly 13 percent simply due to the inclusion of reverse thrust-related emissions alone. Without some affirmative determination that such operations will be prohibited under the action alternatives, reverse thrust emissions should be included in the Draft EIS/EIR air quality analysis.

D. The Applicability of the Construction Equipment NO<sub>x</sub> Standard is Overstated.

The Draft EIS/EIR states that only construction vehicles meeting a 2.5 grams per brake horsepower-hour (g/bhp-hr) NO<sub>x</sub> standard will be used for airport construction projects by 2005 (Draft EIS/EIR, Technical Appendix G, page 3). Furthermore, this requirement will be phased in between 2001 and 2005, beginning at 20 percent of vehicles and increasing at a rate of 20 percent per year. This “requirement” raises several concerns as it is applied to the construction equipment emissions analysis in the Draft EIS/EIR.

First, the 3.0 g/bhp-hr NMHC+NO<sub>x</sub> standard (that is the basis for the 2.5 g/bhp-hr NO<sub>x</sub> assumption) for construction vehicles does not take effect until 2005 for 300-750 horsepower (hp) engines, 2006 and 2007 for 100-300 hp engines, or not at all for engines of other hp. Mandating this equipment for Airport work at an accelerated schedule beginning in 2001 may or may not be successful, but clearly requires some statement of commitment by the regulated parties. Voluntary, so-called “Blue Sky Series,” engines can be certified by manufacturers before 2005 but there is no requirement to do so (and little incentive since these engines cannot be used in the emissions averaging programs associated with non-Blue Sky engines, averaging programs which are currently relied on by all heavy duty engine manufacturers for emissions standards compliance). In reality, construction firms will only be able to provide equipment that is available on the market and it is dubious that the number of engines meeting the suggested standard in the required years will be significant.

Second, the mandatory “clean engine” standards that do begin in 2001 require NO<sub>x</sub> at levels around 4.0 g/bhp-hr (an exact value is not possible since the standard is again expressed as NMHC+NO<sub>x</sub>, in this case 4.8 g/bhp-hr). However, these standards also only apply to 300-750 hp equipment. While a number of construction equipment engines fall into this category, many others range from as low as 25 hp up through 300 hp. For these lower hp categories, standards do not begin until 2003 or 2004 and get progressively less stringent as engine size decreases (to 5.6 g/bhp-hr for engines below 100 hp).

Third, even if this low emissions requirement could be enforced (i.e., allow use of only new Blue Sky Series engines at the Airport), an assumption of 100 percent in-use compliance is overly optimistic. While it is not possible to say with certainty what fraction of equipment may operate at emissions levels above certification standards, experience has demonstrated that engines employing sophisticated engine management strategies and aftertreatment controls (as is expected for engines meeting these stringent standards) are subject to both malperformances and

malmaintenance effects. For first generation engines, such problems are usually exacerbated. What can be stated with certainty is that construction emissions impacts will be larger than the level acknowledged in the Draft EIS/EIR.

E. General Emission Factors for Offroad Equipment are Understated.

In general, it appears that the emission factors employed for offroad engines, even in the absence of the 2.5 g/bhp-hr issue noted above, are significantly underestimated. This underestimation affects not just construction equipment, but both baseline and ongoing aircraft Ground Support Equipment (“GSE”) operations, and results from the fact that outdated emission factor sources were utilized. The net effect is that airport emission and air quality impacts are underestimated.

Offroad engine emissions knowledge is currently in a state of rapid development and estimation techniques need to maintain currency with the latest methods. In California, this would imply use of the California Air Resources Board’s (“CARB”) OFFROAD emission factor model, while nationally a similar model termed NONROAD has been developed by the U.S. Environmental Protection Agency (“EPA”). While development continues on both, they clearly represent the most up-to-date compendiums of current offroad engine emissions estimation techniques. For example, these models employ the most recent emission factor test data, emissions deterioration test data, and equipment size and activity factors. References cited in the Draft EIS/EIR (Draft EIS/EIR, Technical Report 4, Attachment A), such as the EPA’s AP-42 and Procedures for Emissions Inventory Preparation documents as well as the SCAQMD’s CEQA Handbook, employ less developed and, in many cases, seriously outdated data.

An example of the magnitude of the emissions underestimation can be derived by comparing emission factors across the alternative methods. The Draft EIS/EIR relies on the use of the FAA’s Emissions Dispersion and Modeling System (“EDMS”) to generate GSE emission estimates. However, EDMS includes significantly outdated GSE emissions data.<sup>14</sup> A quick comparison indicates that CARB OFFROAD model and EPA NONROAD model GSE (average) emission rates (for the same equipment activity distribution assumed in the EIS/EIR) are, for diesel equipment, from 7 to 13 times greater for VOC, 5 to 10 times greater for PM, 5 to 9 times greater for CO, 4 to 5 times greater for NO<sub>x</sub>, and 4 to 5 times greater for SO<sub>2</sub>. For gasoline GSE, the models produce average emission rates 10 to 20 times greater for VOC, 1 to 6 times greater for PM, 15 to 16 times greater for CO, 6 to 9 times greater for NO<sub>x</sub>, and 2 to 4 times greater for SO<sub>2</sub>. The impact of using outdated emission rates is clearly significant and should be reevaluated if realistic air quality impacts are to be derived.

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<sup>14</sup> This situation may be improved in the latest version of EMDS, which was released subsequent to the completion of the Draft EIS/EIR.

F. Ground Support Equipment Populations Are Not Appropriately Specified.

As stated above, the Draft EIS/EIR uses the FAA's EDMS model to estimate GSE emissions (Draft EIS/EIR, Technical Report 4, Attachment A). Inherent within this approach is an assumption that EDMS properly estimates GSE populations. Since the current GSE population at the Airport is known, it would be appropriate to determine whether EDMS assumptions are consistent with the Airport's actual population and use-hour statistics. This would provide support for the validity of EDMS equipment estimation algorithms and allow for a more appropriate assessment of the accuracy of the GSE emissions estimates and air quality impacts of the Draft EIS/EIR.

G. Emissions Benefits of Conversion of GSE to Electric, Hybrid, and Alternative Fuels are Overstated.

The Draft EIS/EIR contemplates a widespread GSE replacement program under all three of the action alternatives, while retaining primarily fossil fuel powered GSE for the No-Action/No-Project Alternative (Draft EIS/EIR, Technical Report 4, Attachment L). While this could be construed as a mitigation measure and, in fact, is listed as the single most effective mitigation measure on the list of potential mitigation measures included in the Draft EIS/EIR (pages 4-514 through 4-519), it is arbitrary to apply the measure only to the action alternatives, as there are no specific constraints to such substitution today or under the No-Action/No-Project Alternative. Electric GSE is cost effective from a market standpoint today. Therefore, whatever incentive or mandate will be offered under the action alternatives to move toward electrification could just as readily apply today. Required infrastructure modifications are relatively modest, with no dependency on the expansions associated with any of the action alternatives. But by far the most troubling issue is that the replacement program already appears to be accounted for in the "unmitigated" emission estimates for all three action scenarios. If this is the case, no additional emission reductions will be achieved through GSE electrification as is claimed in the proposed list of mitigation measures.

H. Incorrect Aircraft PM Emission Factors Are Used in the Draft EIS/EIR Air Quality Analysis.

Two issues exist with respect to the aircraft PM analysis that result in an underestimation of the Project's potential air quality impacts. First, it appears that the Draft EIS/EIR is based on the incorrect emission factors from the supporting analysis undertaken to develop those factors (Draft EIS/EIR, Technical Report 4, Attachment H). Second, it appears that the approach used to

develop PM emission factors for aircraft<sup>15</sup> produces estimates that are not consistent with previous PM emission testing results.<sup>16</sup>

Analysis of PM emission factor estimation reveals that the basic estimation approach used in the Draft EIS/EIR yields an emission factor that only considers the basic non-volatile portion of particulate. An adjustment factor (that varies with fuel sulfur content) exists and should be used to correct the estimate to total PM (Draft EIS/EIR, Technical Report 4, Attachment H). This factor is calculated to be about 2.6 for low sulfur (about 70 ppmW) jet fuel and 14.7 for high sulfur (about 675 ppmW) jet fuel.<sup>17</sup> Since existing EPA data demonstrates that U.S. jet fuel averages about 600 ppmW sulfur, the appropriate adjustment factor for the Draft EIS/EIR would be about 13.2. However, from figures presented in the Draft EIS/EIR, it appears that the unadjusted emission factors were used for all emissions analysis. If so, PM emission impacts are significantly underestimated and should be reassessed after applying an adjustment to increase the PM emission rate by a factor of 13.

In addition there is a potential deficiency in the approach employed to estimate PM emission factor data. The underlying need for a statistical estimation technique such as that employed cannot be disputed as the available aircraft PM emissions testing database is both small and dated. However, the Draft EIS/EIR (Technical Report 4, Attachment H) statement that the age of that data renders it valueless are questionable. Engine technology has advanced relative to the engines represented in the test database, but the fundamental physical and chemical combustion characteristics that give rise to PM formation have not. The additional claim that the existing aircraft emission factors are not of value since they reflect total PM as opposed to PM-10 is also without merit. Virtually 100 percent of combustion-related PM is PM-10, so any error resulting from the substitution of total PM for PM-10 will be insignificant. In fact, the PM emission factor estimation approach employed in the Draft EIS/EIR requires just such an assumption of equivalency between total PM and PM-10 (as stated in Technical Report 4, Attachment H).

If relationships between aircraft PM and another routinely measured pollutant can be developed for one or more of the standard aircraft operating modes, then measured values for this “independent” pollutant can be used to estimate PM emission rates in that mode (or modes). Such a statistical approach can take advantage of the limited existing PM emissions database,

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<sup>15</sup> The International Civil Aviation Organization (“ICAO”) emissions certification process for aircraft does not include PM, so alternative emission factor estimation approaches are required.

<sup>16</sup> Adjustments not employed in the Draft EIS/EIR may compensate for most of this deficiency.

<sup>17</sup> This calculation is based on data presented in the Draft EIS/EIR (Technical Report 4, Attachment H).

while at the same time recognizing the substantial progress that has been made in aircraft engine performance. It is, however, critical that such relationships consider possible operating mode-specific differences in any identified PM relationship, as engine and combustion efficiency vary substantially across modes. For example, one would expect PM emission rates to be inherently low in high efficiency (high NO<sub>x</sub>) modes of operation since the same high temperature, high pressure conditions that give rise to high NO<sub>x</sub> also favor more complete fuel combustion. Conversely, PM would be expected to be high in low efficiency combustion modes. In short, it should not be expected that the significance of any inter-species relationship(s) is/are invariant across the full range of operating modes.

A very strong statistical relationship between measured PM and the inverse of measured NO<sub>x</sub> is observed in three of the four standard aircraft operating modes (approach, takeoff, and climbout), with coefficient t-statistics all significant at 99-plus percent confidence. A strong coefficient can also be observed for the taxi mode, but it explains virtually none of the observed variation in PM and NO<sub>x</sub> (whereas variance explanatory significance exceeds 99 percent confidence for the other three modes). The magnitude of the relationship coefficients varies from 28.4 in takeoff mode to 45.0 in climbout mode, and is 33.0 in approach mode. While all three modes exhibit significant relationships, takeoff mode serves as the best basis for an overall relationship, as it statistically produces the smallest root mean square error based on regression data (an error 35 to 40 percent lower than those of climbout and approach modes). Using this takeoff mode PM-to-NO<sub>x</sub> relation as a means to estimate aircraft takeoff PM emission rates for each of the engines with NO<sub>x</sub> measurements in the overall ICAO emissions database, PM emission rates for the other three operating modes (climbout, approach, and taxi) can be developed based on observed statistical relationships between mode-specific PM and takeoff PM (i.e., PM-to-PM regressions across modes). Linear coefficients for all three modes (1.42 for climbout, 1.53 for approach, and 3.10 for taxi, all in pounds per thousand pounds fuel burned space) are significant at 99-plus percent confidence, with adjusted correlation coefficients for climbout and approach at 0.78 and 0.83 respectively. Taxi mode correlation is poor, but the PM-to-PM relation does account for observed variance at greater than 99 percent confidence.

Using existing ICAO emissions measurement statistics, this alternative approach produces PM emission rates that are 4 to 37 times higher than those used in the Draft EIS/EIR. The smallest differentials are observed at the highest thrust modes. The differentials grow with reducing thrust possibly because the Draft EIS/EIR approach does not take operating efficiency differentials between modes into consideration. Nevertheless, for a typical LTO cycle (as per Draft EIS/EIR times-in-mode), the aggregate aircraft PM emission factor will be underpredicted by a factor of 17 using the Draft EIS/EIR approach. The effect on PM air quality analyses is obvious.<sup>18</sup>

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<sup>18</sup> Interestingly, if the appropriate carbon-to-total PM emission factor correction of 13.2 is implemented as suggested in the support material for the Draft EIS/EIR (Technical Report 4, Attachment H), the bulk of the emission factor differentials between the two estimation approaches virtually disappear (i.e., a correction factor of 13 versus an underestimation factor of

I. Aircraft SO<sub>2</sub> Emissions are Underpredicted.

The Draft EIS/EIR relies on version 3.2 of the EDMS model to predict aircraft SO<sub>2</sub> emissions (Draft EIS/EIR, Technical Appendix G, page 4). This model underestimates aircraft SO<sub>2</sub> emissions by a factor of two due to reliance on an incorrect AP-42 emission factor (the emission factor was developed without accounting for the factor of two ratio between SO<sub>2</sub> mass and fuel sulfur mass). To the extent that the Draft EIS/EIR already demonstrates potential ambient SO<sub>2</sub> concerns, those concerns will be exacerbated by this underprediction.

J. The Assumption of Gate-Based Power and Air for All Aircraft is Questionable.

The Draft EIS/EIR assumes that 100 percent of air carrier gate power and conditioned air needs will be satisfied by gate-based electrically powered systems as opposed to fossil fuel powered auxiliary power units (APU) or GSE (Draft EIS/EIR, Technical Appendix G, page 10). Experience has shown that even under conditions where gate-based equipment is available, not all airlines or aircraft will utilize it consistently. This seems to be especially true for quick-turnaround airlines such as Southwest. Although the assumption of 100 percent availability and usage affects the no action and action scenarios equally, it is important from an ambient air quality perspective to account for the full range of expected emissions. Without some definitive airport policy that gate-based systems (both power and air) be used and that any on-board APU be shut down until needed for main engine startup, the Draft EIS/EIR would present a more realistic assessment of aircraft emissions if it adjusted the percentage of gate-based system usage to match currently observed use rates at the Airport.

K. APU Emission Factors for SO<sub>2</sub> and PM Not Considered.

APU emission factors for both SO<sub>2</sub> and PM are assumed to be zero. This results from deficiencies in the EDMS model and should be corrected to properly estimate aircraft-related air quality impacts. SO<sub>2</sub> emissions are a function of fuel sulfur content, so that emission rates can be readily calculated and applied. APU PM emission rates can be developed using the same methodology applied to main aircraft engines. The potential impacts of this deficiency would be magnified were the Draft EIS/EIR to properly attribute some fraction of gate power and air support to APU.

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17 for an aggregate LTO). Nevertheless, significant differences would still exist on a mode specific basis.



L. Aircraft Taxi Times are Not Included in the Draft EIS/EIR or Supporting Data.

Aircraft taxi-idle times are not included in the Draft EIS/EIR, its technical appendices or supporting documentation.<sup>19</sup> It can be deduced from the included emissions estimates for aircraft taxiing that those emissions decrease substantially under the action scenarios, but the actual times should be included to allow the public an opportunity to better evaluate their propriety. In addition, the ability of SIMMOD to accurately estimate aircraft taxi times must be demonstrated by comparing SIMMOD predictions for current conditions at the Airport to observed taxi times at the Airport. The issue of aircraft taxi times is critical. The bulk of Aircraft VOC and CO emissions are generated during taxiing. In addition, although NO<sub>x</sub> emission rates are low during taxiing, the amount of time spent in taxi mode results in a significant taxi contribution to overall NO<sub>x</sub> emissions. Most critically, it is expected that virtually all of the aircraft emissions differential between the project baseline and the project alternatives is due to assumed reductions in aircraft idle time. Clearly, it is important that taxi times be accurately modeled. However, sufficient information is not included in the Draft EIS/EIR to determine that accurate modeling was performed.

M. The Project's Conformity Cannot Be Determined from Data and Analysis Contained in the Draft EIS/EIR.

Even without consideration of the various issues noted above, the Draft EIS/EIR presents several air quality concerns relative to the NAAQS/CAAQS under the Preferred Alternative. Although a series of mitigation measures are discussed and preliminary emission reduction estimates presented, these estimates are not documented and therefore, the calculation methodologies cannot be evaluated. The Draft EIS/EIR defers formal review of potential mitigation measures until a Final EIS/EIR is developed (Draft EIS/EIR, page 4-459). Similarly, the Draft EIS/EIR acknowledges the applicability of federal conformity requirements, but defers both the conformity analysis and a proposed conformity determination to the Final EIS/EIR (Draft EIS/EIR, page 4-460). Unfortunately, such an approach makes it impossible to comment constructively on either potential emission mitigation measures or the conformity process, since these processes will be released for comment only after the underlying decision-making has been finalized.

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<sup>19</sup> The Draft EIS/EIR contains references to the development of the taxi/idle times using SIMMOD, but no actual indications of what those times were.

N. The Draft EIS/EIR Fails to Satisfy Applicable Law Because it Does Not Adequately Address the Impact of Toxic Air Pollutants.

1. The Draft EIS/EIR Lacks A Proper Baseline Regarding Air Toxics.

The Draft EIS/EIR does not contain a proper baseline for air toxics emissions from LAX and LAX-related sources. As a result, it does not adequately address the effects of toxic air pollutants upon human health, including the health of the residents of the City of Inglewood.

CEQA requires that an EIR includes a description of the environment in and around the project at the time of the Notice of Preparation. CEQA Guidelines §15125(a). Such a description, or baseline, serves as the basis for the EIR's analysis of the environmental impacts of a project. CEQA also requires that detailed analysis of the potential environmental impacts from each of the projects contained in the aviation alternatives cannot be deferred to subsequent environmental documents. Public Resources Code § 21100; Stanislaus Natural Heritage Project v. County of Stanislaus (1996) 48 Cal.App.4th 182. The Draft EIS/EIR does not contain an adequate basis from which to determine the current impact on human health of air toxics emitted by LAX. "The HHRA did not evaluate impacts of toxic air pollutants associated with current airport operations." Calkins Phase I Report, p. 8. As noted by Mr. Calkins, this oversight means that LAWA does not provide a sufficient baseline from which to draw later conclusions. Without a baseline, LAWA cannot adequately assess the environmental effects of its plans to expand LAX.

2. LAWA Failed To Properly Study Toxic Air Emissions.

The Draft EIS/EIR does not properly study toxic air emissions related to LAX. LAWA's Health Risk and AirToxics evaluation is deficient due to the failure to organize and complete a study, such as the Air Quality and Source Apportionment Study, prior to the release of the Draft EIR/EIS. The Air Quality and Source Apportionment Study are not yet complete. This study will shed important information on the health impacts to the surrounding community as well as identify mitigation measures. It will also determine the contribution of various airport-related activities on selected air pollutant concentrations in relation to those pollutants caused by other, non-airport sources in the surrounding community without the Source Apportionment study. LAWA cannot assess the incremental impact of LAX operations on local air quality. Therefore, LAWA has failed to investigate this area fully before preparing the Draft EIS/EIR. A prudent course of action would be to place any LAX expansion plans on hold until completion of this study. This would allow proper consideration of the serious human health issues addressed in this study. Without this study, the Draft EIS/EIR will not withstand scrutiny under CEQA and NEPA.

3. LAWA's Health Risk Assessment Does Not Adequately Factor Time as a Variable.

The Health Risk Assessment in the Draft EIS/EIR should be extended to consider a longer time period. There do not appear to be any tables or data in the Draft EIS/EIR on cancer and non-

cancer health risks for any year after 2015. However, the operation of the expanded airport during those latter years may well have continuing impacts on the residents of the surrounding communities. Health impacts are often seen in the resident population over a much longer time span than the 15-20 years assessed in the Draft EIS/EIR tables. Other major planning assessments, such as the RTP (2025) and the AQMP (2030), examine impacts of their action over a much longer time frame. Calkins Phase II Report p. 22. The Health Risk Assessment in the Draft EIS/EIR should be extended to conform to this model.

4. LAWA's Study Of Air Pollutants Fails to Consider Relevant Issues.

It is unclear in the Draft EIS/EIR what LAWA's criteria are for determining net change in chronic and acute hazard indices for air pollutants. LAWA does not include the criteria pollutants in this analysis, and this is a critical, indeed fatal, omission. The results of the Source Apportionment study, which was only recently initiated, would have provided valuable input to assessing criteria (NAAQS) as well as various toxic air pollutant impacts on health, if it were available to the LAWA at the time of preparation of the Draft EIS/EIR. The Draft EIS/EIR also appears to ignore the incremental cancer and non-cancer risks to people who do not "receive a certain hazard level criterion." Calkins Phase II Report p. 22. These issues must be addressed and resolved in the Draft EIS/EIR.

V. THE DRAFT EIS/EIR DOES NOT MEET THE REQUIREMENTS FOR ALTERNATIVES ANALYSIS OF EITHER CEQA OR NEPA.

A. The Draft EIS/EIR Alternatives Analysis Does Not Conform to the Requirements of CEQA.

The LAX Master Plan and Draft EIS/EIR fail to conform to CEQA because they do not properly consider alternatives to expansion at LAX. Proposals that entail expansion at other airports instead of LAX should have been analyzed and considered. Instead of considering only three "build" alternatives, each of which called for massive expansion of LAX (in comparison to a flawed No Action/No Project Alternative), LAWA and the FAA should have considered alternatives that included expansion and/or construction at Ontario Airport, El Toro Marine Corps Air Station, Palmdale Airport and March Air Force Base.

In discussing alternative locations for a project, the CEQA Guidelines state, "The key question and first step in analysis is whether any of the significant effects on the project would be avoided or substantially lessened by putting the project in another location." CEQA Guidelines § 15126.6(f)(2). The CEQA Guidelines further state:

"An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or

substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. The range of alternatives required in an EIR is governed by a 'rule of reason' that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project."

CEQA Guidelines §§ 15126.6(a), (f).

According to LAWA, its "preferred" alternative, Alternative "C", causes fewer substantial impacts to the environment surrounding LAX than its other alternatives, "A" and "B." However, the impacts that it does cause are substantial. Moreover, the analysis does not consider whether any of the significant effects of the project would be avoided or substantially lessened by putting the project in another location, as required by CEQA Guidelines, Section 15126.6(f)(2) cited above. The CEQA Guidelines state that alternatives that cause less environmental harm must be considered. Accordingly, inasmuch as the Draft EIS/EIR fails to consider another location, i.e., Ontario, Palmdale, El Toro, etc., the Draft EIS/EIR fails to follow the CEQA Guidelines.

Feasible alternatives to massive expansion of LAX do exist. The Guidelines set forth a number of factors to consider when determining whether or not an alternative is feasible.

"Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries (projects with a regionally significant impact should consider the regional context), and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent)."

CEQA Guidelines section 15126.6.

Considering these feasibility factors in connection with expansion at LAX illustrates why the LAX Master Plan and the Draft EIS/EIR are not consistent with CEQA. LAX is located in the midst of a heavily populated residential area. The area is not well suited for the airport operations that currently exist, let alone massive expansion. LAX is economically viable, but expansion of LAX offers little, if any, additional economic benefit regionally when compared to other expansion scenarios considered by the planning body for Southern California, the Southern California Association of Governments ("SCAG"). "Southern California Aviation Industry Impact Analysis," CIC Research, Inc., July 11, 2000, p. v, attached hereto as Exhibit "C". The LAX Master Plan contemplates massive construction at LAX because, as it stands today, the infrastructure at LAX is not sufficient to handle the expanded operations in the plan. In reality, however, this places LAX in a similar position to that of every other airport in the area. If LAX

is to expand, massive construction will have to take place. The LAX Master Plan is simply not consistent with other plans, in particular SCAG's 2001 Regional Transportation Plan ("RTP") (see below for further discussion) and the 1999 and 2001 Air Quality Maintenance Plan's ("AQMP's"). Lastly, the LAX Master Plan virtually ignores the regional approach to airport expansion, by failing to fully analyze any alternative that does not call for massive expansion at LAX. Given the fact that LAWA owns several of the other airports in the region meets or exceeds the feasibility of expansion of LAX, when considering the factors mandated by CEQA.

B. The Draft EIS/EIR's Alternatives Fail to Satisfy the "Purpose and Need" for the Project.

The mandate to evaluate and compare alternatives is the "heart" of an EIS (CEQ Guidelines, § 1502.14). FAA Order 1050.1D, paragraph 63, implementing NEPA, mandates that an EIS "shall briefly specify the underlying purpose and need to which the agency is responding in proposing the alternatives including the proposed action." The FAA Order further requires that the EIS Alternatives analysis include a rigorous exploration and objective evaluation of all reasonable alternatives. Courts have concluded that to be reasonable, the suggested alternatives must meet the goals of the proposed action.<sup>20</sup>

The Draft EIS/EIR's alternatives analysis fails to meet the stated goals of the Project. The Draft EIS/EIR states that the general "[p]urpose and objectives of the Master Plan are to provide... sufficient airport capacity for passengers and freight in the Los Angeles region to sustain and advance the economic growth and vitality of the Los Angeles region." (Draft EIS/EIR, volume 1, pg. 2-1) More specifically, the Draft EIS/EIR outlines three objectives which the Project needs to satisfy: (1) "to respond to the local and regional demand for air transportation during the period 2000 to 2015, taking into consideration the amount, type, location, and timing of such demand"; (2) "to ensure that new investments in airport capacity are efficient and cost-effective, maximizing the return on existing infrastructure capital"; and (3) "to sustain and advance the international trade component of the regional economy and the international commercial gateway role of Los Angeles."<sup>21</sup>

It is not clear, however, that the proposed runway improvements that form an integral part of Alternative C, the Preferred Alternative, constitute a superior, or even an efficient way to accomplish the Project's stated purposes. For example, all three of the Project's objectives could potentially be, at least partially, achieved through airspace/air traffic modifications, both within the terminal airspace and in the en route system. This alternative is neither acknowledged nor explored in the Draft EIS/EIR. Nevertheless, this conclusion is supported by the fact that the

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<sup>20</sup> See, generally, City of Carmel-By-The-Sea v. United States DOT, 123 F.3d 1142 (1997); National Wildlife Federation v. Federal Energy Regulatory Commission, 912 F.2d 1471 (1990).

<sup>21</sup> Id.

Dual Civet arrival configuration has reduced arrival delay for operations from the east significantly since 1998 and has resulted in an average time-savings of 4.4 minutes per Civet turbojet arrival aircraft. In fact, since the Dual Civet arrival procedures were implemented, there have been no national delay programs set up for the Airport, since delay has not been an issue. However, the Draft EIS/EIR does neither addresses nor incorporates the capacity or delay reduction efficiencies gained through this procedure in any of its modeling.<sup>22</sup>

Moreover, a closer examination of the Master Plan and the Draft EIS/EIR reveals that the Draft EIS/EIR may have ignored relatively inexpensive improvements in air traffic procedures in favor of very expensive, physical changes to the airfield. This is apparently because the Project's true purpose does not include the first two claimed in the Draft EIS/EIR, i.e., the broad ones of providing "sufficient airport capacity for passengers and freight in the Los Angeles region" (Draft EIS/EIR, Volume 1, page 2-1), in an "efficient and cost effective" way (Draft EIS/EIR, page 2-1). Instead, the Project's principal purpose is the narrow and singular one of accommodating "New Large Aircraft" ("NLA") that, with their long haul capabilities, would potentially serve the Airport in order to "sustain and advance the international trade component of the regional economy." (Draft EIS/EIR, page 2-1)<sup>23</sup>

This conclusion is substantiated by the fact that the current aircraft fleet does not require 12,000 feet of runway to take off. Even today's heavy aircraft such as the B-747-400 and the B-777-400 only need 8,000 - 10,000 feet of runway for take-off and landing (under the weather conditions prevailing at the Airport). The Airport's existing runways are 8,295-feet, 10,285-feet, 12,091-feet, and 11,096-feet in length. Thus, even the shortest runway at the Airport can accommodate the heaviest and largest aircraft in the fleet under prevailing circumstances today.

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<sup>22</sup> Where the Master Plan does address air traffic procedures, it is in error. The Master Plan states that the Departure Sequencing Program (DSP), a program that provides the capability to sequence departures from Los Angeles basin airports, would enhance capacity at the Airport. (Master Plan, § 2.6.1.3, page II-2.137) However, the DSP program has been cancelled by the FAA due to a lack of benefit. Essentially, the Southern California TRACON consolidation effort occurred many years ago and the references to it in the Master Plan and the Draft EIS/EIR are outdated. Many innovations and changes in airspace and procedures at the TRACON over the past few years have occurred, and none are referenced or adequately considered in the Draft EIS/EIR. Basically, the Draft EIS/EIR does not address the changes in airspace design or the new routes that have been developed as a result of airspace enhancements in Southern California.

<sup>23</sup> The Draft EIS/EIR comes close to admitting as much: "Development of NLA aircraft is driven by increasing demand and constrained international gateway airports around the world, including LAX ... Development of the NLA will allow these airports to continue to meet the growing demand for travel between primary trading partners. As one of the three major (and busiest) gateway airports in the nation, LAX would be one of the first airports to be served by NLA." (Draft EIS/EIR, page 2-11)

The result of the Draft EIS/EIR's failure to acknowledge the Project's primary purpose, i.e., to increase the proportion of super long-haul aircraft in the fleet, is a concomitant failure to analyze the full range and magnitude of environmental impacts that may arise from the desired change in fleet mix. While it is, as yet, early in the NLA development process, some technical facts about the aircraft are already known, sufficient to make at least some educated projections concerning its impact. For instance, ascertaining the projected climb rate will enable an estimate of whether the NLA can meet current airport noise abatement operational requirements; or whether those will have to be altered; or whether the NLA will, ultimately, overfly noise sensitive communities at lower (or higher) altitudes, resulting in higher (or lower) noise levels over those communities. Similarly, preliminary data concerning engine type and emissions characteristics would enable at least a preliminary analysis of the air quality impact of the NLA, as well as the GSE needed to support it, if different from those categories already in use. Finally, the Draft EIS/EIR should have included the capacity/delay impacts from the increased use of NLA. As the Draft EIS/EIR fails to model ground operations in detail, the delay impacts that may result are not considered in developing an accurate analysis of arrival and departure flows and the congestion which may ensue even after Project implementation.

In summary, because the alternatives analysis is the "heart" of the NEPA process; because the Draft EIS/EIR fails to consider, or analyze, the impacts of eminently reasonable alternatives such as airspace changes to meet the Project's stated purposes; because Alternative C does not alone meet the Project's stated purposes; and because the most significant result of implementing Alternative C, the increased capacity to accommodate NLAs, remains unanalyzed from an environmental perspective, the Draft EIS/EIR's alternatives analysis is seriously flawed.

**VI. THE LAX MASTER PLAN AND DRAFT EIS/EIR FAIL TO SATISFY APPLICABLE LAW BECAUSE THEY DO NOT CONFORM TO OTHER RELEVANT PLANS.**

Federal regulations require that all airport development conform to local plans. The FAA's Airport Environmental Handbook clearly states that any airport plan must conform to the local air emissions plans:

"Section 176(c) of the Clean Air Act Amendments of 1977 states in part that no Federal agency shall engage in, support in any way or provide financial assistance for, license or permit, or approve any activity which does not conform to a State Implementation Plan after it has been approved or promulgated under section 110 of that Act. It is FAA's responsibility to assure that Federal airport actions conform to state Plans for controlling area wide air pollution impacts."

Airport Environmental Handbook, Chapter 5, p. 12. In addition, the Airport Environmental Handbook states that the 1982 Airport Act requires that Airport Improvement Program applications for projects involving airport location, runway location, or a major runway extension shall not be approved unless the governor of the state in which the project is located certifies that there is a “reasonable assurance” that the project will be located, designed, constructed, and operated in compliance with applicable air and water quality standards. Airport Environmental Handbook Chapter 5 p. 14. Finally, the FAA’s Airport Environmental Handbook states that all airport development must conform to local plans:

“For all airport development there shall be evidence to support the following Airport Improvement Program grant assurances as required by the 1982 Airport Act.

- (a) The project is reasonably consistent with existing plans of public agencies for development of the area (section 509(b)(1)(A));
- (b) Fair consideration has been given to the interest of communities in or near the project location (section 509(b)(4)); ...
- (d) Appropriate air and water quality certificates have been or will be obtained for projects involving airport location, runway location, or a major runway extension (section 509(b)(7)).”

Airport Environmental Handbook, Chapter 9, p. 3.

The LAX Master Plan and Draft EIS/EIR fail to conform to two key local plans. How the Master Plan and EIS/EIR fail to conform is discussed in the two paragraphs that immediately follow. However, it should be noted as an initial point that since the Master Plan and EIS/EIR fail to conform to two key local plans, they violate Section (a) referred to immediately above.

First, the LAX Master plan fails to conform to the relevant Air Quality Maintenance Plan. Mr. David Calkins, an expert in air emissions planning and compliance issues, reviewed the LAX Master Plan and Draft EIS/EIR. His reports are attached hereto as Exhibits “E” and “F”. In his report, Mr. Calkins states, “Review of Chapter 4.6 found several inconsistencies in LAWA’s reference to the conformity and SIP planning process.” Calkins Phase I Report, p. 11.

Second, Mr. Calkins has found that the Draft EIS/EIR fails to conform to the Regional Transportation Plan (“RTP”) in at least eight different ways. These differences are discussed in detail below. In addition to the Federal law requirements discussed above, under CEQA an EIR must discuss any inconsistencies between the proposed project and applicable general plans and



regional plans. CEQA Guidelines § 15125(d). The Draft EIS/EIR fails to meet these requirements.

A. The LAX Master Plan Fails to Conform to the Air Quality Maintenance Plan.

The LAX Master Plan does not conform to the local air pollution reduction plan. Southern California is designated a “non-attainment area”<sup>24</sup> under the 1990 Clean Air Act. Therefore all major projects must be constructed with assurance to the Federal Government that the project fits into the current air pollution reduction plan, known as the Air Quality Maintenance Plan (“AQMP”). See Calkins Phase II Report pp. 11-12. Mr. Calkins has determined that the LAX Master Plan Draft EIS/EIR fails to conform to the relevant AQMP in regards to the following:

1. Emission Inventory - the 2001 AQMP, currently in development, will require changes to the Draft EIS/EIR’s emission inventory.
2. Mitigation Measures - LAWA’s failure to commit to specific mitigation measures in the Draft EIS/EIR inhibits development of the 2001 AQMP.
3. Baseline Issues - use of the “adjusted” environmental baseline for off-airport traffic impacts does not allow comparison of the Draft EIS/EIR alternatives with current conditions, but actually compares the alternatives to a future condition.
4. Aircraft Mix - the Draft EIS/EIR assumes an aircraft mix of mostly jumbo airliners, in conflict with the adopted 2001 RTP calculations, which will cause differences in projected emissions between the Draft EIS/EIR and the AQMP.
5. Stationary Source Emissions - LAWA’s alternatives do not take into account the increase in nearby, off-airport stationary source emissions, despite LAWA’s assertions to the contrary; thus, it cannot conform to the regional plan.
6. Ground Support Equipment - LAWA failed to follow the California Air Resources Board’s (“CARB”) latest off-road emission model when concluding that emissions for future Ground Support Equipment would be zero.

Calkins Phase II Report at 13-14. These are serious conformance problems that must be first detailed, then remedied by LAWA before any action can be taken on the LAX Master Plan or its Draft EIS/EIR.

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<sup>24</sup> A “non-attainment area” has monitored air pollution levels in excess of the National Ambient Air Quality Standards (“NAAQS”).

B. The LAX Master Plan Fails to Conform to SCAG's 2001 Regional Transportation Plan.

The LAX Master Plan does not conform to the local Regional Transportation Plan ("RTP"). The Southern California Association of Governments ("SCAG") is the main planning body for Southern California. At least every three years, SCAG adopts a RTP for the area, which sets forth its plan for the foreseeable future, usually 25 years. SCAG adopted a new RTP in April 2001. This RTP replaced SCAG's previous plan, which was adopted in 1998. The Final RTP has not yet been formally released, but its contents in most areas relevant to LAX are known.

As discussed in the Calkins Phase II Report, attached as Exhibit F, the LAX Master Plan Draft EIS/EIR fails to conform to the RTP as follows:

1. Projected Passenger Load - the LAX Master Plan Draft EIS/EIR projects LAX handling over 92 million annual passengers ("MAP") in 2015; the RTP limits LAX to handling what is considered to be its current physical capacity of 78 MAP.
2. On-Road Emissions Factors - The Draft EIS/EIR utilizes EMFAC2000, but the RTP uses emission factors based upon EMFAC7G. This inconsistency makes it quite difficult to compare the air quality impacts of the Draft EIS/EIR upon the RTP.
3. Different Model Years - The Draft EIS/EIR models years 2005 and 2015, but the RTP models 2025 as its model year.
4. Market Incentives - There are significant differences between the two plans in choice of market incentives, which causes potential conflicts between the two plans.
5. Aircraft and Passenger Characteristics - These differ in regards to projected aircraft types and passenger growth during the relevant periods.
6. Cargo Handling Projections - The Draft EIS/EIR projects much larger cargo handling for LAX than that planned for in the RTP.
7. High Speed Rail Projections - The Draft EIS/EIR rejects this project as too speculative, but the RTP bases projections on passenger and cargo demand in part upon the inclusion of this transportation mode.
8. Funding Projections - The RTP does not include the Ring Road, 105 Freeway extension, or 405 Freeway Connector Projects in its funding projections. The

Draft EIS/EIR plans for funding of all these projects, presumably from Federal Highway funds.

Calkins Phase II Report at pp. 9-10.

LAWA's failure to even discuss these issues is a serious deficiency in the Draft EIS/EIR. The Draft EIS/EIR cannot be acted upon until it is modified to conform to the RTP, assuming that is possible to do without simply scratching the entire analysis and starting over. If it is possible to salvage some small part of the plan, such as the mitigation measures, then the Draft EIS/EIR must be reissued for public comment.<sup>25</sup>

**VII. THE DRAFT EIS/EIR DOES NOT ADEQUATELY SPECIFY MITIGATION MEASURES OR METHODS TO ENFORCE THEM.**

CEQA requires that agencies identify the environmental impacts of a project, and implement mitigation measures to lessen the adverse environmental impacts. (CEQA Guidelines §15002 (a)(3)). However, the Draft EIS/EIR fails to comply with CEQA by (1) failing to provide a complete list of mitigation measures, and (2) failing to specify, at a minimum, a Draft Mitigation Monitoring Program to inform the public of how the project proponents intend to ensure the implementation of mitigation measures.

**A. The Draft EIS/EIR Delays Disclosure of the Full List of Mitigation Measures Until the Final EIS/EIR.**

CEQA Guidelines §15126.4(a)(1)(B) mandates that the “[f]ormulation of mitigation measures should not be deferred until some further time.” While the Draft EIS/EIR acknowledges the existence of significant unmitigable impacts, it also states that, “A final package of design features, Master Plan Commitments, and Mitigation Measures will be developed ... The resulting Environmental Action Plan will be published in the Final EIS/EIR.” (Draft EIS/EIR, Executive Summary, pg. ES-30) By deferring to the Final EIS/EIR to reveal the mitigation measures, the public's opportunity comment will have been attenuated.

**B. The Draft EIS/EIR Fails to Provide a Draft Mitigation Monitoring Program.**

California Public Resources Code §21081.6 requires that a public agency “adopt a reporting or monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment. The reporting or monitoring program shall be designed to ensure compliance during project

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<sup>25</sup> When new significant information becomes available after the public review period, Public Resources Code Section 21092.1 and CEQA Guidelines Section 15088.5 required re-circulation of an EIR prior to certification.

implementation.” (Cal. Pub. Resources Code §21081.6 (a)(1)). If an EIR “identifies one or more significant environmental effects of the project,” CEQA Guidelines §15091(a) requires an agency to “make one or more written findings for each of those significant effects, accompanied by a brief explanation of the rationale for each finding.” With these findings, the CEQA Guidelines mandate that “the agency shall also adopt a program for reporting on or monitoring the changes which it has either required in the project or made a condition of approval to avoid or substantially lessen significant environmental effects. These measures must be fully enforceable through permit conditions, agreements, or other measures.” (CEQA §15091(d))

The Draft EIS/EIR violates CEQA Guidelines §1509(d) and California Public Resources Code § 21081.6 in that it fails to set forth a program that monitors or reports on each mitigation measure. Although the Draft EIS/EIR cites some mitigation measures to combat the environmental impacts of the Project, it makes no mention of the “permit conditions, agreements, or other measures” (CEQA Guidelines § 15091(d)) which would ensure compliance with mitigation measures. In other words, it does not specify the steps necessary to ensure compliance, the responsible party to ensure compliance, or the resulting consequences should compliance not occur.

#### **VIII. THE UNRELATED ISSUE OF “SAFETY” SHOULD NOT BE USED AS A SMOKE SCREEN TO PUSH THE CAPACITY-DRIVEN DRAFT EIS/EIR FORWARD.**

In recent public statements, the FAA and LAWA have introduced the notion that because of its high number of runway incursions, the Airport is unsafe, and that the Project’s “improvements” are critical to remedying the adverse safety conditions.

Contrary to the FAA’s contention, however, runway incursions are largely a function of pilot or air traffic controller error, not airport layout and design.<sup>26</sup>

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<sup>26</sup> A pilot might enter a runway without proper authorization or clearance; a pilot is unfamiliar with an airport, does not hear an instruction, or fails to acknowledge an instruction to hold short of an active runway; a pilot, when approaching an active runway, crosses the hold line for that runway; a controller may clear an aircraft onto an active runway without ensuring that there are no other aircraft operating on that runway; the controller may fail to coordinate an aircraft crossing a runway with the controller who has the responsibility for approving all operations on that runway; a controller may clear an aircraft to cross a runway and the pilot may take an excessive amount of time crossing and may interfere with another aircraft; and the controller may fail to exercise the proper oversight of the operation and allow two aircraft to occupy an active runway resulting in a runway incursion.

In fact, the Airport can eliminate runway incursions only if it builds runways with no entrances and no exits. However, simple solutions such as enhanced marking and lighting for runways, increased awareness and training for pilots and controllers, improvements in communications and procedures, and resolving management issues at the FAA<sup>27</sup> are all basic and available measures that should be implemented at the Airport. In addition, affordable incursion-reducing technologies currently available to the Airport such as the Airport Movement Area Safety System (presently in use at the San Francisco International Airport), which uses radar to alert controllers to potential collisions, would minimize the problem as well.<sup>28</sup> In fact, even the FAA has even pressed the need for instituting technological improvements at airports to combat the runway incursion issue.<sup>29</sup>

While recent incidents have made runway incursions a “hot button” in the eyes of the public, Congress, and aviation organizations, this recently surfaced “safety” issue cannot serve as justification for a project which otherwise fails to meet environmental standards.

## **IX. THE DRAFT EIS/EIR IS INSUFFICIENT AS A MATTER OF LAW BECAUSE IT DOES NOT SATISFY ENVIRONMENTAL JUSTICE REQUIREMENTS.**

### **A. The Master Plan and EIS/EIR Unfairly Burden the Minority and Lower-Income Communities Surrounding LAX in Violation of Federal and California Law.**

Federal law requires that each federal agency “make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse health or environmental effects of its programs, policies, and activities on minority populations and low-income populations.” Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations” (Executive Order 12898, February 11, 1994). Environmental Justice is also a requirement of California law. Cal. Pub. Res. Code §72000-72001. Under California law Environmental Justice means “the fair treatment of all people of all

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<sup>27</sup> Transportation Department Inspector General Kenneth M. Mead recently told a House subcommittee that the “FAA’s director of runway safety has little authority over FAA employees who work on runway safety projects. Result: Almost every FAA runway safety project runs years late at more than double the anticipated cost, often failing to meet original expectations.” The Washington Post Company, “Runway Alert”, page A22, July 7, 2001.

<sup>28</sup> “It’s the first surface detection equipment that really gives an alert to the controller and allows the controller to prevent a collision.” CNN, “Close Calls on Runways Alarm Aviation Experts”, June 27, 2001.

<sup>29</sup> The Director of the FAA’s Runway Safety Office, Mr. Bill Davis, expressed that “he needs additional authority to coordinate and speed up technological improvements.” The Washington Post Company, “Runway Alert”, page A22, July 7, 2001.

racess, cultures, and incomes with respect to the development, adoption, implementation and enforcement of environmental laws, regulations, and policies.” Cal. Pub. Res. Code § 72001. The California Environmental Protection Agency is charged with the responsibility to “[P]romote enforcement of all health and environmental statues within its jurisdiction in an manner that ensures the fair treatment of people of all races, cultures, and income levels, including minority populations and low-income populations of the state.” Cal. Pub. Res. Code §72000(b). These requirements imposed on LAWA the responsibility to consider the impacts of LAX expansion on lower income and minority communities.

Several of the communities surrounding LAX, and to the east of LAX, in particular, contain predominantly minority populations and lower income populations. The Draft EIS/EIR contains a demographic analysis of the communities surrounding LAX that will be impacted by the LAX Master Plan. LAWA analyzed seventy census tracts, comprising parts of the City of Los Angeles, El Segundo, Inglewood, Hawthorne, and unincorporated areas of Los Angeles County. Draft EIS/EIR, Appendix F, Environmental Justice Technical Report, pp. 5-6. Fifty-four of the seventy census tracts within the study area are considered to be predominantly minority. A tract is so defined when more than fifty percent of the population is minority. Id. at 10.

Similarly, thirty-three of the seventy census tracts within the Impact Study Area are considered to be low-income. Low-income is defined as having more than 15% of the resident population below the poverty level. Id. Thirty-two of the thirty-three census tracts identified as low-income are predominantly minority. Id. at 15.

LAWA’s analysis shows that the distribution of minority and non-minority populations may cause differential impacts between these two groups:

“This data reveals a readily discernible pattern of minority and low-income communities in the areas surrounding LAX. While the areas to the north and south of LAX are predominantly non-minority, the area east of I-405 within the study area is predominantly minority. Furthermore, within these areas east of I-405 minority populations are heavily concentrated: 39 of the 70 minority census tracts with the study area have minority percentages greater than 90 percent. The uneven distribution of minorities throughout the study area, as evidenced by the data showing that most census tracts have less than 20 percent or greater than 90 percent minorities, increased the potential for differential impacts on minorities and non-minorities.”

Id.

Minority and low-income populations are and have been disproportionately burdened by the impacts of LAX long before the massive expansion planned under the LAX Master Plan:

“[M]inority and low-income residential communities within the study area are currently concentrated east of LAX, separated from the airport by predominantly commercial and industrial airport-related land uses and the I-405 freeway. In contrast, residential areas of El Segundo and Playa Del Rey/Westchester, to the immediate north and south of the airport, do not have high concentrations of minority and low-income populations. LAX has always had an east-west runway configuration to take advantage of the prevailing wind pattern and to maximize efficient use of airspace. The combination of the long-standing runway orientation and more recent changes in the demographic patterns in the area around LAX means that minority and low-income residential communities are directly under the primary arrival flight path. The primary impacts on minority and low-income communities from current airport operations are therefore most associated with aircraft noise and air emissions. While residential areas of El Segundo and Playa Del Rey/Westchester directly adjacent to the airport are also exposed to high levels of side-line noise, the areas of exposure are much smaller in comparison to the noise-impacted residential communities to the east.”

Id. at 16.

Inglewood is one of the predominantly minority communities located east of LAX which receives a disproportionate share of the impacts of LAX. Inglewood’s population is 46.4% African-American, 46% Hispanic, 4.1% White, 1.6% Multi-racial, 1.1% Asian, 0.3% Pacific Islander, 0.2% Native American, and 0.2% Other. California Department of Finance, Demographic Research Unit, California State Census Data Center, Census 2000, “Table Two, Population by Race/Ethnicity, Incorporated Cities by County, p. 5, attached hereto as Exhibit “A”. In addition, a large percentage of the low-income census tracts in LAWA’s study area are located in Inglewood. Draft EIS/EIR, Appendix F, Environmental Justice Technical Report, Figure 3, “Low-Income Census Tracts Within the Study Area.”

LAWA's plan for massive expansion of LAX unfairly burdens the minority and lower-income communities surrounding LAX. LAWA failed to consider alternatives that would have shifted burdens away from minority or low-income populations, or that would at least have distributed the burdens and benefits of expansion more equitably. Instead of planning for massive expansion of LAX, LAWA should have considered alternatives to massive expansion of LAX.

LAWA admits that its Master Plan for expansion of LAX imposes a disproportionate burden of noise impacts upon persons of color and/or low income, and that it does not know if the Plan also imposes a disproportionate burden of toxic air emissions on those same groups. LAX Master Plan Draft EIS/EIR, Chapter 4.4.3 Environmental Justice, p. 4-395. As discussed in the report of Dale Hattis, PhD., attached hereto as Exhibit "B," if LAWA had chosen to seriously consider alternatives that did not include massive expansion at LAX, LAWA would have been able to consider alternatives that would reduce the human health risk overall and spread the environmental burden more equitably among the general population of Southern California. Hattis Report p. 3. Dr. Hattis observes:

"The framing of the options for analysis in the current draft is exclusively focused on engineering changes. Future "demand" for air services is estimated from a single set of assumptions about future population and economic growth in Southern California, and future national average costs of air travel in revenue per seat-mile, and then "build" options are designed to meet this projected "demand" either in full or in part. There is no apparent recognition or analysis of the possibility that at least some of the growth in "demand" for air services could be shifted to outlying airports downwind of major population concentrations (or out of the South Coast Air Basin entirely, in the case of connecting flights) by changes in economic pricing such as airport user fees. Such economic measures might not completely avoid the need to expand capacity at LAX, but they seem worthy of explicit consideration at least as supplements to the existing engineering options..."

Hattis Report p. 3.

For these reasons, LAWA should have considered alternatives to massive expansion of LAX. Dr. Hattis notes three specific reasons why such an analysis of alternatives should take place: (1) User fees, in addition to re-directing demand, could be used for mitigation measures; (2) This approach would allow LAWA to slow growth at LAX, which would allow expansion at a much slower pace, which, in turn, will reduce congestion and, therefore, the significant impacts on the environment from construction; and (3) without such fees the real beneficiaries could be the airlines rather than the flying public. Hattis Report p. 3. LAWA should immediately and seriously consider other alternatives and analyze them to the same degree that it analyzed Alternatives A, B, and C in its current Master Plan. Anything less fails to adequately address Environmental Justice, as required by law.



B. The EIS/EIR Fails to Disclose LAWA's Economic Gain from the Proposed Expansion at the Expense of Surrounding Minority and Low Income Populations.

The LAX Master Plan Draft EIS/EIR fails to disclose the increased revenues that LAWA and the City of Los Angeles expect from the massive expansion plan, or that it comes at the expense of local low income and minority communities. As Dr. Hattis notes:

"[T]here are some glaring omissions of important effects from the economic impact analysis. Economic impacts are assessed in terms of changes in employment, and overall economic activity, for the South Coast as a whole, Los Angeles County, and the City of Los Angeles. Changes in on-airport employment are also described, as are the expected capital costs of the various policy options. Unaccountably, there does not seem to be any readily locatable presentation of expected effects on operating revenues and costs for the major economic actors that are directly affected by the proposed project LAWA itself, the City of Los Angeles as owner and taxing authority, and the airlines. Projections of these expected impacts must exist. Moreover, they are highly relevant to judgments of the equity (fairness) of the distribution of expected good and bad effects on the different policy options for different groups, including an expanded Environmental Justice analysis."

Hattis Report p. 6.

LAWA and the City of Los Angeles stand to reap tremendous financial benefits from LAX expansion. Since these benefits are not specified, the comparative benefit to local low income and minority communities--or the lack thereof--cannot be and has not been evaluated. LAWA must disclose these figures for a meaningful analysis of the relative benefits and burdens to be considered.

C. The Master Plan Creates a Disproportionate And Unfair Distribution of Incremental and Total Direct Job Impacts.

The LAX Master Plan does not fairly distribute new jobs among local minority and low-income communities. According to LAWA's own economic analysis, cities in the "Primary LAX Area" (El Segundo, Hawthorne, Inglewood, Del Aire and Lennox) receive only 3.8% of the incremental "direct jobs" at LAX due to expansion. LAX Master Plan Draft EIS/EIR, Economic Impacts Technical Report, Table 46, "Distribution of Incremental Direct Job Impacts of the LAX Master Plan Alternatives, By County and City, 1996-2015", p. 95. This same area also receives only 3.4% of the total direct job impacts from LAX in 2015. LAX Master Plan Draft EIS/EIR, Economic Impacts Technical Report, Table 47, "Distribution

of Total Direct Job Impacts of the LAX Master Plan Alternatives, By County and City, 2015," p. 96. Compared to the year 1996, the City of Inglewood shows a net increase of only 489 jobs in "LAX- Related Employment" if LAWA adopts Alternative C. LAX Master Plan Draft EIS/EIR, Economic Impacts Technical Report, Table 48, "LAX-Related Employment in the South Bay and North Bay Cities and Communities For the LAX Master Plan EIS/EIR Alternatives, 1996, 2005, and 2015," p. 97. Conversely, the environmental burdens of LAX fall most directly upon those living in its immediate vicinity, like Inglewood. LAWA should make firm commitments to take all reasonably practical steps to ensure that a proportionate share of the economic benefits of LAX also reach those communities. Under the LAX Master Plan, according to LAWA's own jobs projections, that does not occur.

D. The Economic Benefits Of The LAX Master Plan Are Not Proportionate to the Environmental Burdens it Imposes on Surrounding Minority and Low Income Communities.

LAWA should share the economic benefits that flow from LAX with the surrounding communities to the same degree that the environmental burdens are borne by those communities. Offsetting environmental burdens with economic benefits is an important part of Environmental Justice: "In making determinations regarding disproportionately high and adverse effects ... mitigation and enhancement measures ... and all offsetting benefits to the affected minority may be taken into account." Department of Transportation Order 5610.2 - Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, April 15, 1997. Firm commitments in this regard should be made by LAWA in the Draft EIS/EIR. For example, regarding increased cargo capacity at LAX, the Draft EIS/EIR states:

"It is possible that some of the increased demand [for cargo handling] could be met nearby in Inglewood where the City's General Plan indicates a priority for expanding existing industrial firms and providing increased employment opportunities while mitigating residential areas significantly impacted by aircraft noise."

Draft EIS/EIR "Induced Socio-Economic Impacts," Section 4.5, page 4-446.

Although it acknowledges the potential symbiosis of cargo expansion for LAWA and Inglewood, the Draft EIS/EIR fails to incorporate a reasonable and proportionate distribution of the economic benefits of LAX expansion. If the burdens of LAX expansion are to be thrust upon the City of Inglewood, fair treatment requires that efforts be made to direct potential benefits to the communities impacted by those effects--effects that are significant and cannot and will not be mitigated. The proposed redevelopment along Century Boulevard is a good first step in this direction; however, more needs to be done. LAWA should make concrete commitments to address this issue, and its failure to do so renders the EIS/EIR insufficient as a matter of law.

**X. THE DRAFT EIS/EIR FAILS TO SATISFY APPLICABLE LAW BECAUSE IT IMPROPERLY MEASURES HUMAN HEALTH RISKS.**

**A. LAWA's Study does not Adequately Factor Time as a Variable.**

LAWA analyzes environmental health impacts for two years - 2005 and 2015; however, the environmental health impacts will occur over time. Accordingly, LAWA's analysis inaccurately minimizes certain risks and fails to consider numerous cumulative impacts.

Further, as noted by Dr. Hattis, "2005 does not represent even the peak year for construction-related impacts." Hattis Report p.4. In fact, emissions of particulate matter in year 2004 are expected to be more than twice those in 2005 (approximately 44,000 lbs/day versus 19,000 lbs/day). For a proper analysis, LAWA should "analyze and express impacts in terms of both peak-year and integrated bottom-line measures of effect over a reasonably foreseeable extended time over which the facilities will be built and operated." Hattis Report p. 4.

**B. The Draft EIS/EIR Fails to Adequately Delineate Health Risks.**

The increased health risks associated with the LAX Master Plan should be set forth with more clarity and specificity in the Draft EIS/EIR. Impacts are expressed primarily in terms of "significance" of effects for the most exposed individual, or, when considering certain carcinogenic effects, in terms of the areas or numbers of people exposed to concentrations expected to exceed a 1/100,000 lifetime incremental cancer risk criterion or an unusual criterion for non-cancer effects of a hazard index of 5. Hattis Report p. 4. However, the usual criterion used in many impact assessments under other environmental statutes, including Superfund, is a hazard index of 1.5.<sup>30</sup> Id. Dr. Hattis notes:

"These ways of expressing health impact results are of some relevance because they help the audience judge the fairness of the burden of extra risk imposed for residents of the areas most affected by the project options. However, exclusive definition of impacts in terms of the area or number of people who receive an increment of risk or (for non-carcinogenic agents) exposure to pollutants from LAX-related sources alone that is deemed to exceed a single bright line of 'significance' ignores the incremental cancer and non-cancer risks to people who do not happen to be moved across such a criterion level. Further, these ways of summarizing impacts can not, by themselves, give decision-makers

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<sup>30</sup> The difference between a hazard index of 1 and 5 is fivefold in the toxicity-weighted concentrations of the pollutants covered by the index in terms of risk. The fraction of people who suffer irritation and other non-cancer effects is likely to be larger than fivefold, depending on the shape of the dose response relationship.

and the public a sufficient description of the overall health impacts to arrive at a reasoned judgment of whether the mix of economic, human health, and environmental impacts of the proposed "build" option is more desirable overall than the comparable impacts of other options. The current analysis of economic activity describes projected aggregate changes in jobs and overall economic activity for the City of Los Angeles, Los Angeles County, and the whole Southern California area. To be comparable with these aggregate economic impacts, aggregate measures of health impacts must be created and the current artificial limitation of the study area for quantifying air pollution impacts must be transcended."

Hattis Report pp. 4-5.

Decision-makers and the public should be informed of the differences among options in overall cases of cancer that are expected to arise over the lifetimes of the individuals exposed over particular periods of construction and operation of the proposed facilities. This should be done for the entire geographic area of the South Coast Air Basin that receives incremental changes in exposures. Hattis Report p. 5. Human health impacts can and should be expressed in aggregate incremental cancer cases, aggregate incremental deaths, aggregate incremental hospitalizations and aggregate incremental asthma effects for the entire Los Angeles basin associated with the LAX Master Plan. Hattis Report p. 5. These calculations are certainly feasible and would inform the decision makers and the public of the true human health effects of the project. Until this is done, the document is deficient in addressing this topic.

C. The Draft EIS/EIR Fails to Consider Health Risks on a Regional Basis.

The Draft EIS/EIR's human health risk assessment should study risks created by the Master Plan in the entire Southern California region, not simply in those areas immediately surrounding LAX. Failure to do so conceals the advantages in terms of health risks from expanding other airports instead of LAX. As Dr. Hattis notes:

"Were the analysis expanded to include some options shifting additional air service to outlying airports (as recommended above), continued use of the more localized health impact analysis method would cause analysts to miss important benefits that would accrue from placing emissions downwind rather than upwind of the major population centers of the Los Angeles area."

Hattis Report p. 5. Restricting the environmental impact analyses to the immediate LAX area and the options considered only to expansion of LAX prevents considering the relative burdens of LAX expansion on minority and lower-income communities versus expansion of air service at other airports. The City of Inglewood appears to be substantially included in the

existing boundaries of the air dispersion modeling study, but it is important to have impacts broken down by various political jurisdictions covering the most affected communities. Hattis Report pp. 5-6. LAWA's current approach on this risk assessment fails to fully capture all relevant data.

**D. LAWA Failed to Conduct a Sensitivity Analysis of Its Human Health Risk Assessment.**

LAWA failed to conduct a sensitivity analysis of its health risk assessment. This failure means that the health risk assessment does not attempt to assess and communicate uncertainties in a quantitative way. Whether through sensitivity analysis, or use of a more sophisticated model, such analysis can be and is used to inform interested parties of the uncertainties in key results. Hattis Report p. 6. One aspect of the modeling that needs such analysis is the assumed behavior responses of airlines to increasing delays as the intensity of usage of airport facilities increases. Id. This variable affects "capacity" calculations, emissions estimates and economic results. LAWA should perform such sensitivity analysis of its methods and conclusions.

**XI. CONCLUSIONS.**

Based on the above analyses, the Draft EIS/EIR does not serve its most fundamental purpose as an “environmental alarm bell” to “alert the public and responsible officials to environmental changes before they have reached ecological points of no return.” (See, e.g., County of Inyo v. Yorty, 32 Cal.App.3d 795, 810 (1993).) Among other things, the varying baselines, selectively applied to areas of potential impact so as to artificially diminish the apparent impacts of the Project; and the lack of consideration of imminently reasonable alternatives, including air traffic alternatives, to the expenditure of billions of dollars in what are ultimately only marginally effective airfield improvements, require substantial analytic revisions to the Draft EIS/EIR. Absent further revision of the analyses set forth in the Draft EIS/EIR as set forth above (Center Sensible Planning, Inc. v. Board of Supervisors, 122 Cal.App.3d 813, 822 (1981)), the public will have been denied its statutorily mandated opportunity to test, assess and evaluate the new data and conclusions contained in the Draft EIS/EIR, and to make informed judgments as to their validity, in direct contravention of CEQA requirements.

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April 18, 2014

Via E-Mail and FedEx

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Environmental and Land Use Planning  
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Re: Draft Environmental Impact Report for Midfield Satellite Concourse

Dear Ms. Trifiletti:

We submit this letter on behalf of our client, the City of El Segundo, to comment on the Draft Environmental Impact Report ("DEIR") recently released by Los Angeles World Airports ("LAWA") for the Midfield Satellite Concourse ("MSC," or "Project") at Los Angeles International Airport ("LAX"). As LAWA is aware, the City of El Segundo ("City") has been an active participant in the planning process for this Project and other construction at the airport. In the spirit of continued cooperation, we submit this comment letter on behalf of the City.

The City is, on the whole, pleased with LAWA's response to the City's concerns in its March 11, 2013 comment letter on the Notice of Preparation ("NOP"). *See* March 11, 2013 letter, attached. For instance, the City expressed concern over the NOP's statement that construction staging may occur on the southwest side of the airport along the east side of Pershing Drive, just north of Imperial. *See id.* at 3. The DEIR states that construction staging will no longer occur at this location. *See* DEIR at 4-315.

The NOP also described structures and land uses that would be decommissioned or relocated for the construction of the Project ("enabling components"), but did not fully explain where the relocated components would be moved. *See* March 11, 2013 letter at 2. The DEIR provides this information for most of the enabling components. *See* DEIR at 2-41 to 2-43. However, the DEIR is still unclear about the disposition of the eight remain

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overnight (“RON”) spots that will be “eliminated” for the Project. *See id.* Because the DEIR does not indicate a new location, the City assumes that the “other spaces on-Airport” that would compensate for the eight RON spots are either existing spots or spots for which LAWA has already approved construction with appropriate associated CEQA analysis. The Final EIR for the Project should make this clear.

The City is particularly encouraged by LAWA’s commitment in the DEIR to continue operating beyond 2020 under the cap of 153 gates. *See id.* at 4-16, fn. 10; *see also* “MSC North FAQs,” available at <http://www.lawa.org/MSCNorth/faq.aspx> (LAX to comply with 2006 Stipulated Settlement at all times during buildout of MSC North and MSC Program). The City is similarly encouraged by LAWA’s clear commitment to decommission all 18 Western Remote Gates before the MSC is fully built out in 2025. *See* DEIR at 4-16, fn. 10. These commitments serve to reassure the City that the net effect of the Project and other terminal construction will be a “reduction in the total airside gate frontage available for aircraft gates and in the number of available aircraft gates . . . .” LAX Master Plan Final EIS/EIR at 3-75.

As part of LAWA’s compliance with the gate cap beyond 2020, the City looks forward to continued authority to periodically tour the airport and count passenger gates. These counts have proved exceedingly helpful to the City and have required only a limited amount of effort by LAWA (i.e., provision of a vehicle and driver for approximately an hour for each visit). Additionally, during buildout of the Project, decommissioning of the Western Remote Gates, and construction of terminal projects described in Appendix G to the DEIR, the City strongly encourages LAWA to document the airport’s gate inventory and configuration in quarterly reports published to LAWA’s website. Ensuring that the gate count complies with the cap and LAWA’s commitments in the DEIR is particularly important given the description of MSC North as a “modular” terminal that could accommodate an unspecified number of narrow-body aircraft. *See* DEIR at 2-10; *id.* at 2-15.

As always, the City asks that truck trips for the Project avoid El Segundo when possible. The DEIR acknowledges there will be a significant cumulatively considerable peak construction traffic impact at Imperial Highway and Main Street, on El Segundo’s northern border. *See id.* at 4-329. The DEIR states this impact will be unavoidable because “[t]o mitigate the anticipated impact[], the westbound direction of Imperial Highway would need to be widened to provide one additional through lane . . . [which is] infeasible due to right-of-way constraints along Imperial Highway . . . .” *Id.* The City recommends the following mitigation alternatives, which would *not* require widening Imperial and thus would not interfere with rights-of-way:

- extend the westbound double left-turn pocket (for vehicles turning south onto Main) by approximately 150 feet to obtain stacking distance for 14 vehicles;
- extend the eastbound merge lane (for vehicles turning right onto Imperial) by approximately 250 feet to ease transition into traffic before reaching the hill on the south side of Imperial;
- extend the eastbound right-turn pocket west of the bus stop on the south side of Imperial to facilitate turning onto Main.

Each mitigation alternative may require minor signal phasing and bike lane improvements.

Finally, the City strongly concurs with LAWA's determination, based on a brief discussion in the DEIR, that the "MSC South" alternative to the Project's first phase is inferior and should not be adopted. *See id.* at 5-26. Shifting construction of the MSC North terminal to the south would exacerbate existing airport imbalance and could result in significant noise, air quality, and construction-related traffic impacts on the City.

Thank you for the opportunity to comment on the Project and for LAWA's attention to the City's concerns over the NOP. We request that this firm and the City of El Segundo Planning and Building Safety Department receive a copy of any reply to this letter, as well as the Final EIR.

Very truly yours,

SHUTE, MIHALY & WEINBERGER LLP



Joseph "Seph" Petta

Attachment: El Segundo's Comments on Notice of Preparation for Midfield Satellite Concourse, March 11, 2013



# **ATTACHMENT**

## **El Segundo's Comments on Notice of Preparation for Midfield Satellite Concourse, March 11, 2013**

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March 11, 2013

**Via E-Mail and FedEx**

Ms. Lisa Trifiletti  
Capital Programming and Planning Group  
Los Angeles World Airports  
1 World Way, Room 218B  
Los Angeles, CA 90045

**Re: Notice of Preparation for Midfield Satellite Concourse North  
Project and Program**

Dear Ms. Trifiletti:

On behalf of the City of El Segundo, thank you for the opportunity to review the Notice of Preparation ("NOP") and Initial Study ("IS") for the Midfield Satellite Concourse ("MSC") North Project and comprehensive MSC Program (combined, the "Project"). The City expects to be actively involved in the planning process and looks forward to further follow-up discussions and close coordination as the Project goes forward.

As LAWA is aware, El Segundo has a number of longstanding concerns related to LAX, particularly around noise and traffic impacts that could result from increased operations on the southern airfield. El Segundo appreciates that LAWA appears to have considered the City's concerns in focusing most of the Project away from El Segundo. Nevertheless, the City believes that the remaining potential impacts could be further minimized or avoided if LAWA acts consistently with its prior development proposals and decisions, particularly those encompassed by the Specific Plan Amendment Study (SPAS). This letter explains El Segundo's concerns about the Project and calls on LAWA to evaluate fully the potential significant impacts of the Project on the City's residents.

MSC-AL00004

***Project Setting and Description.*** El Segundo urges LAWA to describe the Project and its setting completely and accurately in the EIR. “An accurate, stable and finite project description is the sine qua non of an informative and legally sufficient EIR.” *San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App.4th 713, 727.

El Segundo is concerned that the EIR could fail to sufficiently analyze the Project’s potential impacts due to an incomplete project description. First, the Project’s “enabling components” include demolition of several maintenance facilities, utility infrastructure, parking areas, a beacon and antenna array, and a hangar. IS at 26, 33. The NOP does not state where or when these facilities will be rebuilt or relocated. See IS at 1, 33. LAWA must ensure that any plans for these facilities’ reconstruction or relocation are included in the EIR. If any of these facilities will be permanently removed, then the EIR must state this and explain how remaining facilities such as parking lots will accommodate capacity from the facilities planned for removal. Failure to analyze the impacts of the removal and relocation of these facilities in the EIR could run afoul of CEQA’s prohibition on project segmentation.

Second, the NOP states that the Project will cause no net increase in operations at LAX. IS at 63, 65, 66, 71, 72. Given the Project’s scale, encompassing the eventual addition of 29 gates, a no-net-increase scenario is conceivable only if LAWA removes or decommissions equivalent gates and other facilities elsewhere. The EIR must explain how a no-net-increase scenario will be achieved.

El Segundo anticipates that LAWA will ensure no net increase in operations by decommissioning the Western Remote Gates. This would potentially enable LAWA to move some or all of the proposed West Aircraft Maintenance Area (“WAMA”) project farther north than the location currently under consideration. Moving the WAMA north would address some of El Segundo’s concerns, detailed in the City’s October 30, 2012 letter commenting on the WAMA NOP. In that letter, El Segundo recommended that at least some WAMA components, such as a hangar, some Remain Overnight spots, some Remain All-Day parking, and/or a Ground Run-up Enclosure, be built in the Western Remote Gates area. LAWA should consider this opportunity in the pending WAMA EIR and include an alternative in the MSC Project EIR wherein at least some WAMA components replace portions of the Western Remote Gates that should be removed as part of the MSC Project.

***Specific Plan Amendment Study Consistency.*** El Segundo urges LAWA to ensure consistency between the Project and the plans and commitments reached through the SPAS process.

The City is concerned that the EIR could incorporate project components and characteristics that are irreconcilable with the SPAS. First, the NOP states that the Project will include landside access for employees, services, and deliveries through a secured Air Operations Area post on World Way West. IS at 25. Since a western access point was considered and rejected during the SPAS process, this access point should not be part of the MSC North Project, and thus should not be analyzed in the EIR. Instead, all vehicle and pedestrian traffic should access the MSC from the east via Tom Bradley International Terminal ("TBIT").

Second, on February 5, 2013, the Board of Airport Commissioners ("Board") approved the staff-recommended alternative in the SPAS Draft EIR ("SPAS DEIR"). In this alternative, Runway 6L-24R would be shifted 260 feet north to accommodate a centerfield taxiway on the northern airfield. See SPAS DEIR at 1-18. As a result of the Board's approval, LAWA will no longer move Runway 6R-24L 340 feet south, as the Master Plan assumed. See *id.* at 1-17. Under the Master Plan, the location of Runway 6R-24L had defined the northerly building limits for the TBIT West Gates and the MSC. *Id.*; see also IS at 19 fn. 6.

Since Runway 6R-24L will no longer be moved south, LAWA should consider moving the MSC farther north and include an alternative in the EIR for the Project reflecting this opportunity. An EIR must describe a reasonable range of alternatives to the proposed project, and to its location, that would feasibly attain the project's basic objectives while avoiding or substantially lessening the project's significant impacts. Pub. Res. Code § 21100(b)(4); CEQA Guidelines § 15126.6(a).

Moving the MSC farther north so it lines up with the other north side terminals would help encourage increased use of the northern airfield by aircraft leaving from and arriving at the MSC gates. Thus, consideration of a project alternative in which the MSC is moved north would be consistent with LAWA's efforts to address the existing imbalance between the level of operations on the northern and southern airfields, which places a disproportionate share of environmental impacts on El Segundo.

**Construction Staging.** The NOP states that some construction staging for the MSC North Project would be located on the southwest side of the airport, along the east side of Pershing Drive just north of Imperial Highway. IS at 36, 40, 64. Considering El Segundo's longstanding concerns related to noise and traffic impacts generated by uses at the airport's southern edge, the City urges that this construction staging be moved elsewhere. At the very least, the City expects all potential impacts from this construction staging to be thoroughly analyzed and mitigated in the EIR. The project description should state the duration of this and any other construction activities located near El

Segundo, as well as the potential for any construction vehicle traffic to use the City's designated truck routes or major arterial corridors such as Imperial Highway or Pershing Drive.

***Cumulative Impacts.*** The Project is being proposed while other airport projects, such as the WAMA, are still in varying stages of development. Thus, the EIR must identify and analyze the Project's impacts when considered with other past, present, and probable future projects at the airport and in the surrounding area. El Segundo urges a thorough analysis of these potential impacts and inclusion of meaningful alternatives and mitigation measures in the EIR.

Thank you for the opportunity to comment on the Project. We request that this firm and the City of El Segundo Planning and Building Safety Department receive a copy of the Draft EIR.

Very truly yours,

SHUTE, MIHALY & WEINBERGER LLP



Joseph "Seph" Petta

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# **LAX Airline Airport Affairs Committee**

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## **MEMORANDUM**

**Date:** April 21, 2014

**To:** Lisa Trifiletti, Director Environmental Land Use Planning

**From:** Lori Peters, Airline Technical Representative

**Re:** Draft Environmental Impact Report (EIR) for the Midfield Satellite Concourse  
Los Angeles International Airport (LAX)

This memorandum is written on behalf of the Airline Airport Affairs Committee (AAAC) at LAX. The comments as set forth herein have been reviewed with and approved by the AAAC and are respectfully submitted for consideration by Los Angeles World Airport (LAWA).

- The Midfield Satellite Concourse (MSC) Program consists of a new multi-level concourse located west of the existing Tom Bradley International Terminal (TBIT). The MSC also includes conveyance systems connecting the MSC and Central Terminal Processor (CTP) as well as a new taxilane, taxiway, and apron and utilities required to serve the MSC.
- LAWA has proposed a preferred alternative that is capable of serving both domestic and international operations and would provide at its final phase a concourse that can accommodate up to 29 aircraft gates for Airplane Design Group (ADG) III to ADG IV aircraft.
- LAWA has further proposed development in phases. Phase 1 includes the northern portion of the MSC, building up to 11 gates and associated facilities (MSC North). Those components not part of the MSC North Project are proposed as future phase(s).
- The LAX AAAC supports the MSC North Project with the following caveats:
  - There is demonstrated demand for aircraft gates to reduce dependency on remote gates
  - It will provide gate capacity to enable much needed facility modernization and rehabilitation of the existing CTA
  - Phasing of the construction will be efficient and prudent
  - It will be financially feasible
  - LAWA will work with the airlines to further define and address operational requirements
  - Removal and/or relocation of facilities affected by the proposed MSC North Project will be accommodated in a collaborative manner with affected tenant(s)
  - Future phases of the MSC will be constructed on a demand basis

In closing, while the AAAC supports the MSC North Project, it also recognizes that the project has tremendous impact to current facilities that are critical to existing and future airline operations. It is paramount that accommodation of these affected facilities be done on an expedited basis in full collaboration with the affected tenants.

The AAAC looks forward to working with LAWA to further the planning design, construction and activation of the MSC.



April 21, 2014

Via E-mail to [mscnorthinfo@lawa.org](mailto:mscnorthinfo@lawa.org)

Lisa Trifiletti, Capital Programming and Planning Group  
City of Los Angeles, Los Angeles World Airports  
1 World Way, Room 218E  
Los Angeles, CA 90045

Reference: Comments on Draft EIR for LAX Midfield Satellite Concourse

Dear Ms. Trifiletti:

We thank LAWA, especially you, for working with us during the preparation of this plan. The attempt to include intertwined programmatic and project level reviews in this EIR is problematic for us because some of the statements are broad and can be reinterpreted by future LAWA personnel to subvert agreements and intent as has been done in past activities.

ARSAC remains concerned that some of the issues we have brought up in our March 11, 2013 letter (copy attached) have yet to be fully addressed. We would appreciate responses.

Our comments below to the MSC Draft EIR re-iterate some of those previous concerns raised, as well as new ones. ARSAC is not opposing the MSC project, but we do have issues with the project and EIR methodology.

ARSAC would like LAWA to do another Project Level EIR if and when the MSC South is constructed with new analysis. We worry about the aging of data used in projects and changes in airline business conditions. For example, although LAX is the number 1 US airport for the Airbus A380, it appears unlikely that LAX will have 28 A380 flights a year by 2025 as projected in the LAX SPAS EIR; the limit appears to be more the 12 daily flights that ARSAC has predicted. Asiana plans to add an A380 flight to LAX in August 2014. Similarly, airlines are pushing less fuel efficient Boeing 747-400's and Boeing 767 series aircraft out of their fleets in favor of more fuel efficient aircraft with smaller seating capacities such as the Boeing 777 (e.g. Cathay Pacific, LAX to Hong Kong) and Airbus A321 (e.g. American Airlines, LAX to New York-JFK), respectively. Since 9/11, frequency and profitability are more important to the airlines than capacity and market share, respectively.

One example of a previous comment: Although LAWA prepared a section, 4.5, on Public Services- Fire Protection Services, LAWA failed to address emergency evacuation areas. ARSAC is gravely concerned that if the MSC were to be evacuated, then people inside the MSC would be forced out into the potentially dangerous Aircraft Operating Area (AOA). LAWA must have marked evacuation paths that lead from the MSC to evacuation assembly areas. There are also must be systems and procedures in place to warn aircraft and vehicle drivers to not cross emergency evacuation paths when an evacuation of the MSC is in process.

#### Comments and Questions:

1. Introduction and Exec Summary talks about overall general alternatives for Programmatic level and refers to Terminal 0 alternatives. This is general in nature and doesn't specify details.
2. During the Specific Amendment Study LAWA drafted two versions of the "ARSAC 100 foot south" alternative for our review and comment. LAWA introduced an unnecessary "poison pill taxiway intersection bottleneck" into our alternative by ignoring ARSAC comments. Similarly, LAWA ignored our Terminal 0 comments. Since Terminal 0 references are non-specific we request programmatic as well as project review of this aspect if, when, this is considered in the future.
3. The general overview talks about the north section project being an 11 gate project. Please spell out how this impacts the net number of gates. When the remote gates will be eliminated?

4. In Section 2, the people mover and baggage handling is necessarily broad. We understand the difficulty in preparing this review. The whole issue of passenger transport from gates was a basic tenant when the TBIT was redone. It is clear that something will be done in the future beyond bus movement of passengers, but this topic is so broad and unclear that we suggest delaying any action on this project until a more certain resolution is identified.
5. In Section 2 it refers to partial completion of the Crossfield Taxiway Project (CTFP). This is so critical to aircraft movement between the north and south complexes (and all environmental assessment) that we want assurances that this will be completed ahead of the start of any of the MSC gate construction. This must include all of the taxiway S and T support activities. This section also refers to an airside people mover (APM) which also needs more programmatic level certainty to ensure that the “temporary” bussing does not become permanent since this was the major justification of the TBIT gates to accommodate the NLA.
6. In the description of the Central Terminal Processor (CTP) in Section 4.6.7.3, we are very concerned how this new facility will harm traffic flows and eliminate some parking in the Central Terminal Area (CTA). The CTP will also alter way-finding for vehicles and pedestrians.
  - a. Traffic flows. The CTP will be accessed by vehicles by a left hand turn versus having terminals always on the driver’s right hand side. While LAWA proposes to maintain a bypass from the north to the south terminals, the CTP could create a new traffic bottleneck in short-cut traffic from north to south World Way and perhaps limit traffic flow from TBIT and Terminal 4 departure level from exiting the CTA.
  - b. Center Way ramp. The proposed elimination of the Center Way ramp, while not highly utilized, would be a tragic mistake. Elimination of this ramp will result in one less evacuation route for pedestrians and also hamper the ability of emergency vehicles to get between the upper and lower level roadways. The ceiling heights of the parking garages are too low for some fire trucks to be able to go between levels.
  - c. Pedestrians. Wayfinding for pedestrians will also be harmed- LAWA is proposing using signs to direct passengers to cross the arrivals level street to be able to reach the LAX “A” Airline Connections Shuttle Bus. Why is it not mentioned that passengers would also have to cross the busy arrivals level street to access other ground transportation such as Lot C bus, LAX FlyAway, courtesy shuttles, shared ride vans, etc.??? If LAX wants to be a modern, world class airport, then why is the proposed CTP taking steps backwards in enhancing passenger comfort and convenience??? How much parking will be eliminated?
  - d. Parking. Where will new parking be located that will be convenient for the proposed CTP and other terminals? Will parking be incorporated into the CTP? ARSAC is concerned that mixed use of parking and passenger facilities in the same building may invite terrorist attacks similar to the 1993 World Trade Center bombing.
7. In Appendix E, On-Airport Traffic, ARSAC has several questions:
  - a. Appendix page numbers. Why are there no page numbers in Appendix E?
  - b. PDF Page 3. Appendix E-1- Why is 2011 data listed when 2012 is supposed to be the base level year? Why is there no data calibration for 2012?
  - c. ARSAC has brought up numerous times in many LAX EIR’s the choice of a date in August for traffic counts. We have asked, and to continue to ask, for traffic data to also be collected for September when schools and colleges around LAX are in session. September data, in addition to August data, can provide a useful comparison of the impact of non-LAX traffic on LAX.
  - d. PDF pages 32 to 80. Appendix E-2- It appears that there is no data for LAX Shuttles and RAC Shuttles except for a minor blip on page 80. Was traffic data taken at all terminals for LAX Shuttles and RAC Shuttles? Can you please provide the actual numbers for all of the data (LAX Shuttle, Limos, etc.) used in making the charts? The charts give the appearance that there is no



volume of LAX or RAC vehicles and that even the FlyAway bus shows a greater volume than LAX or RAC shuttles.

We may submit additional comments. ARSAC looks forward to your responses.

Sincerely,

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ATTACHMENT- NOP letter dated March 11, 2013

March 11, 2013

Lisa Trifiletti, Capital Programming and Planning Group  
City of Los Angeles, Los Angeles World Airports  
1 World Way, Room 218E  
Los Angeles, CA 90045

Reference: February 8, 2013, NOTICE OF PREPARATION AND NOTICE OF PUBLIC SCOPING MEETING FOR AN ENVIRONMENTAL IMPACT REPORT, PROJECT NAME: Los Angeles International Airport (LAX) Midfield Satellite Concourse (MSC)

**ARSAC has three areas of concern with the subject EIR:**

- 1. Feasibility of design for long term operation such as the permanent check-in location and methodology for getting to/from gates (including baggage retrieval).**
- 2. Relationship of this project to other "approved" projects in the Master Plan.**
- 3. Phased construction and availability of other approved projects to mitigate impacts if an approved project is not yet built and not scheduled to be completed.**

As LAWA prepares the Environmental Impact Report for this project level review it is expected that project details will be revealed to properly assess impacts. ARSAC expects LAWA to show that the plan is feasible as designed and that there are no overriding infrastructure issues.

**LAWA has indicated that this project will be constructed in two separate phases – northern and southern complexes which are essentially separate. The EIR must review each construction project separately for final impacts because there is no assurance that the second half will be constructed within a reasonable time after the first is completed, if ever.**

One example of a design element of concern is controlled access to the gate area. The very high passenger bridge which has been shown in concept drawings doesn't appear to be practical. We have heard that buses will be used temporarily to ferry people from TBIT to the MSC gates, but we have not heard what the acceptable long term resolution is to be. We agree that bussing should not be a long term solution. LAWA has described a potential method of passenger access and baggage distribution as a massive tunnel with sanitized traffic to control security starting in the CTA going under TBIT and to the MSC (see specific notes about the NOP attachment). This element should be more completely described and evaluated for feasibility and impacts including emergency evacuation procedures. If this is done, LAWA should provide construction phasing impacts on traffic since it would significantly impact the CTA roadway flows. Will this tunnel also have shops and other conveniences for passengers and visitors as we have suggested? This tunnel should be completely identified in terms of size, employee access, and where they will park and how they will get into the CTA to ensure traffic counts include these people.

How will passengers get from check at a remote location to boarding gates and ultimately to another terminal without going through security checks multiple times? Will Federal Inspection Service support be required for these gates? How will it be provided? How will buses crossing the active airfield be controlled? As passenger traffic increases is this disruptive to aircraft flow and even result in new safety issues as bus service increases?

LAWA has talked broadly about a supplemental control tower to address the increased amount of non-visibility areas. Will LAWA provide enough detail to include this tower in the study to see how safety is properly controlled and assessed? Since aircraft ground traffic will require special treatments in this area has LAWA planned to incorporate any technological solutions in addition to full tower staffing?

ARSAC requests that time phasing of all program level Master Plan elements be presented with this EIR to show the proper relationship to the subject project. What contributions to noise and pollution are dependent?

What has LAWA assumed about the construction and completion for all surrounding elements to be built and completed for purposes of the EIR? The impacts are dramatically different during both MSC construction and subsequent operation if not all planned items are constructed. What is the completion schedule for all items? If the taxiways, for instance are incomplete for an extended period beyond MSC construction the times to gate assumed in establishing air pollution levels will be severely divergent. Aircraft noise from taxiing or APU use (if any) may face different areas and be for different durations. We ask that LAWA identify all elements that will be delayed more than one year beyond MSC and what criteria are used as triggers to build the missing elements. We also ask that alternatives be provided for any element relied upon which will be built greater than five years after the MSC.

We have heard that LAWA would like to use the gates in the MSC as temporary fill in for other refurbishment and expansion. Please identify what areas are impacted and show the interim environmental impacts of anything greater than one year duration which will result.

We expect LAWA will be performing substantial refurbishments to the CTA parking lots and roadways. How is this addressed in the EIR? LAWA has said that MSC and TBIT cannot be accessed on the same loop around LAX (you won't be able to go from one directly to the other). Has LAWA fully accounted for the resulting traffic patterns? Specifically, will traffic be better because international travelers will be more dispersed (less crowded at TBIT)? Or will traffic be worse because of buses/shuttles having to complete a partial loop of the CTA to go from MSC to TBIT?

If you have questions, then please contact us. We look forward to working more closely with you.

Sincerely,

Denny Schneider, President  
denny@welivefree.com  
(213) 675-1817

Robert Acherman, Vice President  
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(310) 927-2127

#### ATTACHMENT WITH DETAIL QUESTIONS RELATED TO THE MSC NOP DOCUMENT.

Specific Questions on Initial Study Checklist

Figure 1- MSC Project Location.

Why isn't the proposed tunnel between the Midfield Satellite Concourse (MSC) and the Central Terminal Processor (CTP) shown in Figure 1?

Why is the passenger bridge between the MSC and CTP no longer being considered? Will the bridge be removed from the scale model of the MSC and CTP on display in the lobby of the Clifton Moore Administration Building at LAX?

What would have to “change substantively” to trigger an Environmental Impact Statement (EIS / NEPA) re-review? It appears that this section conflicts with Page 34, 1.5.1. Federal approvals. FAA approval would be required for relocation of the beacon and antenna array and for the supplemental FAA tower on top of the MSC.

#### Figure 2- Project Components

Item 5- Ramp Tower. What is the height of the ramp tower? Has the FAA been consulted about the ramp tower? Are there plans to place other towers on the LAX airfield as the current tower does not have visibility behind the Tom Bradley International Terminal and the maintenance areas on the west side of the airfield?

Item 8- Landside Access from World Way West. ARSAC requests that no passenger access be permitted to the MSC or other terminals from World Way West. ARSAC has strongly opposed any passenger access to the passenger terminals from Pershing and World Way West.

#### Figure 3- Concourse and Apron

Why are the bus routes not shown from the MSC to the other terminals? How many bus gates will there be at the MSC? Where will the MSC bus terminal be located on the MSC? What is the minimum safest distance between aircraft parked at the MSC gates and the MSC bus gates?

Does the proposed tunnel between the MSC and the CTP go under aircraft gates? On the figure, it appears that the tunnel goes under two Airbus A380 gates. Will the tunnel be able to withstand fully loaded A380's sitting at the gate for up to three hours?

At what depth will the proposed tunnel be dug? What are the dimensions of the tunnel? How will contamination toxics be handled during and after construction?

Will the tunnel have a stop at the Tom Bradley International Terminal? How will the tunnel handle departing and arriving passengers?

Will there be a sterile corridor in the tunnel for arriving international passengers? Where will the Federal Inspection Services (e.g. Customs, Immigration, Agriculture, etc.) facilities be for arriving international passengers at the MSC? In the MSC? Tom Bradley International Terminal? Terminal 2? Terminal 5? Terminal 6? Other terminals?

#### Page 25- Footnote 7

Does the comment imply that other terminals will be redeveloped? What are the terminals proposed to be redeveloped? What is the timeline for terminal redevelopments? If terminals are moved from current locations will there be potential changes to the MSC already built in to accommodate connecting terminals?

#### Page 26- Item 3, Ramp Tower

Is FAA approval required for the ramp tower? Will an EIS (NEPA) need to be prepared for the ramp tower? Will a complete safety review be conducted? What will be the traffic capacity of the new tower?

#### Page 26- Enabling Projects

Are the “E” numbered projects the actual numerical sequence of the order for these enabling projects? If the order for the “E” projects is different, then what is that sequence?

#### Page 35- I. Aesthetics

Will the architecture of the MSC be similar to that of Bradley West?

Construction staging areas. ARSAC prefers that the construction staging areas and construction worker proposed south of Westchester Parkway be moved closer to Pershing and World Way West away from homes.

Light and glare. ARSAC requests that lighting on MSC not point directly into Westchester/Playa del Rey or El Segundo. If at all possible, lighting should be confined to spill over only into the MSC apron and adjoining taxilanes.

#### Page 38- III. Air Quality

ARSAC requests that the Air Pollution Apportionment Study be included in this EIR for the MSC.

#### Page 42- V. Cultural Resources

Theme Building view preservation. In the LAX Specific Plan Amendment Study (SPAS) EIR, LAWA has committed to protecting the surrounding views of the Theme Building to keep the Theme Building within its historical context. ARSAC requests that photos be made of current conditions from the Theme Building to the current and future MSC project locations (e.g. CTP, removal of Parking Structures 3 and 4.) ARSAC requests that the photos be used to assist architects and engineers in designing MSC projects that preserve the Theme Building's historical context surroundings.

#### Pages 46 to 47- VI. Geology and Soils

ARSAC is concerned about soil contamination in the American Airlines and former Trans World Airlines/current Qantas maintenance sites. Please see comments under Section VIII, Hazards and Hazardous Waste.

#### Page 51- VII. Green House Gas Emissions

Why is there is nothing in the Initial Study document to indicate how passengers will be loaded or unloaded from aircraft at the MSC? Will there be electrically powered passenger loading bridges at the MSC? Will there be a passenger loading bridge to provide upper deck access for Airbus A380 aircraft?

Will there be electrical power provided at the MSC gates so aircraft do not have to use Auxiliary Power Units (APU's) at the gates?

ARSAC requests that the MSC gates provide electrical power to aircraft and that the use of APU's be banned at the MSC. LAWA has already committed to 100% gate electrification in the LAX Master Plan and the Community Benefits Agreement with the LAX Coalition.

#### Page 52- VIII. Hazards and Hazardous Materials

ARSAC is extremely concerned about soil contamination in the American Airlines and former TWA/Qantas maintenance areas. LAWA has already dealt with soil contamination issues under the former Continental hangar immediately west of the American Airlines High Bay hangar. These maintenance areas have been in use for almost 50 years. In that time span, all kinds of lubricants, grease, oil, jet fuel, solvents, Skydrol, paint, coolant, wastewater and other toxics could have been dumped or leaked into the soil. These facilities could also include industrial gases, lead based paint and asbestos. ARSAC requests that LAWA study and inventory these hazardous materials and to develop an appropriate clean-up program.

#### Page 56- g. Evacuation Plan

Unlike the other passenger terminals which have street access, the MSC is located in the middle of the Aircraft Operating Area. In case of evacuation, where will people in the MSC go? ARSAC requests that LAWA set-up evacuation areas for the MSC so that evacuees will not be dispersed into the AOA.

#### Page 57- Pollution discharge

Will there be any discharge or drainage from the MSC to the Argo Ditch?

#### Page 63- XII. Noise

ARSAC again requests electrically powered passenger loading bridges be used at the MSC. The gates should also provide electricity to aircraft so that the APU's do not need to be used. APU usage should be banned in the MSC.

#### Page 63- XII. Noise

ARSAC requests a noise study of taxiing aircraft around the MSC. Why does it state that there will not be a significant increase in noise in Westchester/Playa del Rey and El Segundo due to the new MSC taxilanes and taxiways? This is not the same as proving changes in noise levels with a noise study. How will LAWA monitor run-up activities? It has used cameras in other parts of the airport. The projection of the MSC handling from 9% to 19% of LAX daily operations is significant. In the LAX SPAS EIR, LAWA predicts 2,053 operations per day by the year 2025. This would yield 185 and 390 daily operations, respectively.

#### Page 67- XIV. Public Services, a. Fire Protection

ARSAC is concerned about emergency evacuation plans and areas for the MSC, proposed Automated People Mover (APM) and proposed tunnel. ARSAC requests that emergency evacuation scenarios be studied in the MSC EIR.

#### Page 68- XIV. Public Services, b. Police Protection

ARSAC requests that an Airport Police office be designated in the MSC.

#### Page 69- XIV. Public Services, d. Parks

ARSAC requests that an indoor park or green space be established in the MSC for the enjoyment of passengers and airport workers.

#### Page 71- XVI- Transportation/Traffic

ARSAC requests that construction traffic trips be studied in the EIR. LAWA should encourage the use of ride sharing, shared vans and buses for construction workers.

ARSAC requests that current private vehicle traffic be studied in this EIR today and again in future phases of the MSC. As the Initial Study document notes, "The LAX Master Plan EIR assumed that no private vehicles would circulate through the CTA." LAWA needs to establish some kind of baseline now and using existing conditions would be helpful in that regard when proposing future MSC projects such as the CTP which alter traffic flows in the CTA. Traffic flow will be greatly affected in the CTA if the CTP is constructed as the ramps between the departure and arrivals levels will be eliminated, two parking garages will be torn down and the recirculating lane from Terminal 4 to Terminal 3 will also be likely removed.

#### Page 72- XVI. Transportation/Traffic, c. Air Traffic

ARSAC requests that the EIR add a section to evaluate air traffic from 2025 to the year 2040.

#### Page 72- XVI. Transportation/Traffic, e. Emergency Access

ARSAC reiterates our request to include studying of emergency evacuation plans for the MSC and proposed APM and proposed tunnel. This study should be expanded to include fire and disaster recovery access.

#### Page 77- XVII. Utilities

Where will LAX send its trash once the Sunshine Canyon Landfill closes in 2031? The MSC and other LAX buildings will continue to be operation beyond 2031.

As stated on page 77, "LAWA's goal is to divert 70 percent of waste by 2015." How will LAWA accomplish diversion of 70 percent of waste? Will LAWA sort trash onsite to pull out recyclable items? Where will this trash sort facility exist? How will LAWA handle disposal of left-over food from inbound international flights?

ARSAC requests that the hazards of electrical vaults be included in the EIR. On the various drawings, there is an electrical vault shown near an Airbus A380 capable gate on the west side of Bradley West. ARSAC is concerned that an electrical vault explosion could occur at this location similar to the one that killed Los Angeles City Firefighter Brett Lovrein at the Citibank building (Sepulveda and La Tijera) in Westchester, just north of LAX.

<http://lafd.blogspot.com/2008/03/los-angeles-firefighter-killed-in-line.html>

ARSAC's concern about the electrical vault is even greater given the presence of jet fuel.

Page 78. XVIII- Mandatory Findings

ARSAC agrees with the ratings of Potentially Significant Impacts in this section.

ARSAC requests that LAWA provides more frequent disclosures for compliance with mitigation measures. ARSAC requests that LAWA employ an independent third party to verify LAWA's EIR mitigation compliance. ARSAC also requests that LAWA provide penalties for itself when mitigation measures are not met.

Date: Mon, Apr 21, 2014 at 3:32 PM  
Subject: MSC North DEIR Comments  
To: [mscnorthinfo@lawa.org](mailto:mscnorthinfo@lawa.org)

Hello,

My comment submission failed and it was suggested that I contact this email address. I would like to submit my comments on this project:

I have concerns about the section titled Known Controversy and Issues to be Resolved, specifically under Transportation. The DEIR claims that there would be no long-term operational changes to traffic activity and traffic flows within the Airport area because it would not change the number of aircraft operations or where aircraft passengers are dropped off or picked up at LAX. In addition, trips associated with operation of the future phases of the MSC Program were analyzed only at a program level because the LAWA Master Plan EIR assumed that no private vehicles would circulate through the CTA. LAWAs recent actions have made it pretty clear that they intend to try to increase the total number of aircraft and passengers handled at LAX each year. The MSC North project will undoubtedly be used to handle some of this increased traffic, not just to alleviate capacity to allow for renovations of existing terminals. The on airport changes in traffic should be analyzed in this EIR to prepare for that eventuality. To ignore that it is a possibility is naive. In the same way, there have been no serious indications that LAWA will actually close the CTA to private vehicles anytime in the near future so to assume that it will happen and not examine the possibility that it remain open is absurd.



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