Appendix B

Responses to Comments on the Final Environmental Impact Statement

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1. INTRODUCTION AND INDICES

1.1 Introduction

The Final Environmental Impact Statement (EIS) for the Los Angeles International Airport (LAX) Proposed Master Plan Improvements has been prepared pursuant to the National Environmental Policy Act (NEPA), and in accordance with the Council on Environmental Quality (CEQ) implementing regulations (40 CFR part 1500-1508), and FAA Order 5050.4A, *Airport Environmental Handbook*.

On January 18, 2001, FAA and the City of Los Angeles published a Draft EIS/EIR for the proposed LAX Master Plan improvements. In accordance with federal and state requirements, the Draft EIS/EIR was circulated for public review, with the review period closing on November 9, 2001. Nine public hearings were held during the public review period. Subsequent to the close of the public comment period on the Draft EIS/EIR, FAA and the City of Los Angeles prepared a Supplement to the Draft EIS/EIR. The Supplement to the Draft EIS/EIR was circulated for public review on July 9, 2003, with the review period closing on November 7, 2003. Twelve public hearings were held during this review period. In accordance with the provisions of the CEQ NEPA regulations (40 CFR 1503.4[a]) and CEQA (14 CCR §15088), the FAA and the City of Los Angeles jointly prepared responses to all comments received on the Draft EIS/EIR and the Supplement to the Draft EIS/EIR. Part II of the Final EIS/EIR provides written responses to the comments received during the public review periods for the Draft EIS/EIR and the Supplement to the Draft EIS/EIR.

On January 13, 2005, FAA published its Final EIS for the LAX Master Plan. On January 21, 2005, a Notice of Availability of the Final EIS was published in the Federal Register (Vol. 70, No. 13, Friday, January 21, 2005). In accordance with 40 CFR 1506.10(b)(2), FAA did not make a decision on the proposed action for a minimum 30-day period following publication of the Final EIS. Although it is not required that public comments be allowed during this timeframe, FAA decided to permit public comment in accordance with 40 CFR 1503.1(b). As indicated in the Notice of Availability, the FAA was seeking, and accepting, comments on revised and updated information and analyses disclosed in Volume A of the Final EIS and related appendices (Appendices A-1, A-2a, A-2b, A-3a, A-3b, A-3c, A-3d, and A-4). Although the stated intent of FAA was to focus the scope of public comment on the information and analysis provided in Volume A and associated appendices, a number of comments were received during the review period for the Final EIS that pertained to the Draft EIS./EIR or the Supplement to the Draft EIS/EIR. In many instances, the specific concerns or types of issues raised in such comments had been previously addressed by the FAA in the responses to comments contained in Part II of the Final EIS. The FAA is not required to further respond to comments that have been previously addressed. Notwithstanding the above, the FAA has decided to respond to all comments received during the review period for the Final EIS whether or not such comments pertain specifically to Volume A and the associated appendices.

As indicated above, FAA made the Final EIS available to the public on January 13, 2005. This was approximately one week before publication of the Notice of Availability of the Final EIS in the Federal Register. Thus, the duration of the comment period for the Final EIS was, in effect, five weeks.

The format for the responses to comments presents, on a letter-by-letter basis, each comment, which is then followed immediately by a response. The comments and responses in this appendix are organized and grouped into categories based on the affiliation of the commentor. The comments are presented in the following order: federal agencies, regional agencies, local agencies, and public comments (i.e., letters from private citizens, organizations, etc.). This format for, and approach to, presentation of the responses to comments on the Final EIS are the same as used in Part II of the Final EIS.

An alphanumeric index system is used to identify each comment and response, and is keyed to each letter commentor and the individual comments therein. For example, the second letter within the group of local agencies submitting comments on the Final EIS is from the County of Los Angeles, and the text of the letter is considered to have 7 individual comments. The subject letter was assigned the alphanumeric label "FAL00002," representing "Comments on the Final EIS-Agency-Local-Letter No. 2." The individual comments within the letter are labeled as FAL00002-1 through FL00002-7. The same basic format and approach is used for the comment letters from federal agencies ("FAF"), regional agencies ("FAR"), and public comments ("FPC"). This same alphanumeric labeling system was also used for the comments received on the Draft EIS/EIR and Supplement to the Draft EIS/EIR, as included in Part II of the Final EIS,

except that each label is preceded with the letter "S" to identify comments on the Supplement to the Draft EIS/EIR and there is no preceding designation for those comments submitted on the Draft EIS/EIR (i.e., categories of comment letters on the Supplement to the Draft EIS/EIR include SAF for federal agency comments, SAR for regional agency comments, and so on; categories of comment letters on the Draft EIS/EIR include AF for federal agency comments, AR for regional agency comments, and so on).

The following indicates the letter identification prefix code used for categorizing the comment letter types.

Letter ID Prefix	Description
FAF	Federal Agency
FAR	Regional Agency
FAL	Local Agency
FPC	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, commentor 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 of the comment letters by alphanumeric label number, the second index lists all of the comment letters by the commentor's last name, and the third index lists all of the comment letters by the affiliation, if any, of the commentor.

Chapter 2 includes the 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 Attachment 1 of this appendix.

Immediately following each typed comment is a written response developed by the FAA. 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 described above. For example, a response may indicate "Please see Response to Comment FAL00003-2" if that response addresses the same concern expressed in a different comment. Similarly, certain responses to comments on the Final EIS contain cross-references to topical responses and/or individual responses on comments submitted on the Draft EIS/EIR and the Supplement to the Draft EIS/EIR which are contained in Part II of the Final EIS. In such cases, the volume number of Part II in which the cross-referenced Topical Response, response on the Draft EIS/EIR, or response on the Supplement to the Draft EIS/EIR is located is provided in the response to comment on the Final EIS.

1.2 Indices of Comment Letters

The following are three indices that organize the comment letters by letter identification number, commentor, and affiliation.

Index by Letter Identification (ID) Number

Letter ID	Commentor	Affiliation/Agency	Department	Date
FAF00001	Manzanilla, Enrique	United States Environmental Protection Agency	Region IX	2/22/2005
FAR00001	Grayson, April	Southern California Association of Governments		3/9/2005
FAL00001	Lichman, Ph.D., Barbara E.	Chevalier, Allen & Lichman LLP		2/22/2005
FAL00002	Zimmerman, Martin K.	County of Los Angeles	Chief Administrative Office	2/22/2005
FAL00003	Armi, Osa L.	Shute, Mihaly & Weinberger LLP		2/18/2005
FPC00001	Mego, Gordon M.	None Provided		12/20/2004
FPC00002	Ehret, John S.	None Provided		
FPC00003	Rowe, Jill	None Provided		2/9/2005
FPC00004	Velasco, Valeria	Alliance for Regional Solution to Airport Congestion		2/20/2005
FPC00004	Schneider, Denny	Alliance for Regional Solution to Airport Congestion		2/20/2005
FPC00005	Parks, Bernard C.	City of Los Angeles	Eighth District	2/22/2005
FPC00006	Waters, Maxine	U.S. House of Representatives	35th Congressional District	2/22/2005
FPC00007	Gordon, Mike	California State Assembly	Fifth-Third District	2/22/2005
FPC00008	Sambrano, Diane	None Provided		2/21/2005
FPC00009	Carpio, Cecil	None Provided		2/22/2005
FPC00010	Carpio, Cecil	None Provided		2/22/2005
FPC00011	Sambrano, Dianne	None Provided		2/24/2005

Index by Commentor

Commentor	Affiliation/Agency	Department	Date	Letter ID
Armi, Osa L.	Shute, Mihaly & Weinberger LLP		2/18/2005	FAL00003
Carpio, Cecil	None Provided		2/22/2005	FPC00009
Carpio, Cecil	None Provided		2/22/2005	FPC00010
Ehret, John S.	None Provided			FPC00002
Gordon, Mike	California State Assembly	Fifth-Third District	2/22/2005	FPC00007
Grayson, April	Southern California Association of Governments		3/9/2005	FAR00001
Lichman, Ph.D., Barbara E.	Chevalier, Allen & Lichman LLP		2/22/2005	FAL00001
Manzanilla, Enrique	United States Environmental Protection Agency	Region IX	2/22/2005	FAF00001
Mego, Gordon M.	None Provided		12/20/2004	FPC00001
Parks, Bernard C.	City of Los Angeles	Eighth District	2/22/2005	FPC00005
Rowe, Jill	None Provided		2/9/2005	FPC00003
Sambrano, Diane	None Provided		2/21/2005	FPC00008
Sambrano, Dianne	None Provided		2/24/2005	FPC00011
Schneider, Denny	Alliance for Regional Solution to Airport Congestion		2/20/2005	FPC00004
Velasco, Valeria	Alliance for Regional Solution to Airport Congestion		2/20/2005	FPC00004
Waters, Maxine	U.S. House of Representatives	35th Congressional District	2/22/2005	FPC00006
Zimmerman, Martin K.	County of Los Angeles	Chief Administrative Office	2/22/2005	FAL00002

Index by Affiliation

Affiliation/Agency	Department	Commentor	Date	Letter ID
Alliance for Regional Solution to Airport Congestion		Schneider, Denny	2/20/2005	FPC00004
Alliance for Regional Solution to Airport Congestion		Velasco, Valeria	2/20/2005	FPC00004
California State Assembly	Fifth-Third District	Gordon, Mike	2/22/2005	FPC00007
Chevalier, Allen & Lichman LLP		Lichman, Ph.D., Barbara E.	2/22/2005	FAL00001
City of Los Angeles	Eighth District	Parks, Bernard C.	2/22/2005	FPC00005
County of Los Angeles	Chief Administrative Office	Zimmerman, Martin K.	2/22/2005	FAL00002
Shute, Mihaly & Weinberger LLP		Armi, Osa L.	2/18/2005	FAL00003
Southern California Association of Governments		Grayson, April	3/9/2005	FAR00001
U.S. House of Representatives	35th Congressional District	Waters, Maxine	2/22/2005	FPC00006
United States Environmental Protection Agency	Region IX	Manzanilla, Enrique	2/22/2005	FAF00001

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2. COMMENTS AND RESPONSES

Following are responses to comments received on the Final EIS.

FAF00001 Manzanilla, Enrique United States Environmental Protection Agency 2/22/2005

FAF00001-1

Comment:

The Environmental Protection Agency (EPA) has reviewed the Final Environmental Impact Statement (FEIS) for the Los Angeles International Airport Proposed Master Plan Improvements in Los Angeles County, California. This is a priority project from Executive Order 13274 (Environmental Stewardship and Transportation Infrastructure Project Reviews; February 27, 2003). Our review is pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508), and Section 309 of the Clean Air Act. Our detailed comments are attached.

EPA has a long history of coordinating with the Federal Aviation Administration (FAA) and the City of Los Angeles, Los Angeles World Airports (LAWA) to reduce environmental impacts resulting from the proposed master plan improvements at Los Angeles International Airport (LAX). We have actively participated in the NEPA process for this project since 1997. We provided scoping comments on July 31, 1997; comments on the DEIS, September 24, 2001; the preliminary draft of the Supplemental DEIS (SDEIS), May 1, 2003; the SDEIS, November 5, 2003; and the preliminary "Environmental Justice Program Package", February 12, 2004. We commend the significant efforts made by FAA and the LAWA for reducing impacts from the proposed master plan improvements, and appreciate the opportunity to provide early comments throughout the NEPA process. We are pleased that many of our comments have been addressed. EPA also organized a peer review of the Air Quality and Source Apportionment Study of the Area Surrounding Los Angeles International Airport, Technical Workplan (November 17, 2000) which resulted in the publication of the Report on the Peer Review Workshop on the Los Angeles World Airports, Air Quality and Source Apportionment Study of the Area Surrounding Los Angeles International Airport (August 8, 2003).

The FEIS identifies that the Safety and Security Alternative (Alternative D), which seeks to accommodate projected growth in air traffic, without providing additional capacity, is the preferred alternative. We note that LAWA identified the same preferred alternative upon completion of the Environmental Impact Report (EIR). Although FAA has selected the least environmentally damaging alternative as the preferred action, EPA has continuing concerns regarding potential air quality impacts resulting from this project. On January 5, 2005, the South Coast Air Basin was designated as nonattainment for particulate matter less than 2.5 microns (PM 2.5). Given the serious air quality problems in this area, and the recent PM2.5 nonattainment designation, EPA is recommending additional measures be incorporated into the Record of Decision as conditions of FAA approval for the project to further reduce emissions associated with airport operations and construction.

Response:

The comment is introductory to comments that follow. Responses to specific recommendations are provided in the responses to comments below. Please see Response to Comment FAF00001-5 regarding PM2.5 emissions. For additional discussion of PM2.5, please see Response to Comment FAL00001-28.

FAF00001-2

Comment:

In addition, EPA recommends that the Record of Decision (ROD) include a commitment to complete the Air Quality and Source Apportionment Study and protocol changes recommended by EPA through the above-mentioned Report on the Peer Review Workshop (August 8, 2003). EPA understands that a commitment from LAWA to pursue the Study is incorporated into the Community Benefits Agreement, of

which FAA is not a signatory. The Record of Decision should commit to address EPA's previous comments on this study.

Response:

This comment recommends that the Air Quality Source Apportionment Study be included in the ROD as a condition of approval. The Source Apportionment Study was originally undertaken by USEPA and LAWA with FAA as a member of the Technical Advisory Committee.

In accordance with 49 U.S.C. §47106(c)(1)(B), the Record of Decision includes as a condition of approval those mitigation measures within the jurisdiction and control of the FAA and LAWA that are needed to reduce or prevent significant adverse effects resulting from implementation of the preferred alternative as documented in the Final EIS. Appendix A of the Record of Decision includes a list of those mitigation measures that have been identified as conditions of approval based on the criteria above.

The Air Quality and Source Apportionment Study identified in the comment is not a measure necessary to mitigate adverse air quality impacts associated with the proposed action. Rather, this study would evaluate the contribution of existing on-airport aircraft emissions to off-airport air pollutant concentrations, which implicates existing, not project-specific air quality impacts, and furthermore would produce information but would do nothing to reduce impacts from the proposed action. As a result, FAA has not included this measure as a condition of approval in the ROD. However, FAA strongly supports LAWA's efforts to conduct this study and encourages LAWA to continue working with USEPA, CARB, SCAQMD, and other appropriate state and federal agencies to complete the study. Please also see Response to Comment FAF00001-11.

FAF00001-3

Comment:

In our previous comments on the SDEIS/EIR, EPA stressed the importance of reducing air quality impacts to surrounding communities. We were concerned with the issue of public participation and information sharing with low-income and minority populations in the vicinity of LAX. One of the main tenets of environmental justice is meaningful public participation, particularly with those communities that will be directly impacted by environmental decisions. We commend LAWA and the "LAX Coalition for Economic, Environmental, and Educational Justice" on the completion of a Community Benefits Agreement, which includes specific commitments intended to reduce environmental impacts associated with the proposed master plan improvements The FEIS maintains that "LAWA will work in cooperation with the affected communities and appropriate regulatory agencies to support and participate in long-term studies to contribute to an understanding of these types of environmental impacts". EPA urges FAA to provide a continuing commitment and leadership to these efforts, in collaboration with the community and other agencies.

Response:

Comment noted.

FAF00001-4

Comment:

We appreciate the opportunity to review the Final EIS and trust our comments can be addressed in the Record of Decision (ROD). EPA is available to assist in further refinement of mitigation measures proposed. Please send me a copy of the ROD when it is signed.

Response:

Comment noted. Please see Responses to Comments FAF00001-1 and FAF00001-2 above and FAF00001-5 through FAF00001-11 below.

FAF00001-5

Comment:

EPA DETAILED COMMENTS ON THE FINAL ENVIRONMENTAL IMPACT STATEMENT FOR THE LOS ANGELES INTERNATIONAL AIRPORT PROPOSED MASTER PLAN IMPROVEMENTS, FEBRUARY 22, 2005

Air Quality

Airport Related Emissions
The proposed project is located within the South Coast Air Basin (SCAB), which is designated as extreme nonattainment for the National Ambient Air Quality Standard (NAAQS) for 1-hour ozone (O3), and serious nonattainment for 8-hour O3, carbon monoxide (CO), and particulate matter smaller than ten microns (PM10). In addition, on January 5, 2005, South Coast Air Basin was designated nonattainment for PM2.5, effective April 5, 2005. For 2000 through 2002, South Coast Air Basin had the highest PM2.5 annual mean concentration (29 micrograms per cubic meter (ug/m3)) in the country. The annual standard for PM2.5 is 15 ug/m3. Data from 2000-2002 show that for the 24-hour PM2.5 standard, South Coast is one of two areas in the nation that violate this standard of 65 (ug/m3).

Despite data indicating that SCAB has a significant PM2.5 pollution problem, the Final Environmental Impact Statement/Final Environmental Impact Report (FEIS/EIR) only references the PM2.5 designation (FEIS/EIR General Conformity Determination, p. 4-1), but does not specifically analyze PM2.5 as part of the air quality analysis. The 2003 Air Quality Management Plan for the South Coast indicates that attainment of the PM10 standards by the 2006 deadline will still leave the area 49 percent above the 24-hour PM2.5 standard and 95 percent above the annual PM2.5 standard. Therefore, PM2.5 precursors, such as sulfur dioxide (SO2), should be considered for their impact on PM2.5 in addition to PM10 since control measures for PM10 identified in the FEIS may not be appropriate or adequate for PM2.5 in all cases. While SCAB is in attainment for SO2, projected on-airport emissions of SO2 for Alternative D represent a significant increase from the 1996 baseline emissions of SO2 of 355 tons per year (tpy) (FEIS/FEIR, Table F4.6-6). The 1996 baseline emissions inventory indicates that the bulk of these SO2 emissions are due to aircraft, auxiliary power unit (APU), and ground support equipment (GSE) sources. Of these emissions sources, aircraft is the largest (by a factor of ten). However, APU emissions of SO2 are greater than that of GSE by a factor of 1.5 (FEIS/FEIR, Table F4.6-6).

Recommendation:

Given the recent designation of the SCAB as nonattainment for PM2.5, EPA recommends the following mitigation measures to reduce airport-related, emissions. All mitigation commitments should be incorporated into the Record of Decision (ROD) as conditions of FAA approval for the project

- For all on and off airport diesel sources under FAA and/or LAWA control, use ultra low sulfur fuel (<15 parts per million by volume), use new (>1996) diesel engines, replace diesel engines with alternative clean fuel engines, use alternate fuel sources, and install particulate filters.

- Require the cleanest technology (in terms of fuel, gas-electric hybrid, or electric vehicles) for all transport vehicles for airport activities, including but not limited to: shuttle buses, shared ride vehicles, terminal transport buses, public transit, taxi cabs, and delivery vehicles.

- Expedite commitments to reduce GSE use ahead of the GSE Memorandum of Understanding (MOU) commitment scheduled by EPA- FAA's Voluntary Airport Low Emissions (VALE) Program and commit to specific methods to reduce emissions associated with aircraft fueling such as underground hydrant fuel systems and electric hydrant carts.

Response:

The Record of Decision (ROD) includes those mitigation measures that are needed to reduce significant effects of the preferred alternative as documented in the Final EIS. The mitigation measures that the FAA anticipated to be conditions of approval for the Preferred Alternative at the time of the Final EIS were identified in Table AES-4 of the Final EIS, "Master Plan Commitments and Mitigation Measures Proposed for the LAX Master Plan Build Alternatives." Appendix A to this ROD includes summaries of the mitigation actions ultimately selected to be conditions of approval of the ROD. Based upon the

information disclosed in the Final EIS, FAA finds that all practical means to avoid or minimize environmental harm has been adopted, through appropriate mitigation planning.

Please see Response to Comment FAL00001-28 regarding Final EIS analysis for PM2.5. Although the Final EIS per se did not specifically identify the effect of precursor compounds on impacts of PM2.5, the Final General Conformity Determination (Appendix A-2a of Volume A of the Final EIS) did address impacts of precursor compounds on impacts of PM10. Please see Section 5.3.1.1.1 of Appendix A of the Final General Conformity Determination for a discussion of how this evaluation was addressed and Section 5.3.2 of the Final General Conformity Determination for a discussion of the results of the evaluation. Considering the impacts of both primary and secondary PM10, it was concluded that Alternative D will not cause or contribute to exceedances of the PM10 national ambient air quality standards in the surrounding area.

Although SO2 emissions for Alternative D in 2015 are projected to be 88 tons greater than those for the environmental baseline, the proper comparison for purposes of analysis under NEPA and general conformity provisions of the Clean Air Act is between Alternative D and the No Action/No Project Alternative. SO2 emissions for Alternative D are projected to be 16 tons less than those for the No Action/No Project Alternative in 2015. Emissions of SO2 are less likely to impact PM2.5 emissions under Alternative D than under the No Action/No Project Alternative.

The comment includes specific suggestions for addressing air quality impacts. The specific suggestions included in the comment pertain to activities that are largely within the control and jurisdiction of LAWA. Please see below for more information regarding the specific suggestions.

On and off airport diesel sources. LAWA already complies with the Los Angeles City Council directive on diesel engine particulate traps, approved by the Mayor on December 2, 2002, which requires all existing City-owned and City-contracted diesel-fueled vehicles to be retrofitted with particulate traps, which engines will henceforth be required to use with ultra low-sulfur diesel fuel (see Section 2.3.1 of Appendix S-E of the Final EIS). As also noted in Section 2.3.1 of Appendix S-E of the Final EIS, LAWA began introducing alternative-fuel vehicles into its fleet in 1993, with a goal of having 50 percent of its fleet powered by alternative fuels by the end of 2003. As of 2004, 50 percent of LAWA's fleet vehicles at LAX (approximately 370 of 740) are alternatively fueled. Many of these alternative-fuel vehicles will qualify as super ultra low-emitting vehicles (SULEV) and zero-emission vehicles (ZEV). To support its growing fleet of alternative-fuel vehicles, LAWA has installed clean fuel stations at LAX, including compressed natural gas (CNG) and liquefied natural gas (LNG) and added a hydrogen fuel station in 2004. To improve the effectiveness and longevity of the particulate traps on City-owned on-road diesel-fueled vehicles, LAWA uses low-sulfur diesel fuel containing no more than 15 parts per million by weight of sulfur. LAWA has provided a number of public-use electric charging stations designed for vehicles using both inductive and conductive charging systems, and charging and parking are free to airport users driving such vehicles. Furthermore, under Alternative D, Mitigation Measure MM-AQ-2 (Construction-Related Measure) requires numerous specific actions to reduce emissions of exhaust emissions from on-road and nonroad mobile sources and stationary engines, such as specifying a combination of construction equipment using "cleaner burning diesel" fuel and exhaust emission controls. The FAA supports LAWA in its commitment to reducing emissions from its vehicle fleet.

Clean fuel airport transport vehicles. LAWA continues to work with transportation providers at LAX to adopt cleaner fuel technologies. In 1999, LAWA awarded door-to-door van contracts to three full-service and four long-distance companies to assist in reducing traffic congestion and improving air quality in and around the airport. The vehicles of the LAX courtesy shuttle fleet are now 100 percent alternatively fueled.

Expedited implementation of GSE MOU. Under Alternative D, LAWA has made a major commitment through Mitigation Measure MM-AQ-4 (Operations-Related Measure) to the conversion of ground support equipment (GSE) to extremely low-emission technology, such as electric power, fuel cells, or other future technological developments. This conversion complements and extends the GSE MOU and anticipates the virtual elimination of emissions from GSE at LAX by 2015. Implementation details are still being developed because this effort will involve both the participation and cooperation of numerous third parties operating at LAX as well as evolving technologies. It should be noted that LAWA has already installed underground hydrant fuel system infrastructure throughout LAX, and this system will be extended as needed to support Alternative D. The hydrant fuel carts used to transfer fuel from the hydrant system into the aircraft are included in the GSE that are subject to the GSE MOU and Mitigation Measure MM-AQ-4. The FAA supports LAWA in its efforts to seek and obtain financial assistance through its Voluntary Airport Low Emission (VALE) program, where applicable, to advance all elements of Mitigation Measure MM-AQ-4 as quickly as technically feasible.

FAA has determined that LAWA is currently undertaking or has committed under the CEQA process to undertake all practicable means of effectuating emissions reductions at LAX. FAA has also determined it is not appropriate at this time to identify conditions of approval of the ROD beyond those currently indicated. It would be inappropriate for FAA to require additional air quality mitigation measures, such as those indicated in the comment, as a condition of approval of the ROD for a variety of reasons. For instance, as described above, LAWA is currently implementing or has made commitments to implement henceforth the mitigation identified in the first of the commentor's suggestions, with the exception of using only new diesel engines (>1996) and replacing diesel engines with alternatively fueled engines at this time. While LAWA is taking strides to accomplish these measures in the shortest possible time, it is not practicable from a financial and operational standpoint to require LAWA to do so within the time frame suggested, and would be an undue burden if included as a condition of approval of the ROD. With respect to the commentor's second suggested measure, FAA does not have the authority to require "the cleanest technology (in terms of fuel, gas-electric hybrid, or electric vehicles) for all transport vehicles for airport activities, including but not limited to: shuttle buses, shared ride vehicles, terminal transport buses, public transit, taxi cabs, and delivery vehicles." This measure is not related to a significant adverse impact that would be caused by the proposed project. Moreover, some of these vehicles are owned and operated by entities beyond the jurisdiction and control of FAA or LAWA. Lastly, the comment recommends that FAA require "[e]xpedite[d] commitments to reduce GSE use ahead of the GSE Memorandum of Understanding (MOU) commitment scheduled by EPA- FAA's Voluntary Airport Low Emissions (VALE) Program." (FAA notes that its VALE program is completely unrelated to the GSE MOU.) As noted above, GSE use is already addressed in Mitigation Measure MM-AQ-4, which is unrelated to and exceeds the requirements of the GSE MOU, and is a condition of approval of this ROD. Although the comment requests FAA to mandate an expedited reduction of GSE use ahead of the implementation of the MOU, there are practical limitations on the rate at which these measures can be achieved. Furthermore, as this measure is not related to significant adverse impacts of the proposed project and the FAA lacks jurisdiction and control over the signatories of the MOU other than LAWA, FAA does not have the authority to require the signators to expedite the schedule for reducing emissions from GSE. For all of the reasons explained above in detail, FAA has determined that it is not appropriate to require LAWA to undertake suggested mitigation beyond that already identified as a condition of approval of the ROD.

Finally, please see the following table for a comparison of USEPA recommended mitigation measures to existing regulatory requirements and LAX Master Plan mitigation measures.

Comparison of USEPA Recommendations to Existing Regulations and Master Plan Mitigation Measures/Commitments (Comment FAF00001-5)

USEPA Recommended Mitigation Measure[1]	Existing Requirements	MMRP Mitigation Measure
"For all on and off airport diesel sources under FAA and/or LAWA control, use ultra low sulfur fuel (<15 parts per million by volume), use new (>1996) diesel engines, replace diesel engines with alternative clean fuel engines, use alternative fuel sources, and install particulate filters."	The air quality analysis for the LAX Master Plan assumes that LAWA will continue to comply with existing rules and regulations related to air quality. These requirements include, but are not limited to, the following: ◆ SCAQMD Rule 431.2, Sulfur Content of Liquid Fuels, requires that, after January 1, 2005, only low sulfur diesel fuel (containing 15 ppmw sulfur) will be permitted for sale in the South Coast Air Basin. ◆ Los Angeles City Council directive on diesel engine particulate traps, approved by the Mayor on December 2, 2002; requires that all existing City-owned and City-contracted diesel-fuel vehicles be retrofitted with particulate traps, which engines would henceforth be required to use ultra low sulfur diesel fuel (15 ppmw or less); some exceptions apply to emergency vehicles and off-road vehicles. In December 2002, CARB and most major domestic air carriers serving the South Coast Air Basin executed a Memorandum of Understanding (MOU) regarding ground support equipment. The MOU requires Participating Airlines to meet the following goals: ◆ The Participating Airlines shall meet a 2.65 grams per brake-horsepower hour emission rate goal for HC plus NOx, as an average industry aggregate, by December 31, 2010 for the 1997 Existing Fleet. ◆ The Participating Airlines will, in aggregate, have ZEVs represent at least thirty percent (30%) of the 1997 Existing Fleet by December 31, 2010. ◆ The Participating Airlines will, in aggregate, have ZEVs represent at least forty-five percent (45%) of New GSE by December 31, 2010. ◆ The Participating Airlines agree to reduce diesel particulate emissions from their diesel GSE in the South Coast by installing CARB-verified diesel particulate control technology. ◆ Each Participating Airline will purchase and use low sulfur diesel fuel (15 ppm maximum sulfur content by weight) for all diesel GSE operating in the South Coast beginning after December 31, 2003, except under certain conditions.	*MM-AQ-1*[2] *MM-AQ-2*: "The specific components of this construction-related air quality mitigation measure include: … ◆ Specify combination of electricity from power poles and portable diesel- or gasoline-fueled generators using 'cleaner burning diesel' fuel and exhaust emission controls. ◆ Specify combination of construction equipment using 'cleaner burning diesel' fuel and exhaust emission controls." *MM-AQ-4*: "The primary component of the operations-related air quality mitigation measure consists of one airside item, the conversion of ground support equipment (GSE) to extremely low emission technology (such as electric power, fuel cells, or other future technological developments). Due to the magnitude of the effort to convert GSE, it must be a phased program and must be completed at build out of the Master Plan in 2015…."
"Require the cleanest technology (in terms of fuel, gas-electric hybrid, or electric vehicle) for all transport vehicles for airport activities, including but not limited to: shuttle buses, shared ride vehicles, terminal transport buses, public transit, taxi cabs, and delivery vehicles."		*MM-AQ-1*[2] *MM-AQ-3*: "The primary feature of the transportation-related air quality mitigation measure is the development and construction of at least eight (8) additional sites with FlyAway service similar to the service provided by the Van Nuys FlyAway currently operated by LAWA. The intent of these FlyAway sites is to reduce the quantity of traffic going to and from LAX by providing regional locations where LAX employees and passengers can

Comparison of USEPA Recommendations to Existing Regulations and Master Plan Mitigation Measures/Commitments (Comment FAF00001-5)

USEPA Recommended Mitigation Measure[1]	Existing Requirements	MMRP Mitigation Measure
		pick up an LAX-dedicated, clean-fueled bus that will transport them from a FlyAway closer to their home or office into LAX and back…. Other feasible mitigation elements may be developed to ensure that the emission reductions for this transportation-related measure are achieved. These may include, for example: ◆ Promoting commercial vehicle/trucks/vans using terminal areas (LAX and regional intermodal) to install SULEV/ZEV engines to reduce vehicle air emissions. ◆ Promoting 'best-engine' technology (SULEV/ZEV) for rental cars using on-airport RAC facilities to reduce vehicle air emissions. ◆ Consolidating nonrental car shuttles using SULEV/ZEV engines to reduce vehicle emissions."
"Expedite commitments to reduce GSE use ahead of the GSE Memorandum of Understanding (MOU) commitment scheduled by USEPA-FAA's Voluntary Airport Low Emissions (VALE) Program and commit to specific methods to reduce emissions associated with aircraft fueling such as underground hydrant fuel systems and electric hydrant carts."		*MM-AQ-1*[2] *MM-AQ-4*: "The primary component of the operations-related air quality mitigation measure consists of one airside item, the conversion of ground support equipment (GSE) to extremely low emission technology (such as electric power, fuel cells, or other future technological developments). Due to the magnitude of the effort to convert GSE, it must be a phased program and must be completed at build out of the Master Plan in 2015. An implementation plan will be developed which provides available details as to how each of the elements of this operations-related mitigation measure will be implemented and monitored. Because this effort will apply to all GSE in use at LAX, both LAWA-owned equipment and tenant-owned equipment, the effort must begin upon City approval of the LAX Plan with a detailed inventory of the number, types, sizes, and usage history of all GSE at LAX. Because some of the tenant organizations (mainly the major domestic commercial airlines) have signed a memorandum of understanding (MOU) with the California Air Resources Board (CARB) that requires the signatories to replace a proportion of their GSE fleet with clean-fuel alternatives (including zero-emission equipment), it will be necessary for LAWA to evaluate the level of its commitment within the framework of the MOU. Because LAWA anticipates facilitating this component by providing incentives or tenant lease requirements, early negotiations with tenant organizations may allow LAWA to accommodate cost-sharing agreements to implement the GSE conversions in a timely manner, to make LAWA's financial commitment as cost effective as possible…."

Comparison of USEPA Recommendations to Existing Regulations and Master Plan Mitigation Measures/Commitments (Comment FAF00001-5)

	USEPA Recommended Mitigation Measure[1]	Existing Requirements	MMRP Mitigation Measure
1	A very extensive range of possible mitigation measures was considered for the LAX Master Plan, including most, if not all, of the USEPA recommended mitigation measures. *See* 12/6/04 Memorandum, "Inventory of Air Quality Mitigation Measures Considered in Conjunction with the LAX Master Plan EIS/EIR." Those measures determined to be the most feasible and potentially effective, based on existing information and the current level of planning for the LAX Master Plan, are included in the MMRP. *Id*. Additional measures and more specific requirements will be developed during project-level planning. The new or refined mitigation measures will be incorporated into the LAX Master Plan-Mitigation Plan for Air Quality (LAX MP-MPAQ), which will be developed in consultation with the USEPA pursuant to Mitigation Measure MM-AQ-1. As noted below, the goal of the LAX MP-MPAQ is to reduce potential air pollutant emissions associated with implementation of the LAX Master Plan to levels equal to, or less than, the levels identified in the Final EIS and Final EIR for the project. The First Addendum to the Final EIR states, "MM-AQ-1 recognizes that the Final EIR is a program-level document and provides a mechanism for identification of all feasible methods for reducing air pollutant emissions in accordance with the performance standard provided in the measure. The measure provides a firm commitment to future mitigation of the significant impacts associated with the Master Plan to the extent feasible." First Addendum, at 2-12.		
2	MM-AQ-1 requires the implementation of all feasible measures to reduce air pollutant emissions to levels equal to, or less than, the levels identified in the Final EIS and Final EIR for the project. MM-AQ-1 states, in part, "LAWA shall expand and revise the existing air quality mitigation programs at LAX through the development of an LAX Master Plan Mitigation Plan for Air Quality (LAX MP-MPAQ). The LAX MP-MPAQ shall be developed in consultation with the FAA, the U.S. Environmental Protection Agency (USEPA), the California Air Resources Board (CARB), and the South Coast Air Quality Management District (SCAQMD), as appropriate, and shall include all feasible methods to reduce air pollutant emissions from aircraft, ground support equipment (GSE), traffic, and construction equipment both on and off the airport." The goal of the LAX MP-MPAQ is to reduce potential air pollutant emissions associated with implementation of the LAX Master Plan to levels equal to, or less than, the levels identified in the Final EIS and Final EIR for the project.		

FAF00001-6

Comment:

Auxiliary Power Unit Emissions

The FEIS states that, in 2015, the installation of 400-Hz electricity and preconditioned air at all of the gates is expected to reduce auxiliary power unit (APU) emissions by approximately 75 percent, or 540 tpy of CO, 310 tpy of NOx, 20 tpy of hydrocarbons (HC), and 55 tpy of sulfur dioxide (SO2). In the response to our SDEIS/EIR comments on opportunities to reduce APU emissions, the FEIS states that Clean Air Act Section 233 preempts LAWA and FAA restrictions on APU operation at the gate. Section 233 of the Act addresses State adoption and enforcement of aircraft emission standards; it does not prohibit restrictions on APU use nor does it prohibit LAWA and FAA from offering incentives to reduce APU use. EPA's recommended additional measures for incorporation into the ROD to reduce APU emissions are included below.

Recommendation:

As previously requested in our comments on the SDEIS/EIR, EPA recommends that APU emissions be quantified to reflect specific activities and uses during aircraft operations, with a breakdown highlighting those emissions which can be reasonably reduced by using electric power grid and those where electric power grid can not be utilized effectively. In the ROD, FAA and LAWA should commit to mitigation measures to further minimize APU emissions where they can be reasonably reduced. We recommend the following mitigation measures be incorporated into the ROD as conditions of FAA approval of the project:

- Reduce APU emissions through incentives or lease agreements promoting use of gate power and preconditioned air and reduction of taxi-in/taxi-out time through aircraft on-tarmac traffic mitigation strategies. Identify appropriate early warning programs to alert pilots as to changes in departure times, which may lead to reduced APU emissions. Commit to further measures to minimize APU emissions from specific aircraft activities where emissions can be reasonably reduced.

Response:

As indicated in Response to Comment FAL00001-5, the Record of Decision includes, as a condition of approval, those mitigation measures that are within the jurisdiction and control of the FAA and LAWA and are needed to reduce or prevent significant adverse effects resulting from implementation of the preferred alternative as documented in the Final EIS. Please see Appendix A of the ROD for summaries of the mitigation actions identified by FAA as conditions of approval in the ROD. Based upon the information disclosed in the Final EIS, FAA finds that there is no possible and prudent alternative to the preferred alternative and all reasonable steps have been taken to minimize its significant adverse effects.

Emissions from auxiliary power units (APUs), as provided in Attachments 4 and 7 of Appendix F-B in the Final EIS, were calculated for total usage, providing a single emission impact attributable to APU usage. Information on specific APU activity usage was not required for this analysis and is not available, therefore it is not possible to quantify the emissions that could be reduced using the electric power grid. Therefore, information requested by the commentor regarding quantification of those emissions that could reasonably be reduced by using the power grid cannot readily be provided. It should be noted that the analysis of mitigation measures would remain the same regardless of the availability and/or analysis of this activity usage information.

As noted in Section 2.3.1 of Appendix S-E of the Final EIS, it is LAWA's goal to have all of its aircraft gates at LAX, regardless of the interpretation of Clean Air Act Section 233, equipped with 400-Hz power and preconditioned air in the near future. Implementation of this goal is intended to proceed regardless of the alternative ultimately constructed at LAX. This feature will allow aircraft pilots to minimize the use of their aircrafts' APUs while parked at the gate. FAA, USEPA, and LAWA will engage interested parties in an evaluation of all feasible measures for reducing APU emissions at the gates; such measures may include incentive programs and aircraft guidelines restricting APU use at gates when turnaround time exceeds certain limits.

It should be further noted that, regardless of the availability of the 400-Hz power and preconditioned air infrastructure at LAX, and regardless of the interpretation of Clean Air Act Section 233, neither LAWA nor FAA have express authority to require use of this infrastructure. The final decision on such use of this infrastructure remains the sole discretion of each aircraft pilot due to safety and other considerations. The decision to operate the APU on the aircraft is the responsibility of the pilot in command of the aircraft, and it must be consistent with the manufacturer's recommendations on how to safely operate the aircraft. Each airline has its own set of rules on how they use the APU within the manufacturer's envelop of usage.

FAF00001-7

Comment:

Construction Mitigation Measures

Several potential mitigation measures to reduce construction emissions are listed in the FEIS/EIR as well as the multiple state and district requirements with which the Los Angeles International Airport (LAX) Master Plan must comply. EPA commends FAA and LAWA for incorporating multiple measures to reduce the impacts resulting from future construction associated with this project.

Recommendations:

Due to the serious nature of the PM10 and PM2.5 conditions in the SCAB, we recommend that the best available control measures for these pollutants be implemented at all times and reiterate our comment included in the SDEIS/EIR to incorporate the Construction Mitigation Plan into the ROD. We recommend that (1) all construction mitigation measures listed in the FEIS/EIR, (2) all requirements under the South Coast Air Quality Management District (SCAQMD) Rules 403 and 1186.1, and (3) the following additional measures be incorporated into a Construction Mitigation Plan. The ROD should include a commitment to implement the Construction Mitigation Plan as a condition of FAA approval of the project to minimize PM10 and PM2.5 emissions.

Fugitive Dust Source Controls:
- Stabilize open storage piles and disturbed areas by covering and/or applying water or chemical/organic dust palliative where appropriate. This applies to both inactive and active sites, during workdays, weekends, holidays, and windy conditions.

- Install wind fencing and phase grading operations where appropriate, and operate water trucks for stabilization of surfaces under windy conditions.

- When hauling material and operating non-earthmoving equipment, prevent spillage and limit speeds to15 miles per hour (mph). Limit speed of earth-moving equipment to 10 mph

Mobile and Stationary Source Controls:
- Maintain and tune engines per manufacturer's specifications to perform at EPA certification levels and to perform at verified standards applicable to retrofit technologies. Employ periodic, unscheduled inspections to limit unnecessary idling and to ensure that construction equipment is properly maintained, tuned, and modified consistent with established specifications.

- Prohibit any tampering with engines and require continuing adherence to manufacturers recommendations

- Require that leased equipment be 1996 model or newer unless cost exceeds 110 percent or average lease cost. Require 75 percent or more of total horsepower of owned equipment to be used be 1996 or newer models.

- Use particulate traps where suitable.

Administrative controls:
- Identify where implementation of mitigation measures is rejected based on economic infeasibility.
- Prepare an inventory of all equipment prior to construction and identify the suitability of add-on emission controls for each piece of equipment before groundbreaking. (Suitability of control devices is based on: whether there is reduced normal availability of the construction equipment due to increased

downtime and/or power output, whether there may be significant damage caused to the construction equipment engine, or whether there may be a significant risk to nearby workers or the public.)
- Utilize cleanest available fuel engines in construction equipment and identify opportunities for electrification.
- Develop a construction traffic and parking management plan that minimizes traffic interference and maintain traffic flow
- Incorporate programs such as Leadership in Energy and Environmental Design (LEED) at LAX.

Response:

As indicated in previous responses, this Record of Decision includes, as a condition of approval, those mitigation measures that are within the jurisdiction and control of the FAA and LAWA and needed to reduce or prevent significant adverse effects resulting from implementation of the preferred alternative as documented in the Final EIS. Please see Appendix A of the ROD for summaries of the mitigation actions identified by FAA as conditions of approval in the ROD. Based upon the information disclosed in the Final EIS, FAA finds that there is no possible and prudent alternative to the preferred alternative and all reasonable steps have been taken to minimize its significant adverse effects. In accordance with 40 CFR 1505.3, the FAA will take appropriate steps, through Federal funding grant assurances and conditions, airport layout plan approvals, and contract plans and specifications, to ensure that the mitigation actions are implemented during project development, and will monitor the implementation of these mitigation actions as necessary to assure that representations made in the Final EIS with respect to mitigation are carried out.

As indicated in Appendix A of the ROD, FAA is requiring, as a condition of its final approval in the Record of Decision that LAWA and the City implement the air quality mitigation measures described in the adopted LAX Master Plan MMRP. This includes the mitigation measure associated with construction emissions, MM-AQ-2, which was identified in the Final EIS. By including this condition of approval in the ROD, the condition will be enforceable through special grant assurances in grant agreements entered into with the City for Alternative D. In addition, as noted in Section 2.1 of the Final General Conformity Determination (Appendix A-2a of Volume A of the Final EIS), all of the CEQA-related mitigation measures that FAA relied upon in the general conformity evaluation have been expressly adopted by LAWA and the City in approving Alternative D. As such, those mitigation measures are fully enforceable under California law. (Cal. Pub. Res. Code § 21081.6). California regulations also require compliance with mitigation requirements as stated in a mitigation monitoring and reporting program (MMRP); see 14 C.C.R. §§ 15091(d) and 15097(c)(3). Thus, there are numerous legal mechanisms for ensuring compliance with the construction mitigation measures identified in the MMRP and/or adopted as conditions of approval in the ROD.

The LAX Master Plan MMRP, which incorporates all of the mitigation measures that FAA relied upon in the general conformity evaluation, describes LAWA's lead responsibility for administering the program, the timing of implementation, monitoring frequency, and actions indicating compliance. These provisions ensure that the measures will be properly implemented. Also, the City Council adopted the LAX Specific Plan, a zoning ordinance that establishes development regulations and standards based on the land uses permitted in the LAX Plan. The Specific Plan requires a separate approval for each individual project within the Master Plan and requires the decision-maker to make findings to support that approval. These include a finding that the appropriate mitigation measures are being adopted as a condition of approval. Further, the LAX Specific Plan requires that LAWA prepare and submit to the City Council, among others, annual reports indicating the status of implementation of the LAX Master Plan MMRP.

As noted in the LAX Master Plan MMRP, LAWA shall expand and revise the existing air quality mitigation programs at LAX through the development of an LAX Master Plan Mitigation Plan for Air Quality (LAX MP-MPAQ). Of import, the LAX MP-MPAQ shall be developed in consultation with the FAA, USEPA, CARB, and SCAQMD, as appropriate, and shall include technologically/legally feasible and economically reasonable methods to reduce air pollutant emissions from aircraft, GSE, traffic, and construction equipment both on and off the airport. This is currently underway. As LAWA develops the details of the LAX MP-MPAQ, it will seek additional review and comments from FAA, USEPA, CARB, and SCAQMD on these new documents. The intended purpose of the LAX MP-MPAQ is to ensure that all the feasible mitigation measures are identified and implemented to reduce the air quality impacts of Alternative D at least to the levels noted in the Final EIS for the LAX Master Plan and are maintained during and following project implementation. The LAX MP-MPAQ, currently under development, is subdivided into four sections. The section addressing Mitigation Measure MM-AQ-1 (Framework), provides the basic organizational structure for the full program. It is also intended to provide a clear, consistent and convenient foundation for its implementation. With the Framework's "overarching configuration," the individual components of the LAX MP-MPAQ (i.e., MM-AQ-2, Construction-Related

Measure, MM-AQ-3, Transportation-Related Measure, and MM-AQ-4, Operations-Related Measure) are more effectively coordinated and completed. Importantly, additional information that is specific or unique to the other three will be contained in their respective volumes, to be published separately.

LAWA is currently preparing MM-AQ-2 (Construction-Related Measure) as a stand-alone document. It will require all feasible methods to mitigate construction-related emissions, and will explicitly identify those elements listed in the Final EIS that are able to be quantified. This document will not address regulatory requirements, such as those under SCAQMD Rules 403 (which requires limiting speeds to 15 mph and suspending grading activities when wind speeds exceed 25 mph, among other things) and 1186.1, since LAWA must comply with those requirements regardless and they do not constitute mitigation, nor are they creditable as mitigation under CEQA or NEPA. Many of the additional measures recommended by USEPA in its comment have already been evaluated in the Final EIS and are included as components in MM-AQ-2. These include, but are not limited to, the following: (1) Fugitive Dust Controls (apply non-toxic soil stabilizer to all inactive construction areas; stabilize storage piles with non-toxic soil stabilizer); (2) Mobile and Stationary Controls (require that all construction equipment is properly maintained at all times in accordance with manufacturers' specifications; prohibit tampering with construction equipment; specify combination of construction equipment using "cleaner burning diesel" fuel and exhaust emission controls); and (3) Administrative Controls (designate a person to ensure the implementation of all components of the construction-related measure through direct inspections, records reviews, and investigation of complaints; specify combination of electricity from power poles and portable diesel- or gasoline-fueled generators using "cleaner burning diesel" fuel and exhaust emission controls). The MMRP for the LAX Master Plan requires that the MPAQ Framework be developed in consultation with the USEPA, CARB, and SCAQMD. Therefore, LAWA will discuss the additional measures recommended by USEPA in its comment during those consultations to determine how they and other feasible methods can be incorporated into MM-AQ-2.

No construction will occur until the construction-related mitigation measures are fully implemented. FAA anticipates that, once fully developed, air quality mitigation measures MM-AQ-1, MM-AQ-2, MM-AQ-3, and MM-AQ-4 will be responsive to many of the measures suggested in the comment, some of which are already specifically identified as components of one or more of these four mitigation measures. For this reason, and because a process has been established to make decisions on further defining the specific elements of mitigation measures MM-AQ-1, MM-AQ-2, MM-AQ-3, and MM-AQ-4, FAA does not believe it would be appropriate at this time to preempt those decisions by including the mitigation measures recommended here as conditions of approval in the ROD. However, FAA encourages LAWA to take into consideration those mitigation measures identified in the comment that are not currently included as specific elements of MM-AQ-1, MM-AQ-2, MM-AQ-3 or MM-AQ-4. It should be noted that several of the measures suggested, specifically those addressing fugitive dust, would be required by existing regulations (SCAQMD Rule 403) and are therefore not included as mitigation measures.

Finally, please see the following table for a comparison of USEPA recommended mitigation measures to existing regulatory requirements and LAX Master Plan mitigation measures and commitment.

Comparison of USEPA Recommendations to Existing Regulations and Master Plan Mitigation Measures/Commitments (Comment FAF00001-7)

USEPA Recommended Mitigation Measure[1]	Existing Requirements	MMRP Commitment and/or Mitigation Measure
"Stabilize open storage piles and disturbed areas by covering and/or applying water or chemical/organic dust palliative where appropriate. This applies to both inactive and active sites, during workdays, weekends, holidays, and windy conditions."	LAWA will continue to comply with existing rules and regulations related to air quality, including, but are not limited to, the following: ◆ SCAQMD Rule 403, Fugitive Dust, identifies the minimum particulate controls for construction-related fugitive dust. This rule requires that disturbed soils be stabilized throughout the construction period, including applying water or a stabilizing agent in sufficient quantities to prevent the generation of visible dust plumes. Additional requirements apply to large operations.	*MM-AQ-1*[2] *MM-AQ-2*: "The specific components of this construction-related air quality mitigation measure include: … ◆ Apply non-toxic soil stabilizer to all inactive construction areas (i.e., areas with disturbed soil). ◆ Following the addition of materials to, or removal of materials from, the surface of outdoor storage piles, said piles shall be effectively stabilized of fugitive dust emissions utilizing non-toxic soil stabilizer. ◆ Post a publicly visible sign with telephone number and person to contact regarding dust complaints; this person shall respond and take corrective action within 24 hours. ◆ Prior to final occupancy, the applicant demonstrates that all ground surfaces are covered or treated sufficiently to minimize fugitive dust emissions.
"Install wind fencing and phase grading operations where appropriate, and operate water trucks for stabilization of surfaces under windy conditions."		*MM-AQ-1*[2] *MM-AQ-2*: See above regarding soil stabilization.
"When hauling material and operating non-earthmoving equipment, prevent spillage and limit speeds to 15 miles per hour (mph). Limit speed of earth-moving equipment to 10 mph."	LAWA will continue to comply with existing rules and regulations related to air quality, including, but are not limited to, the following: ◆ California Vehicle Code section 23114 states: "A vehicle may not be driven or moved on any highway unless the vehicle is so constructed, covered, or loaded as to prevent any of its contents or load other than clear water or feathers from live birds from dropping, sifting, leaking, blowing, spilling, or otherwise escaping from the vehicle." ◆ SCAQMD Rule 403, Fugitive Dust, requires that vehicles limit their speeds to 15 miles per hour in staging areas. The rule also requires that at least 6 inches of freeboard be maintained on haul vehicles.	*MM-AQ-1*[2]
"Maintain and tune engines per manufacturer's specifications to perform at EPA certification levels and to perform at verified standards applicable to retrofit technologies. Employ periodic, unscheduled inspections to limit unnecessary idling and to ensure that construction equipment is properly maintained, tuned, and modified consistent with established specifications."		*MM-AQ-1*[2] *MM-AQ-2*: "The specific components of this construction-related air quality mitigation measure include: … ◆ Prohibit construction vehicle idling in excess of ten minutes. ◆ Utilize construction equipment having the minimum practical engine size (i.e., the lowest appropriate horsepower rating for intended job).

Comparison of USEPA Recommendations to Existing Regulations and Master Plan Mitigation Measures/Commitments (Comment FAF00001-7)

USEPA Recommended Mitigation Measure[1]	Existing Requirements	MMRP Commitment and/or Mitigation Measure
		◆ Require that all construction equipment working on site is properly maintained (including engine tuning) at all times in accordance with manufacturers' specifications and schedules. ◆ Prohibit tampering with construction equipment to increase horsepower or to defeat emission control devices. ◆ The contractor or builder shall designate a person or persons to ensure the implementation of all components of the construction-related measure through direct inspections, record reviews, and investigations of complaints."
"Prohibit any tampering with engines and require continuing adherence to manufacturers recommendations."		*MM-AQ-1*[2] *MM-AQ-2*: "The specific components of this construction-related air quality mitigation measure include: … ◆ Require that all construction equipment working on site is properly maintained (including engine tuning) at all times in accordance with manufacturers' specifications and schedules. ◆ Prohibit tampering with construction equipment to increase horsepower or to defeat emission control devices."
"Require that leased equipment be 1996 or newer unless cost exceeds 110 percent [of] average lease cost. Require 75 percent or more of total horsepower of owned equipment to be used be 1996 or newer models."		*MM-AQ-1*[2]
"Use particulate traps where suitable."		*MM-AQ-1*[2] *MM-AQ-2*: "The specific components of this construction-related air quality mitigation measure include: … ◆ Specify combination of construction equipment using 'cleaner burning diesel' fuel and exhaust emission controls."

Comparison of USEPA Recommendations to Existing Regulations and Master Plan Mitigation Measures/Commitments (Comment FAF00001-7)

USEPA Recommended Mitigation Measure[1]	Existing Requirements	MMRP Commitment and/or Mitigation Measure
"Prepare an inventory of all equipment prior to construction and identify the suitability of add-on emission controls for each piece of equipment before groundbreaking. (Suitability of control devices is based on: whether there is reduced normal availability of the construction equipment due to increased downtime and/or power output, whether there may be significant damage caused to the construction equipment engine, or whether there may be a significant risk to nearby workers or the public.)"		*MM-AQ-1*[2] *MM-AQ-2*: "The specific components of this construction-related air quality mitigation measure include: … ◆ Specify combination of construction equipment using 'cleaner burning diesel' fuel and exhaust emission controls."
"Utilize cleanest available fuel engines in construction equipment and identify opportunities for electrification."		*MM-AQ-1*[2] *MM-AQ-2*: "The specific components of this construction-related air quality mitigation measure include: … ◆ Specify combination of electricity from power poles and portable diesel- or gasoline-fueled generators using 'cleaner burning diesel' fuel and exhaust emission controls. ◆ Specify combination of construction equipment using 'cleaner burning diesel' fuel and exhaust emission controls."
"Develop a construction traffic and parking management plan that minimizes traffic interference and maintain traffic flow."		*Master Plan Commitment ST-18*: "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."

Comparison of USEPA Recommendations to Existing Regulations and Master Plan Mitigation Measures/Commitments (Comment FAF00001-7)

USEPA Recommended Mitigation Measure[1]	Existing Requirements	MMRP Commitment and/or Mitigation Measure
"Incorporate programs such as Leadership in Energy and Environmental Design (LEED) at LAX."		*MM-AQ-1*[2] *MM-AQ-3*: "Other feasible mitigation elements may be developed to ensure that the emission reductions for this transportation-related measure are achieved. These may include, for example: ◆ Covering, if feasible, any parking structures that receive direct sunlight, to reduce volatile emissions from vehicle gasoline tanks; and installing solar panels on these roofs where feasible to supply electricity or hot water to reduce power production demand and associated air emissions at utility plants."

1 A very extensive range of possible mitigation measures was considered for the LAX Master Plan, including most, if not all, of the USEPA recommended mitigation measures. *See* 12/6/04 Memorandum, "Inventory of Air Quality Mitigation Measures Considered in Conjunction with the LAX Master Plan EIS/EIR." Those measures determined to be the most feasible and potentially effective, based on existing information and the current level of planning for the LAX Master Plan, are included in the MMRP. *Id*. Additional measures and more specific requirements will be developed during project-level planning. The new or refined mitigation measures will be incorporated into the LAX Master Plan-Mitigation Plan for Air Quality (LAX MP-MPAQ), which will be developed in consultation with the USEPA pursuant to Mitigation Measure MM-AQ-1. As noted below, the goal of the LAX MP-MPAQ is to reduce potential air pollutant emissions associated with implementation of the LAX Master Plan to levels equal to, or less than, the levels identified in the Final EIS and Final EIR for the project.

The First Addendum to the Final EIR states, "MM-AQ-1 recognizes that the Final EIR is a program-level document and provides a mechanism for identification of all feasible methods for reducing air pollutant emissions in accordance with the performance standard provided in the measure. The measure provides a firm commitment to future mitigation of the significant impacts associated with the Master Plan to the extent feasible." First Addendum, at 2-12.

2 MM-AQ-1 requires the implementation of all feasible measures to reduce air pollutant emissions to levels equal to, or less than, the levels identified in the Final EIS and Final EIR for the project. MM-AQ-1 states, in part, "LAWA shall expand and revise the existing air quality mitigation programs at LAX through the development of an LAX Master Plan Mitigation Plan for Air Quality (LAX MP-MPAQ). The LAX MP-MPAQ shall be developed in consultation with the FAA, the U.S. Environmental Protection Agency (USEPA), the California Air Resources Board (CARB), and the South Coast Air Quality Management District (SCAQMD), as appropriate, and shall include all feasible methods to reduce air pollutant emissions from aircraft, ground support equipment (GSE), traffic, and construction equipment both on and off the airport." The goal of the LAX MP-MPAQ is to reduce potential air pollutant emissions associated with implementation of the LAX Master Plan to levels equal to, or less than, the levels identified in the Final EIS and Final EIR for the project.

FAF00001-8

Comment:

Air Quality - Master Plan Commitments

Results of the supplemental human health risk assessment report suggests that acute and chronic non-cancer effects are likely to occur under the no action alternative. The non-cancer chronic hazard index (HI) ranges from 35 to 221 (average 59) and acute HI ranges from 14 to 87 (average 23). (Technical Report - LAX Master Plan Supplement to the Draft EIS/EIR, 9.a. Supplemental Health Risk Assessment Technical Report, June 2003, p. 11 and 14-15.) Although these are "baseline values" (i.e. with no action), the HI indicates risks from emissions that are attributable to the operations of the airport and the traffic into and out of the airport.

EPA has worked for many years with LAWA, consultants, and State and local air district experts to develop an air quality and source apportionment study plan. In 2003, EPA convened an expert peer review panel that reported on the existing, incomplete work plan (Report on the Peer Review Workshop on the Los Angeles World Airports, Air Quality and Source Apportionment Study of the Area Surrounding Los Angeles International Airport (August 8, 2003). The reviewers were quite complimentary of the existing documentation, but made many suggestions for improving the plan, starting with a complete emissions inventory for the airport. EPA acknowledges that "LAWA will conduct an air quality and source apportionment study to evaluate the contribution of on-airport aircraft emissions to off-airport pollutant concentrations." (FEIS, p. A-2-118, AQ-1) and is encouraged that the Community-Based Agreement states that this project can proceed within one year if FAA provides approval and/or funding.

EPA has provided funding to the California Air Resources Board (CARB), in collaboration with University of California at Los Angeles and University of Southern California, to conduct a limited scope air quality study at and around LAX. We understand and appreciate that LAWA will cooperate and provide necessary support for the study which will start in April 2005. SCAQMD has also started its MATES III study and expects to complete the study in early 2006. These sources of information will aide in implementation of the Air Quality and Source Apportionment Study.

Recommendations:

We recommend that the ROD clarify the role and specific commitments of FAA in the proposed AQ-1, Air Quality and Source Apportionment Study, AQ-2, School Air Filters, and AQ-3 Mobile Health Research Lab (FEIS/EIR, p. A.2-118)

As a condition of FAA approval of the project in the ROD, EPA recommends that FAA (1) incorporate suggestions described in the peer review workshop report and pertinent findings from the CARB and MATES III studies in implementing the proposed Air Quality and Source Apportionment Study, and (2) develop a schedule to conduct the air quality and source apportionment study, including initiation of the study within one year of the FEIS/EIR being finalized. Furthermore, the Air Quality and Source Apportionment Study information should be used to validate the modeled concentrations of hazardous air pollutants, especially acrolein and 1,3-butadiene, as characterized in the FEIS/EIR, to inform future mitigation.

Response:

In accordance with 49 U.S.C. §47106(c)(1)(B), the Record of Decision includes as a condition of approval those mitigation measures within the jurisdiction and control of the FAA and LAWA that are needed to reduce or prevent significant adverse effects resulting from implementation of the preferred alternative as documented in the Final EIS. Appendix A of the ROD includes summaries of the mitigation actions that have ultimately been identified as conditions of approval of the ROD. Based upon the information disclosed in the Final EIS, FAA finds that there is no possible and prudent alternative to the preferred alternative and all reasonable steps have been taken to minimize its significant adverse effects.

USEPA has recommended that FAA require completion of the Air Quality Source Apportionment Study as a condition of approval. Please see Response to Comment FAF00001-2 regarding the Air Quality Source Apportionment Study (identified in the Final EIS as Master Plan Commitment AQ-1).

The two Master Plan commitments to which USEPA refers, the installation of air filters in schools and the mobile health research lab are included in the Final EIS as Master Plan Commitments AQ-2 and AQ-3. FAA's review of air quality impacts in the Final EIS does not disclose significant impacts particular to schools, therefore air filters are not required to address any project-related impact. The mobile health research lab identified in Master Plan Commitment AQ-3 would study various aspects of current conditions resulting from existing airport operations and other activities in the project area but would not reduce impacts from the proposed action. As a result, FAA has not included these measures as conditions of approval in the ROD. FAA encourages LAWA, however, with assistance from appropriate agencies such as USEPA or other State and Federal agencies, to pursue completion of this study.

FAF00001-9

Comment:

As a condition of FAA approval of the project in the ROD, EPA recommends that (1) air filters be installed in schools prior to the initiation of the Air Quality and Source Apportionment Study to mitigate potential adverse health effects, (2) installation of air filters be complemented with an adequate inspection and maintenance program to ensure that installation meets intended purposes, and (3) the health endpoints of the research proposed through the Mobile Health Research Lab be expanded by working with the California Environmental Health Tracking Program and the California Department of Health Services.

Response:

Comment noted. Please see Response to Comment FAF00001-8 above.

FAF00001-10

Comment:

Transportation Conformity
The FEIS includes the completed General Conformity Clean Air Act Determination, and states that emissions associated with the proposed action could not be confirmed to have been included with those from a conforming Regional Transportation Improvement Program and a conforming Regional Transportation Plan prepared by Southern California Association of Governments. Therefore, there has not been a determination of transportation conformity for any emissions that may result from proposed roadway improvements associated with Alternative D. Because future funding and/or approval for a proposed new interchange included as a part of Alternative D may come from the Federal Highway Administration (FHWA), that portion of the project will need to be evaluated for transportation conformity.

Recommendation:

In the ROD, identify all portions of Alternative D that will require a transportation conformity determination and will need to be included in a conforming regional transportation improvement program and regional transportation plan.

Response:

The commentor states that there has not been a determination of transportation conformity for any emissions that may result from proposed roadway improvements associated with Alternative D and recommends that the FAA identify in the ROD all portions of Alternative D that will require a transportation conformity determination.

The roadway improvements associated with Alternative D are not currently specifically included in the 2004 Regional Transportation Plan (RTP) and the 2004 Regional Transportation Improvement Program (RTIP), because the Los Angeles City Council and the FAA have only recently selected Alternative D as representing the Master Plan for LAX. However, it is precisely because Alternative D was not explicitly included in the analyses supporting the 2004 RTP and the 2004 RTIP that the associated emissions were not included in the State Implementation Plan (SIP). Therefore, the FAA was required to analyze and address the emissions associated with Alternative D, including those associated with the roadway

improvements in its general conformity evaluation of Alternative D. Thus, the emissions associated with roadway improvements for Alternative D have been accounted for in the General Conformity Determination for the Preferred Alternative.

The FAA supports the continued interagency planning efforts by the City of Los Angeles and LAWA to ensure that the LAX Master Plan development projects are considered by the Southern California Association of Governments and included in its 2007 RTP and 2007 RTIP.

At this time, no decision has been made to implement the proposed Lennox Boulevard/I-405 Interchange Mitigation Measure (MM-ST-13), which appears to be the roadway improvement that is the subject of this comment. This measure is one of two alternative measures proposed to mitigate specific transportation impacts, but over which neither FAA nor LAWA have sole authority to implement. After a decision has been made by the City of Los Angeles to implement this mitigation measure, the appropriate NEPA and Transportation Conformity documentation through the Federal Highways Administration will be prepared prior to implementation of this measure.

FAF00001-11

Comment:

Mitigation Measures and Master Plan Commitments

Under the National Environmental Policy Act (NEPA), "all relevant, reasonable mitigation measures that could improve the project are to be identified. Mitigation measures must be considered even for impacts that by themselves would not be considered significant. Once the proposal itself is considered as a whole to have significant effects....mitigation measures must be developed where it is feasible to do so" (see Council on Environmental Quality (CEQ), 1981, "Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations"). CEQ also issued guidance on integrating pollution prevention measures in NEPA documents and NEPA decisions (1993 Memorandum on Pollution Prevention and NEPA).

The FEIS identifies a comprehensive list of 115 mitigation measures and master plan commitments proposed by both LAWA and FAA. FAA anticipates identifying 19 measures as conditions of approval for implementation in the Record of Decision (FEIS/EIR, p. A.1-41).

Recommendation:

We recommend that the FAA include in the ROD an expanded range of measures as conditions of approval of Alternative D. Specifically, Mitigation Measures MM-EJ-1, Expediting Residential Soundproofing for Qualifying Homeowners and other measures to further reduce noise impacts and Master Plan Commitment AQ-1, Air Quality and Source Apportionment Study. In the ROD, EPA recommends that FAA identify why each mitigation measure presented in the FEIS/EIR is not carried forward as a condition for approval of the project (why it is not feasible, not practicable, not appropriate, etc.)

Response:

In accordance with 49 U.S.C. §47106(c)(1)(B), this Record of Decision includes as a condition of approval those mitigation measures that are within the jurisdiction and control of the FAA and LAWA and needed to reduce or prevent significant adverse effects resulting from implementation of the preferred alternative as documented in the Final EIS. The mitigation measures that the FAA anticipated to be conditions of approval for the Preferred Alternative at the time of the Final EIS are identified in Table AES-4 of the FEIS, "Master Plan Commitments and Mitigation Measures Proposed for the LAX Master Plan Build Alternatives." Appendix A to this ROD includes summaries of the mitigation actions that have ultimately been identified as conditions of approval of the ROD. Based upon the information disclosed in the Final EIS, FAA finds that, (a) there is no possible and prudent alternative to the preferred alternative, and (b) all reasonable steps have been taken to minimize its significant adverse effects.

Measures to reduce noise impacts in the ROD include Measure N-1, Maintenance of Applicable Elements of Existing Aircraft Noise Abatement Program, and Measure N-4, Update the Aircraft Noise Abatement Program Elements as Applicable to Adapt to the Future Airfield Configuration. Mitigation Measure MM-EJ-1, Expedite Residential Soundproofing for Qualifying Homeowners, is not identified as a measure that would be included in the ROD for Alternative D because the Final EIS did not find any

significant adverse impacts within minority and/or low-income communities relative to noise associated with Alternative D, as described in Section A.2 of the FEIS. Therefore, including the measure requested in the comment as a condition of approval of the ROD would not be appropriate. This is consistent with the CEQ 40 Most Asked Questions guidance cited by the commentor, which states, "…Once the proposal itself is considered as a whole to have significant effects…mitigation measures must be developed where it is feasible to do so." However, MM-EJ-1 is included in the MMRP, adopted by LAWA and the Los Angeles City Council, and therefore is included among the measures that are enforceable under state law and regulation.

Master Plan Commitment AQ-1, Air Quality Source Apportionment Study, was not included as a condition of approval in the ROD because this measure would not reduce air quality impacts associated with the proposed project. Rather, this measure would study current conditions resulting from existing airport operations and other activities in the project area. As such, this Master Plan Commitment does not satisfy the criteria identified above under 49 U.S.C. §47106 for inclusion as a condition of approval.

FAR00001 Grayson, April Southern California Association of Governments 3/9/2005

FAR00001-1

Comment:

We have reviewed the Final Environmental Impact Statement, Los Angeles International Airport Proposed Master Plan Improvements and determined that it is regionally significant per Areawide Clearinghouse criteria. SCAG comments on the Final EIS were appropriately considered, therefore, we have no further comments. A description of the project was published in the January 1-15, 2005 Intergovernmental Review Clearinghouse Report for public review and comment.

Response:

Comment noted.

FAL00001 Lichman, Ph.D., Barbara Chevalier, Allen & Lichman LLP 2/22/2005

FAL00001-1

Comment:

The following are comments by the City of Inglewood ("Inglewood"), the City of Culver City ("Culver City"), and the County of Los Angeles ("County") (collectively "Commentors") concerning the "Final Environmental Impact Statement for the Proposed Master Plan Improvements at Los Angeles International Airport ("LAX")" ("FEIS") and the Clean Air Act Final Conformity Determination ("Conformity Determination") incorporated as Appendix A-2a in the FEIS. As a threshold issue, please be advised that these comments specifically address the environmental topics covered in Volume A of the FEIS, noise, air quality, and environmental justice, where new information and/or analysis supercedes that set forth in the Draft Environmental Impact Report/Environmental Impact Statement ("DEIR") and Supplemental Draft Environmental Impact Report/Environmental Impact Statement ("SEIR"), prepared jointly by Los Angeles World Airports ("LAWA") and the Federal Aviation Administration ("FAA"), and the Final Environmental Impact Report ("FEIR") prepared by LAWA pursuant to the California Environmental Quality Act, Public Resources Code § 21000, et seq., ("CEQA").1 These comments also address the additional issue of capacity where the use of the No Action/No Project Alternative ("NA/NP") as the baseline for analysis materially alters the FEIS analysis from that presented in the FEIR. With respect to the other issues presented in the FEIS, Commentors hereby incorporate by reference, in full, their prior comments on the DEIR, SEIR, FEIR and Draft Conformity Determination.

With that preface, Commentors summarize their comments as follows:

1 The DEIR and SEIR were joint products of LAWA and the FAA, and both, along with the FEIR, provide the foundational analysis in the FEIS. Any material that is not changed from the earlier environmental documents is assumed, for purposes of these comments to be adopted in the FEIS.

Response:

The comment is introductory to comments that follow. Please see Responses to Comments below.

The commentor is correct in stating that any material from the earlier environmental documents that is not changed by Volume A is adopted as part of the Final EIS.

Responses to comment letters on the Draft EIS/EIR and Supplement to the Draft EIS/EIR submitted by the City of Culver City, City of Inglewood, and County of Los Angeles are included in Part II of the Final EIS. Please see pages iii-9, iii-12 and iii-13, and iii-18 and iii-19 in Part II-Volume 1 of the Final EIS for a listing of comment letters submitted by the City of Culver City, City of Inglewood, and County of Los Angeles, respectively, on the Draft EIS/EIR and Supplement to the Draft EIS/EIR. Please see the Table of Contents in Part II-Volume 1 to determine the location (Volume number) of each comment letter in Part II. Responses to comments on the Draft General Conformity Determination submitted by the County of Los Angeles are provided in Appendix C of Appendix A-2a, Final Clean Air Act General Conformity Determination, in Volume A2 of the Final EIS.

FAL00001-2

Comment:

The fundamental flaw that taints virtually all of the FEIS' analysis and conclusions is its unsupported assumptions about the constraints on passenger and operational capacity that characterize Alternative D. Those assumptions are: (a) although Alternative D's airfield capacity is virtually identical to that of Alternative C, the former preferred Alternative, with an acknowledged capacity of 89.6 MAP, constraints on the number of gates will effectively constrain the number of passengers passing through the airport; (b) constraints on the amounts of on-airport cargo sort space will limit the total number of operations; (c) as a consequence of these constraints, demand for air travel will "self-disburse" to other airports in the region; such that (d) ultimately, Alternative D's capacity will be virtually identical to that of the NA/NP alternative, the baseline for comparison under the National Environmental Policy Act ("NEPA"), 42 U.S.C. § 4321, et seq.

The FEIS' analysis based on those assumptions vastly underestimates the project's environmental impacts, by utilizing the purported constraints to artificially equate the impacts of Alternative D with those of the NA/NP baseline. They are, however, unsupported by any evidence, let alone substantial evidence, in the Record. Instead, the Record demonstrates, among other things, that: (a) Alternative D has the same airside capacity as Alternative C and far greater capacity than the NA/NP Alternative; (b) the number of contact gates, their capacity and the amount of terminal space will, far from limiting capacity, increase capacity under Alternative D, and the removal of the remote gates which purportedly limits flexibility to expand passenger capacity is not a commitment, but a chimera, allowing their replacement at any time they are needed to further increase capacity; (c) the amount of cargo sort space on-airport is irrelevant to limitation of cargo operations (let alone operations in general) because there is an abundance of warehousing available off the airport; and (d) there is no legal mechanism whereby aircraft operations can be forced to disburse to other airports, nor is there, with the demise of the planned El Toro International Airport, the lynchpin of the 2001 SCAG Regional Transportation Plan ("RTP") upon which the FEIS relies, any peripheral airport capacity to accommodate such imagined dispersion of demand throughout the region in the foreseeable future. Therefore, the Record shows that Alternative D will allow airfield capacity increases equal to or greater than Alternative C without any enforceable on-airport constraints on that blossoming of capacity.

Response:

Comment noted. The content of this comment is similar to comment FAL00003-2; please refer to Response to Comment FAL00003-2 regarding FAA's reliance on the practical capacity of LAX and other Master Plan issues raised in this comment. Also, please see Part II-Volume 1 of the Final EIS for Topical Responses TR-GEN-3 regarding actual versus projected activity levels, TR-RC-1 regarding the LAX Master Plan role in the regional approach to meeting demand, and TR-MP-2 regarding the SCAG Regional Transportation Plan (RTP).

For the reasons described in Response to Comment FAL00003-2, the FAA concludes that the analysis of the practical capacity of LAX in the Final EIS, as modified by implementation of the Alternative D improvements, is designed to provide the decision-maker with the reasonably foreseeable environmental impacts arising out of the implementation of the various alternatives. Having considered the commentor's position and after reviewing the analysis in support of the Master Plan and the Final EIS, it is FAA's position that the issue of capacity has been adequately addressed. There are different

ways to approach the issue of capacity analysis. The FAA has determined that for the purposes of the required analysis, the methodology selected was both adequate and appropriate for providing the FAA with the information needed to evaluate the project.

The content of the comment raises several other issues addressed herein. The commentor incorrectly asserts that "the amount of cargo sort space on-airport is irrelevant to limitation of cargo operations . . because there is an abundance of warehousing available off the airport." In fact, the vast majority of cargo arriving and departing LAX passes through the cargo buildings on the airport property. The only exceptions are special shipments of large livestock (such as race horses) and other rare shipments that require specialized handling (such as an armored car shipment of valuables) that are specially cleared and escorted to their awaiting cargo aircraft. As described on page 3-61 in Chapter 3 of Part I of the Final EIS, without adequate cargo building space, the volume of air cargo that can be handled through these facilities is constrained. Warehouses near LAX can and do store and distribute air cargo that is arriving and departing LAX. However, these activities are by brokers and distribution companies looking to take advantage of the limited supply of on-airport warehouse space and cargo lift capacity at LAX. These off-airport facilities cannot replace the basic handling logistics required by The U.S. Customs Service and for airside distribution of cargo to and from the appropriate flights. Again, it is the on-airport warehouse element in the cargo supply chain that sets the capacity of the system. After September 11, 2001, cargo and mail that is carried in the cargo holds of passenger aircraft have come under increased scrutiny. The Transportation Security Administration (TSA) is looking at tighter restrictions on cargo handling at all airports in the U.S. There are indications that stricter guidelines are coming in the near future that will require all cargo to be inspected at on-airport cargo warehouses. While this restriction is not yet in place, it would have a further dampening effect on the volume of cargo that could be processed at LAX below that projected in the No Action/No Project Alternative and in Alternative D.

The commentor is correct in the statement that, "there is no legal mechanism whereby aircraft operations can be forced to disburse to other airports . . ." FAA and LAWA have established the same point in the Final EIS. The FAA and LAWA have also stated that the practical capacity projection used to analyze the foreseeable activity and impacts associated with the implementation of Alternative D improvements at LAX are in no way a legal or technically enforceable "cap" on activity. Instead, Alternative D is LAWA's best attempt to use available planning tools to encourage the capacity to stay generally equivalent to the No Action/No Project activity level by relying on the reasonable assumptions regarding market reactions to physical constraints as described in Response to Comments FAL00003-2.

The commentor also raises questions about the regional context of the conclusions made by the decision makers regarding LAX's future role in the Los Angeles region. In Chapter 1, Regional Context, in Part I of the Final EIS, a full review is provided of the broader regional aviation planning issues facing the Southern California Association of Governments (SCAG is the region's official metropolitan planning organization or MPO) and the region's leaders. The commentor does not reference SCAG's 2004 Regional Transportation Plan (RTP) that addresses its comment and is covered in Chapter 1 of the Final EIS. The Final EIS is consistent with the current and approved 2004 RTP given that the role of LAX in the region did not change in SCAG's updated plan. While El Toro was a significant component of SCAG's 2001 RTP, it is not part of the 2004 RTP and other airports throughout the region, other than LAX, are now planned by SCAG to serve larger shares of the future projected aviation demand.

FAL00001-3

Comment:

The FEIS's environmental analysis is further distorted by the obverse analytic defect, i.e., the capacity of the NA/NP Alternative is vastly overstated. Not only does the FEIS employ a baseline for analysis that flies in the face of contemporary case law, see, e.g., American Rivers v. FERC, 201 F.3d 1186, 1195, n. 15, 1198 (9th Cir. 1999), but also ignores the acknowledgment in the FEIS' predecessor documents which states that the improvements in the NA/NP Alternative are "minor" and that "With only the improvements anticipated under the No Action/No Project Alternative, operations at these levels (i.e., 48.7 MAP and 3.1 MAP) in 2015 at LAX would be very inefficient and congested..." (FEIS, § A, p. A.1-11).

Response:

Please see Topical Response TR-GEN-2 in Part II-Volume 1 of the Final EIS regarding No Action/No Project Alternative assumptions. As described in Topical Response TR-GEN-2 and in Chapter 3 in Part

I of the Final EIS, the No Action/No Project Alternative would involve very few improvements to the airfield or terminal facilities. Nonetheless, aviation activity at LAX would continue to grow under this alternative, reaching a projected level of 78.7 million annual passengers and 3.12 million annual tons of cargo in 2015.

The FAA has prepared a Final EIS that complies with existing law regarding the appropriate point of comparison for evaluating the significance of impacts of proposed "action" alternatives in a NEPA document. The appropriate point of comparison as identified in FAA Orders 5050.4A and 1050.1E, and supported by existing case law, is the No Action Alternative. Despite commentor's indications to the contrary, contemporary NEPA case law does not adopt the CEQA "baseline" concept, which evaluates the significance of project impacts by comparing future conditions under the action alternatives to conditions which existed when the environmental review process began. The case cited by the commentor, American Rivers v. FERC, 201 F.3d 1186 (9th Cir. 1999), did not address the general question of the appropriate basis for comparing project impacts under NEPA. Rather, in that case, the Court reviewed the Federal Energy Regulatory Commission's interpretation of the organic statute under which it operates, the Federal Power Act, 16 U.S.C. § 791a et seq. Interpreting that statute, the Court determined that using existing environmental conditions at a hydroelectric power facility as a baseline for evaluating a licensee's relicensing proposal was a reasonable interpretation of relicensing requirements under the Federal Power Act. Thus, that case addressed the unique statutory provisions of the Federal Power Act, and is not an analysis of general requirements under NEPA.

FAL00001-4

Comment:

Because the capacity potential of Alternative D is understated and that of the NA/NP baseline dramatically overstated, the FEIS erroneously concludes that the project will not give rise to significant noise or other impacts. That conclusion is further underlain by notable evidentiary and analytic omissions. For example, the FEIS' noise analysis does not take into account the operations of the new large A-380 aircraft. Indeed, the fleet mix in the FEIS does not include the A-380 or any other New Large Aircraft ("NLA"), even though the FEIS anticipates that as many as 30 per day will access LAX in 2006, but, rather, its surrogate the 747-400, which is smaller, lighter and able to use the "over water" departure procedure (upon which the noise analysis is partially based) under less restrictive "tailwind" conditions. The FEIS explains this omission only by the offhand statement that "...many of these [larger] aircraft will be quieter than the aircraft they are replacing." [emphasis added] (Subtopical Response, TR-N-6.3, Topical Responses, p. 2-114).

Response:

The commentor states that the capacity of Alternative D has been understated and the capacity of the No Action/No Project Alternative has been overstated, resulting in inaccurate disclosure of environmental impacts in the Final EIS. The Final EIS discloses that the future activity level of Alternative D is anticipated to be approximately 78.9 million annual passengers (MAP) and 3.12 million annual tons (MAT) of cargo in the year 2015, while the future activity level of the No Action/No Project Alternative is projected to be approximately 78.7 MAP and 3.12 MAT of cargo in 2015. The future activity levels for both the No Action/No Project scenario and Alternative D were calculated using an accepted forecasting procedure. The results are well supported by substantial analysis in the Final EIS and supporting documents. See Response to Comment FAL00003-2 for an explanation of how the future activity level for Alternative D was calculated and how it differs from estimating a theoretical maximum design capacity, and why the methodology used in the Final EIS is appropriate. See also TR-GEN-2 for an explanation of the definition of the No Action/No Project Alternative, and Response to Comment FAL00003-2 for an explanation of how the future activity level of the No Action/No Project Alternative was determined and why this methodology is appropriate. To the extent that environmental impact disclosure for certain resource categories is dependant on predicted future activity levels, that disclosure is accurately identified commensurate with the projected activity levels.

Furthermore, the commentor is incorrect in stating that the Final EIS fails to take account of the noise impacts of the A-380 or other similar large aircraft. The Final EIS accounts for A-380 operations. A-380 aircraft are included within the group of New Large Aircraft (NLA) represented for noise assessment purposes by the 747-400. The commenter is correct in stating that the 747-400 at Maximum Gross Takeoff Weight (MGTOW) is both smaller and lighter than the A-380 at MGTOW, but is incorrect in stating that the 747-400 is more able to use the "over water" departure procedure (upon which the noise analysis is partially based) under less restrictive "tailwind" conditions. The runway length requirement for the A-380 at MGTOW weight is 9,350 feet, while the runway length requirement for the 747-400 at

MGTOW is 9,950 feet. Consequently, the A-380 aircraft would be forced to use an easterly departure less frequently than a 747-400 aircraft during tailwind conditions, resulting in a potential for the Final EIS to overstate the actual noise impacts of the A-380, rather than understating them, as the commentor posits. It is only the older 747-200B/C and 747-300 aircraft, not the 747-400, that must occasionally use an easterly departure during "over water" operations because at MGTOW they have runway length of requirements of 10,900 to 14,050 feet under comparable wind conditions. All of these type 747 aircraft, in addition to the 747-400 as a surrogate for the A-380, were taken into account in the noise analysis.

Certificated noise data is not available for the A-380 aircraft as of the date of the Final EIS. The FAA's Office of Environment and Energy has advised the use of the 747-400 as a substitution to represent the noise and operating conditions of the A-380 for noise modeling using INM Version 6.0. The noise characteristics of the A-380 cannot be more clearly defined until it is certificated for its noise characteristics during flight testing.

FAL00001-5

Comment:

The impacts reported in the FEIS' air quality analysis and the conclusions of the Final Conformity Determination based upon that analysis are similarly under-estimated. The FAA found the emissions from Alternative D to conform to the State Implementation Plan ("SIP"), based on a last minute determination by the SCAQMD that "the baseline aircraft inventories would serve as the emissions budget for general conformity purposes", SCAQMD letter, August 12, 2004.

SCAQMD's purported Determination was not, however, within SCAQMD's authority to make. See 40 C.F.R. § 93.158(a)(5)(i)(A). That Section requires that such a determination be made by "the State Agency primarily responsible for the applicable SIP." In California, that agency is the California Air Resources Board ("CARB"). The Record however contains no evidence that CARB ever made such a Determination. Moreover, the SCAQMD Determination was based only on the flawed assumptions concerning both baseline and Alterative D capacity that underlie the FEIS. A revised analysis using the acknowledged airfield capacity of Alternative D to accommodate 89.7 MAP (rather than the assumed equation of Alternative D and the NA/NP Alternative at the 78.9 MAP), and the attendant increase in aircraft operations, while holding other emissions sources constant, demonstrates that, for the criteria pollutants for which the Southern California Region is in non-attainment, PM10 and NO2, a realistic project description would result in exceedances of both the PM10 and NO2 National Ambient Air Quality Standards ("NAAQS"), and, thus, would not conform to the SIP under the standard employed in the Conformity Determination. Moreover, even if conformity could be demonstrated, the same flaws in the air quality analysis that characterize the predecessor environmental documents, and the resulting failure to fully disclose the project's air quality impacts, render the FEIS inadequate under NEPA.

Response:

The commentor alleges 1) that the FAA based its determination of general conformity for Alternative D on a "last minute determination by the SCAQMD" and 2) that there is no evidence that the California Air Resources Board (CARB), which the commentor identifies as the state agency primarily responsible for the applicable SIP, ever made a similar determination. The comment is incorrect on both accounts. The determination of general conformity was the result of a long process that included ongoing agency coordination, and both CARB and the SCAQMD provided input to FAA's findings in the Final General Conformity Determination.

This comment fails to acknowledge that the determination by SCAQMD in its August 12, 2004, letter to FAA is predicated on the conclusions of CARB in its July 23, 2004, letter to FAA, which included a brief summary of the nearly decade-long process of developing the ozone SIP for the South Coast Air Basin (SCAB). Copies of both of these letters are included in Appendix C of Appendix A-2a, Final Clean Air Act General Conformity Determination, of Volume A of the Final EIS. While CARB is responsible for preparing and submitting proposed SIP revisions for all parts of California directly to USEPA, CARB relies heavily on SCAQMD to prepare and submit well documented Air Quality Management Plans that serve as the primary basis for that portion of the California SIP that deals with the SCAB. Therefore, CARB and SCAQMD share joint responsibility for the SIP as it relates to the SCAB, and both agencies provided input to FAA's findings in the Final General Conformity Determination, and their conclusions are consistent as noted in Attachment C-6A of Section 2 of Appendix C of Appendix A-2a of Volume A of the Final EIS.

Furthermore, the commentor indicates that the determination by SCAQMD is based on "the flawed assumptions concerning both baseline and Alternative D capacity that underlie the FEIS" and that a realistic project description would result in exceedances of both the PM10 and NO2 National Ambient Air Quality Standards. The airfield capacity of Alternative D is not "acknowledged . . . to accommodate 89.7 MAP," as stated by the commentor. The general conformity evaluation is based on Alternative D as designed, including related mitigation measures, and is consistent with the forecast activity level for Alternative D of 78.9 MAP in 2015 that will be constrained by airside gate access for aircraft. The Southern California Association of Governments, in commenting on the Supplement to the Draft EIS/EIR for the LAX Master Plan, noted that the forecast activity levels of Alternative D are generally consistent, but not specifically consistent, with the adopted forecast for LAX in the 2001 RTP. Likewise, the 2004 RTP assumes that LAX is expected to reach a passenger demand level of 78 million annual passengers in 2015, a prediction that is generally consistent with the market forecasts developed for Alternative D in 2015. Therefore, the general conformity evaluation is based on appropriate activity levels for Alternative D as designed and demonstrates that Alternative D conforms to the approved SIP. There is no basis for conducting a general conformity evaluation of Alternative D at a passenger activity level of 89.7 MAP as suggested by the commentor. Please see Response to Comment FAL00003-2 for more information regarding the comparative capacity of Alternative D and the No Action/No Project Alternative. The FAA does not accept the commentor's assertion regarding aircraft activity and passenger levels. It should be noted that passenger activity level is not the sole determinant of aircraft emissions and that these emissions can vary due to the interdependence of numerous factors, including aircraft fleet mix, number of aircraft operations, aircraft times in mode, and passenger load factors, among others.

FAL00001-6

Comment:

Finally, the FEIS entirely dismisses the project's environmental justice impacts. While the FEIR concluded that, when compared to the 1996 environmental baseline as many as 4,983 (SEIR, Table S58, p. 94) persons would be newly impacted by an increase of 1.5 dB within the existing 65 CNEL contour, the standard of significance employed in the FEIS,2 and the FEIR's Addendum No. 3 concludes that Alternative D will shift largely to minority and low income communities, the FEIS concluded that, when compared to the NA/NP baseline, the project has no significant noise, air quality or surface traffic impacts. The FEIR further concludes that Alternative D "would not result in disproportionally high and adverse noise impacts on minority and/or low-income communities" [FEIS, Vol. A-1, p. A.2-81]; and that, with respect to pollutant concentrations, "no significant impacts are expected to result in relation to Alternative D [thus] there is no potential for disproportionally high and adverse health impacts to the minority and low income populations" [FEIS, Vol. A-1, p. A.2-87]. Those findings not only defy the vast weight of the evidence in the Record, but also the purpose and intent of the environmental justice requirement itself.

2 Commentors acknowledge that the FEIS need not take into account under NEPA the minority residents that will be inside the 65 dB CNEL contour for the first time and the over 17,000 low income and minorities who will be newly awakened by single event noise in excess of 94 dB.

Response:

The Final EIS comprehensively addressed environmental justice in Section A.2.2, Environmental Justice (NEPA Analysis) of Volume A. As presented in subsection A.2.2.1 and further described in Topical Response TR-EJ-4 in Appendix A-1 of Volume A of the Final EIS entitled "Topical Response TR-EJ-4," the Final EIS clearly states that the FAA's analysis of environmental justice using federal standards and a No Action/No Project Alternative baseline results in findings that differ from those of LAWA in the Final EIR, which uses a 1996 baseline. The environmental justice analysis presented in Volume A of the Final EIS, while providing findings that differ from the Final EIR, arrives at these findings based on applicable federal laws, regulations, and guidelines and in fulfillment of the requirements for environmental justice set forth in Executive Order 12898 and the U.S. Department of Transportation Order 5610.2. Given the differences between the Final EIS (Volume A) and Final EIR approach to environmental justice, with different baselines and standards, it is not surprising that the results of the analyses differ.

The fact that analysis under CEQA and NEPA result in different conclusions does not indicate that the environmental justice analysis contained in the Final EIS "def[ies] the purpose and intent of the environmental justice requirement itself." Executive Order 12898 directs each Federal agency to make

achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations. The Council on Environmental Quality (CEQ) has oversight of the Federal government's compliance with Executive Order 12898 and NEPA. CEQ, in consultation with USEPA and other affected agencies, developed guidance to further assist Federal agencies with their NEPA procedures so that environmental justice concerns are effectively identified and addressed. The environmental justice analysis presented in the Final EIS was undertaken consistent with that guidance, entitled, "Environmental Justice Guidance under the National Environmental Policy Act." FAA's decision to evaluate the environmental justice impacts of the proposed project based upon the guidance set forth by CEQ cannot reasonably be described as defying the purpose and intent of Executive Order 12898.

For further details regarding differences between these analyses please see Topical Response TR-EJ-4, subsection 3, Summary of Final EIS and EJ Findings and Comparison to Earlier Analyses, in Appendix A-1 of Volume A of the Final EIS.

FAL00001-7

Comment:

In short, the FEIS' findings regarding capacity, noise, air quality and environmental justice are unsupported in the Record and insupportable under the letter and purpose of the law. Commentors strongly urge that, employing defensible data and analysis, the FAA reconsider its findings of insignificance of the project's impacts, and present effective mitigation measures, hitherto absent, to fully offset those impacts.

Response:

Comment noted. Please see Responses to Comments above and below.

The FAA finds that the Final EIS has been prepared in conformance with the National Environmental Policy Act (NEPA) of 1969, as amended, and CEQ Guidance regarding NEPA (40 CFR Part 1500).

Part I of the Final EIS identifies adverse impacts associated with implementation of the LAX Master Plan and provides a comprehensive set of Master Plan commitments and mitigation measures to address such effects as identified under the CEQA analysis, the NEPA analysis, or both. (Specifically, these are presented in Chapter 5 of the September 2004 Addendum to the Final EIR and further refined by the Second and Third Addenda to the Final EIR.). Appendix A of this ROD includes summaries of the mitigation actions discussed more fully in the Final EIS for each environmental impact category. Based upon the information disclosed in the Final EIS, FAA finds that there is no possible and prudent alternative to the preferred alternative and all reasonable steps have been taken to minimize its significant adverse effects. NEPA does not require that FAA "fully offset" environmental impacts, as suggested in the comment. Rather, NEPA requires that where a project as a whole indicates the potential to have significant impacts, federal agencies must consider feasible mitigation. There is no substantive requirement under NEPA to present or adopt mitigation measures that "fully offset" all of the project's potential impacts. The FAA is committed to ensuring that the mitigation measures contained in Appendix A of this ROD are implemented per CEQ regulations, Section 1505.3. Appendix A is included as part of this Record of Decision and is part of the FAA's approval of the Airport Layout Plan as described in this ROD. Appendix A is also included to clarify mitigation measures required as a condition of project approval in this ROD. Appendix A lists the environmental resources and the mitigation measures this ROD requires for reducing project-related impacts on affected resources.

FAL00001-8

Comment:

I. THE PROJECT'S ENVIRONMENTAL IMPACTS ARE DRAMATICALLY UNDERSTATED BY THE FALSE EQUATION OF THE NA/NP ALTERNATIVE AND ALTERNATIVE D.

The FEIS' analyses of the project's environmental impacts are predicated entirely upon the claimed equality of Alternative D's capacity enhancement potential with that of the NA/NP baseline alternative. By improperly inflating the capacity of the baseline for comparison with the project, and minimizing the capacity of the project itself, the FEIS arrives at the conclusion that the project will cause no significant

environmental impacts. A simple review of applicable case law and the components of each alternative in the Record, however, reveals both the inaccuracy of the FAA's analysis and conclusions, and the intent behind them, i.e., to affirmatively obscure the project's impacts.

Response:

FAA does not accept or concur with the commentor's allegations regarding the No Action/No Project Alternative baseline or the capacity of Alternative D. Please refer to Response to Comment FAL00003-2 for more information regarding the comparative capacity of Alternative D and the No Action/No Project Alternative. Please see Topical Response TR-GEN-2 in Part II-Volume 1 of the Final EIS regarding No Action/No Project Alternative assumptions. The commentor is incorrect in asserting that the Final EIS concludes that the Preferred Alternative "will cause no significant environmental impacts." Contrary to the commentor's assertion that the project's impacts have been obscured, the environmental impacts associated with the proposed project are well documented in the Final EIR and Final EIS, which together comprise over 30,000 pages of information.

FAL00001-9

Comment:

A. The FEIS Improperly Inflates the Baseline for Environmental Review to Minimize the Project's Impacts.

1. The NA/NP Alternative Employed in the FEIS Contravenes Applicable Case Law.

For purposes of comparison with the project's impacts, the FEIS employs the NA/NP Alternative as baseline. Relying on a definition of the components of the NA/NP Alternative contained in regulatory guidance dating back to 1981, the FEIS concludes that the NA/NP Alternative should include "consequences of predictable actions by others in the absence of Federal action or approval of the project." 40 Most Asked Questions Concerning CEQ 's National Environmental Policy Act Regulations, 46 Fed.Reg. 18026 (1981). From that platform, the FEIS jumps to the conclusion that the NEPA "no action" alternative and the CEQA "no project" alternative are similar in that, as under CEQA, NEPA requires inclusion of reasonable foreseeable future projects that would occur if the subject project did not. That conclusion flies in the face not only of current applicable case law but also the very regulations cited as support in the FEIS.

First, the FEIS misstates the applicable definition of "no action". Question 3 specifically distinguishes between actions such as "updating a management plan", and actions involving "Federal decisions on proposals for projects". In the latter instance, "'no action' would mean the proposed activity would not take place." Applicable case law concurs.

"Once a project begins, the 'preproject' environment becomes a thing of the past, thereby making evaluation of the project's effects on the preproject resources impossible. Without establishing the baseline conditions which exist in the vicinity of [the project] before [the project] begins, there is no way to determine what effect the [proposed project]... will have on the environment and, consequently, no way to comply with NEPA." Half Moon Bay Fisherman's Marketing Assn. v. Carlucci, 857 F.2d 505, 510 (9th Cir. 1988) (see also, American Rivers v. FERC, 201 F.3d 1186, 1195, n. 15, 1198 (9th Cir. 1999)) [citing Half Moon Bay for the same proposition]).

It is indisputable that the approval of "a project", Alternative D, is at issue here. Thus, the proper baseline is simply what would occur if Alternative D were not implemented.

Commentors do not contend that actions already taken, or to be completed, under the current 1981 Master Plan should not be taken into account in the baseline analysis, because they are part of the environment at the outset of project planning. But as set forth below, the FEIS attempts to shoehorn into this category a plethora of future events that have nothing to do with the existing Master Plan. Indeed, the FEIS expects those conditions to occur despite deficiencies in airfield facilities under the existing Master Plan, such as the entry of NLAs into the fleet, even though there are no taxiways or gates to accommodate them, and none planned in the existing Master Plan.

The FEIS also intentionally misconstrues the requirement in Question 3 that the NA/NP Alternative include "predictable actions by others" [emphasis added]. Question 3 illustrates "predictable actions by others" as a situation in which "the denial of permission to build a railroad to a facility would lead to construction of a road and increased truck traffic." Thus, Question 3, on its face, contemplates indirect

results of failure to take action, not the direct intentional acts of the project proponent to enact or implement actions that will augment the baseline alternatives environmental impacts.

In short, the FEIS vastly expands, unsupported by case law or regulation, the scope of the NA/NP Alternative, for what can only be one purpose, to inflate the baseline for analysis, thus artificially minimizing the project's impacts.

Response:

The No Action Alternative was addressed in the alternatives analysis in accordance with 40 CFR 1502.14. In accordance with NEPA, the No Action Alternative analyzed in the Final EIS consists of future conditions if the proposed action is not implemented. The comment is too vague to permit a full substantive response, as the "plethora of future events that have nothing to do with the existing Master Plan" is not defined by the commentor. The No Action Alternative is represented by future circumstances without the project, and its analysis addresses the reasonably foreseeable environmental impacts likely to occur in the absence of the proposed federal action. As indicated in Section 3.2.1 of Part I-Volume 1 of the Final EIS, the No Action/No Project Alternative includes anticipated operational changes; all projects that are fully entitled, approved, under construction, or that have been completed between the baseline year and release of the Draft EIS/EIR; as well as projects and actions consistent with the 1981 Interim Plan (referred to by the commentor as the "existing Master Plan") that would be reasonably expected to occur in the foreseeable future if the LAX Master Plan is not approved and/or that are predictable responses that would be implemented in the absence of FAA action. The No Action/No Project Alternative does not include future events that are unrelated to the 1981 Interim Plan or to the conditions listed above. With respect to new large aircraft (NLAs), such aircraft could be accommodated at LAX even if Alternative D were not implemented and despite the lack of taxiways or gates specifically designed to accommodate these aircraft.

The No Action/No Project Alternative is distinct from baseline conditions which exist in the vicinity of the project before the project begins. The Final EIS includes a comprehensive discussion of baseline conditions (affected environment) at the time the Notice of Intent was published (1996), as well as an update to those conditions as of the Year 2000.

Regarding the case cited by the commentor (Half Moon Bay Fisherman's Marketing Assn. v. Carlucci, 857 F.2d 505, 510 (9 Cir. 1988)), this case does not support the commentor's conclusion that the Final EIS improperly defines the No Action/No Project Alternative. The language quoted from the case is taken out of context. In fact the court was addressing a situation where an EIS outright failed to disclose the existing conditions of a portion of the ocean floor where the proposed project would dump contaminated dredge material. In the absence of any information on the oceanography of the area, the court unsurprisingly found that there was no way to determine what effect the proposed dumping would have on the environment. The opinion does not purport to describe the appropriate definition of the no action scenario, nor does it address, much less reach a holding, regarding this topic.

Please also see Topical Response TR-GEN-2 in Part II-Volume 1 of the Final EIS regarding No Action/No Project Alternative assumptions.

FAL00001-10

Comment:

2. The Record Shows that the Airfield Capacity Enhancing Potential of the NA/NP Baseline is Significantly Less than that of Alternative D.

In the recently published FEIS, the NA/NP Alternative is defined broadly, and "includes, but is not limited to, anticipated operational changes such as the introduction of larger aircraft, as well as airport improvements that are otherwise entitled, approved, under construction, completed between 1997 when FAA issued its Notice of Intent to prepare an EIS, and January 2001 (when FAA and the City of Los Angeles published the Draft EIS/EIR). These facilities include taxiway improvements, passenger terminal improvements, reconstruction of an on-airport auto parking structure, cargo facility improvements, demolition of facilities on acquired real estate, and collateral development... In addition, the No Action/No Project Alternative includes additional projects and actions that are consistent with the 1981 Los Angeles International Airport Interim Plan, and would reasonably be expected to occur in the foreseeable future, if the LAX Master Plan were not approved..." CIS, Volume A, § A.1.1, p. A.1-11.

The SEIR and FEIR, however, define the components of the NA/NP Alternative far more conservatively:

"... [O]n airport development projects not requiring FAA approval that maximize the use of the airport property and improve airfield access, efficiency and security - including the Century cargo complex, remote aircraft parking of commuter aircraft, cargo development along Imperial Boulevard, renovation of the Tom Bradley International Terminal, and the taxiway EE project - are reasonably foreseeable projects appropriate for inclusion in the NA/NP Alternative." FEIR, Topical Response TR-GEN-2, NA/NP Alternative Assumptions, p. 2-42.3

The SEIR goes so far as to characterize the NA/NP Alternative as including:

"only minor airport improvements approved as of the publication of the DEIS/EIR in January 2001 or that were in the planning stages at the time. The improvements include minor taxiway improvements, new cargo building space, construction of at least one off-airport parking structure and reconstruction of an on- airport parking structure." SEIR, § 3.3.1, p. 3-6 [emphasis added].

In short, the FEIS is both non-specific and inconsistent about precisely what airfield projects are included in the NA/NP Alternative. The only certainty is that the scope of those improvements is "minor" relative to those included in Alternative D.

3 The NA/NP Alternative also includes the already entitled off-airport landside development of the LAX Northside Project, with 4.5 million square feet of office, hotel and retail uses, and the 3.1 million square foot hotel and retail Continental City project. SEIR, § 3.3.1, p. 3-6. While both may be relevant to the air quality and traffic analyses, they are not addressed here as part of Alternative D's airside potential.

Response:

The Final EIS is very specific and consistent regarding the airfield projects included in the No Action/No Project Alternative. The commentor does not accurately state the Final EIR's description of the No Action/No Project Alternative. That description, provided in Section 3.2.1 of Part I-Volume 1 of the Final EIR, is essentially the same as the text quoted by the commentor from Volume A of the Final EIS. The commentor compares the description of the No Action/No Project Alternative in Volume A of the Final EIS to text included in Topical Response TR-GEN-2 in Part II-Volume I of the Final EIS. The text from Topical Response TR-GEN-2 is quoted out of context. The quoted text is from a subheading titled "Inclusion of On-Airport Development Projects" and, accordingly, focused on that portion of the No Action/No Project Alternative project description. Other components of the No Action/No Project Alternative, that are consistent with the description of the No Action/No Project Alternative provided in both the Final EIS and the Final EIR, are described elsewhere in the topical response (see for example the subheading titled "The No Action/No Project Alternative is Not Too Expansive").

FAL00001-11

Comment:

B. The Attributes of Alternative D Have a Far Greater Capacity Potential than the NA/NP Alternative.

Unlike the NA/NP Alternative, and similar to the other build Alternatives, Alternative D would admittedly implement dramatic airfield improvements, including, but not limited to: (1) relocation of runways to allow construction of parallel taxiways between runways in both the north and south complexes, extension of taxiway D, thus increasing available east/west taxi routes to taxiing aircraft from four to at least seven; reduction in the number of taxiways linking parallel runways to reduce the potential for runway incursion and traffic delays; improvement of taxiways to meet current FAA design standards for wide body aircraft thus enhancing access to contact gates designed specifically for wide body aircraft. FEIR, Topical Response TR-SAF-1. The Record further shows that the four runway configuration which characterizes both Alternatives C and D allows for a capacity of 89.6 MAP, the same as that projected for Alternative C, Master Plan Addendum, p. 3-4. The FEIR does not deny this conclusion. FEIR Response to Comment SAL00013-27.

The Record also shows that the proposed airside improvements work. The average amount of delay in 2015 with implementation of Alternative D will be 11.56 minutes per operation, while that for the NA/NP Alternative will be 13.34 minutes of delay per operation. MP Addendum, p. E-42. Similarly, Alternative D will see fewer cancelled flights than the NA/NP Alternative. Master Plan Addendum, p. E-42.4 The Record also acknowledges that the reduced delays and cancellations are attributable to airfield

improvements. Master Plan Addendum, p. E-49. Thus, it is clear on the face of the Record that the NA/NP Alternative and Alternative D are not equivalent from an operational standpoint. Less delay and cancellations mean more operations pass through the airport, and with them, more environmental impacts. These differences are unanalyzed in the FEIS.

4 Alternative D also improves on Alternative C which results in 13.82 minutes of delay per operation and 46 cancelled flights.

Response:

The commentor asserts that reduced delay per operation and fewer cancellations anticipated under Alternative D due to airfield improvements will result in an increase in aircraft operations, and therefore greater capacity than disclosed in the Final EIS. This assertion assumes that future aviation forecasts are a function of airfield configuration alone. This is incorrect. The airfield improvements included in Alternative D are expected to increase the efficiency and safety of aircraft operations. However, the passenger activity that is expected to occur in 2015 with Alternative D takes account of conditions throughout the airport that bear on the airport's level of operations, not just airfield configuration. Here, if one also accounts for the design of the Alternative D gate facilities and the projected airline response to the constrained facilities, forecasts indicate that activity levels will likely be essentially equivalent to activity levels under the No Action scenario. For more information regarding the activity forecasts for Alternative D, please see Chapter 3, Alternatives, of Part I of the Final EIS.

Also, as stated in Response to Comment SAL00013-27, cited by the commentor, "Alternative D does not increase runway capacity. The No Action/No Project Alternative, Alternative C, and Alternative D each feature four-runway airfields with approximately the same runway capacity." While the runway capacity of each of these alternatives is approximately the same, each of these alternatives also has its own constraining features. Depending on the nature and extent of the constraining features particular to each alternative, different levels of activity can be anticipated under these alternatives.

Please see the Draft LAX Master Plan and the Final LAX Master Plan in which all existing conditions (Chapter 2, Draft LAX Master Plan), aviation forecasts (both unconstrained (Chapter 3, Draft LAX Master Plan) and constrained (Chapter 3, Final LAX Master Plan)), demand/capacity simulation analyses (Appendices 5F and 5J, Draft LAX Master Plan; Appendices B and D, Final LAX Master Plan), facility requirements (Chapter 4, Draft LAX Master Plan; Chapter 2, Final LAX Master Plan) and alternatives (Chapter 5, Draft LAX Master Plan; Appendix H, Final LAX Master Plan) for meeting these requirements have been prepared, reviewed and presented along with all associated methodology and assumptions. Appendices A through I of the Final LAX Master Plan provide substantial technical update and analyses of existing airport conditions and future demand/capacity simulation results associated with Alternative D. In particular see Appendix E, Alternative D Airside Analysis, of the Final LAX Master Plan, which fully documents the assumptions, the analysis and the results of aircraft activity simulation modeling, and Appendix F, Aircraft Operations and Passenger Activity Profiles. Please also see Chapter 2 in Part I of the Final EIS in which this airport planning process has also presented the results and conclusions of this process in context with the demonstrated purpose and need for the plan. Please see Chapter 4 in Part I of the Final EIS for the environmental impacts associated with each of the LAX Master Plan alternatives, including Alternative D. Please see Responses to Comments SAL00015-11 in Part II-Volume 10 of the Final EIS regarding commentor's consultant analysis and SAL00015-312 in Part II-Volume-10, and SAL00015-333 in Part II-Volume 10 of the Final EIS regarding capacity issues. Also please see Part II-Volume 1 of the Final EIS for Topical Response TR-GEN-3 regarding projected versus actual capacity levels at LAX.

FAL00001-12

Comment:

C. Gate and Cargo Warehousing Limitations Are Not Effective Constraints on Alternative D's Ultimate Capacity.

Commentors recognize that a variety of factors, not merely airfield capacity, contribute to total airport capacity, including "landside (i.e., roadways, parking, curb frontage), facility (i.e., terminals) and airspace." FEIR, Topical Response, TR-RC-5.2.1. Here, the FEIR (and, by extension, the FEIS) relies entirely on landside limitations to constrain Alternative D's acknowledged capacity enhancing potential. The basis of that reliance is inadequately documented, and what documentation and analysis does exist indicates that such reliance is misplaced.

1. The Only Purported Limitation on Alternative D's Aircraft Operational Capacity Arises from an Alleged Deficiency in On-Airport Cargo Sort Space.

First, the FEIR acknowledges that, while total daily operations under Alternative D are forecast to be less than Alternative C, "the difference in total operations is due to the fact that Alternative D would not be designed to accommodate the same level of cargo activity as Alternative C..." FEIR, § 3.2.9, Topical Response, TR-MP-1, p. 2-93. This purported limitation is based solely on the maintenance of inadequate "sort space" on the airport. However, the FEIR also acknowledges that "demand for air transportation of cargo is tied to both the level and the types of economic activity in the region", Topical Response, TR-MP-1, p. 2-92, and that "the economy in the L.A. Region relies heavily on LAX to meet air cargo demand", Topical Response, TR-MP-1, p. 2-93. Therefore, limitation of cargo operations is outside LAWA's control, because the high demand for cargo service does not need to be fully satisfied by on-airport sort space. Rather, it can easily be met by the use of private cargo warehousing and other facilities off the airport property as has historically been the case with the airport, as well as the Port of Los Angeles and the Port of Long Beach which are in close proximity.

2. The Only Purported Limitation on Alternative D Passenger Capacity is an Unsupported, Unanalyzed and Unenforceable Limitation on Gate Capacity.

Similarly, the FEIR reports that limitation on passenger capacity to the same level as the NA/NP Alternative will be achieved by "the number and type of gates available under the Alternative D design", FEIR, § 3.2.9, allegedly 153. The FEIR, then contrasts Alternative D's capacity potential to that of Alternative C, which was projected to have 168 gates "as necessary to accommodate the projected increase in average fleet size that serves both the international and domestic markets." FEIR, § 3.2.9. That distinction, in this case, is one without a difference because the airfield capacity of Alternatives C and D is acknowledged to be virtually identical; the Record is devoid of any analysis of Alternative D's gate capacity or enforceable gate constraints; but the Record does contain evidence that the number of gates in Alternative D will be the equivalent of 165, two more than the number projected for the NA/NP Alternative and only three less than the number projected for Alternative C.

The Administrative Procedures Act ("APA"), 5 U.S.C. § 701, et seq., § 706(2)5 provides that an agency action will be set aside and found unlawful if, among other things, it is "arbitrary, capricious and abuse of discretion, or otherwise not in accordance with the law." APA § 706(2)(A). An agency action is arbitrary and capricious if

"the agency has relied on factors which Congress had not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise." Dioxin/Organochlorine Center v. Clarke, 57 F.3d 1517, 1521 (9th Cir. 1995).

The FEIS' purported constraints are based on just such arbitrary and capricious conclusions.

First, neither the FEIS nor the predecessor environmental documents, nor the Administrative Record in County of Los Angeles, et al., v. City of Los Angeles, et al., Los Angeles Superior Case No. BS094320 (2005), brought pursuant to CEQA by Commentors here, contains a shred of evidence to support the gate capacity conclusions contained in those documents.

Moreover, those conclusions are belied by the environmental document upon which the FEIS relies. The FEIR reveals that Alternative D will involve an increase in "airside gate frontage", increases in the number of aircraft gates and increases in aircraft gate efficiency far beyond the levels projected for the NA/NP alternative. For example, Alternative D includes an increase of nearly 3,600 linear feet of terminal frontage: Terminals 1, 2 and 3 will be replaced by the new north terminal; Tom Bradley International Terminal will be reconfigured; and a new West Terminal will be built. The total existing frontage of the terminals being modified is thus 7,156 feet. Following proposed modifications, the terminals will encompass 10,748 feet - an increase of 3,592 feet over current terminal frontage.

Further, the number of gates in Alternative D exceeds the number in the No Project Alternative. Table ES-2 in the Master Plan Supplement indicates that the No Project Alternative will be configured with 115 contact gates (traditional numbered gates in the terminal and a jetway to awaiting aircraft), 48 remote gates for an existing total of 163. Alternative D reflects 121 air carrier contact gates and 32 parking spaces for commuter aircraft and/or regional jets, Master Plan Supplement, Figure 2.2-4, Gate Layout and Utilization, for a total of six additional direct contact gates over and above that number included in

the No Project Alternative. Moreover, six of the new contact gates will be sized to accommodate the new A380 Aircraft, which have the capacity for at least 600 passengers each, FEIR, Chapter 2, § 2.3.7, more than double the capacity of the largest aircraft in the current fleet, the 747-400. Thus, the six new contact gates projected for Alternative D provide the effective passenger pass-through capacity of 12 current gates, bringing the gate equivalent capacity under Alternative D not to 153, but to 165. While FAA may seek to quibble with the math, the proof is in the projections they have adopted from prior environmental documents. As set forth above, the projected decrease in delays and cancellations under Alternative D graphically demonstrates improvements, not contractions, in gate pass-through capacity consistent with Commentors' analysis, not the FEIS' unsupported assumptions regarding gate constraints.

Finally, the increased capacity of contact gates is not the end of potential gate capacity under Alternative D. Alternative D does not make any firm commitment to implement gate constraints. ["The City could choose to limit development of additional gates at LAX in order to encourage more equitable distribution of air traffic throughout the region." FEIR, § 2.3.4 [emphasis added]). Therefore, LAWA retains the flexibility to create remote gates in available apron space, and/or retain the eight contact gates in Terminal 8, thereby boosting the total for Alternative D to 129 contact gates, 15% more than the existing number of gates.

5 Because NEPA does not contain an independent judicial review provision, actions for violation of NEPA are adjudicated under the APA.

Response:

The commentor makes numerous factual allegations regarding the cargo and passenger capacity of Alternative D, each of which is addressed in detail below.

The commentor incorrectly asserts that "the amount of cargo sort space on-airport is irrelevant to limitation of cargo operations . . . because there is an abundance of warehousing available off the airport." In fact, the vast majority of cargo arriving and departing LAX passes through the cargo buildings on the airport property. The only exceptions are special shipments of large livestock (such as race horses) and other rare shipments that require specialized handling (such as an armored car shipment of valuables) that are specially cleared and escorted to their awaiting cargo aircraft. As described in Part I, Chapter 3, page 3-61 of the Final EIS without adequate cargo building space, the volume of air cargo that can be handled through these facilities is constrained. Warehouses near LAX can and do store and distribute air cargo that is arriving and departing LAX. However, these activities are by brokers and distribution companies looking to take advantage of the limited supply of on-airport warehouse space and cargo lift capacity at LAX. These off-airport facilities cannot replace the basic handling logistics required by The U.S. Customs Service and for airside distribution of cargo to and from the appropriate flights. Again, it is the on-airport warehouse element in the cargo supply chain that sets the capacity of the system. After September 11, 2001, cargo and mail that is carried in the cargo holds of passenger aircraft have come under increased scrutiny. The Transportation Security Administration (TSA) is looking at tighter restrictions on cargo handling at all airports in the U.S. There are indications that stricter guidelines are coming in the near future that will require all cargo to be inspected at on-airport cargo warehouses. While this restriction is not yet in place, it would have a further dampening effect on the volume of cargo that could be processed at LAX below that projected in the No Action/No Project Alternative and in Alternative D.

With respect to air passenger capacity, the commentor is correct in the statement that, "there is no legal mechanism whereby aircraft operations can be forced to disburse to other airports . . . . " FAA and LAWA have established the same point in the Final EIS. The FAA and LAWA have also stated that the practical capacity projection used to analyze the foreseeable activity and impacts associated with the implementation of Alternative D improvements at LAX are in no way a legal or technically enforceable "cap" on activity. Instead, Alternative D is LAWA's best attempt to use available planning tools to encourage the capacity to stay generally equivalent to the No Action/No Project activity level by relying on the reasonable assumptions regarding market reactions to physical constraints as described in Response to Comments FAL00003-2.

The commentor has incorrectly stated the comparison of gate frontage between Alternative D and the No Action/No Project Alternative and between Alternative D and Alternative C. The following are the correct comparisons as provided in Part I, Chapter 3 of the Final EIS.

The example that the commentor provides in an attempt to support its assertion that "Alternative D will involve an increase in 'airside gate frontage'" is factually incorrect. Under Alternative D the concourses

associated with Terminals 1, 2 and 3 and the north concourse of the Tom Bradley International Terminal (total of 6,840 lineal feet of gate space) would be replaced by the North Central Terminal Area Concourse (total of 3,500 lineal feet of gate space). This change would be a net loss of 3,340 lineal feet of gate space. The reconfiguration of the Tom Bradley International Terminal would add 2,645 lineal feet of gate space back to the Central Terminal Area. This improvement would result in a net loss of 695 lineal feet of gate space in the CTA. Alternative D also results in the loss of the west remote gates, the American Eagle remote gates and the United Airlines remote gates. These changes constitute a total loss of 6,330 lineal feet of gate space. When added to the net loss in the CTA described above, the total loss of gate space is 7,025 lineal feet. To make up for this loss of space, Alternative D would add a new West Satellite Concourse with a total gate space of 4,925 lineal feet. Altogether, Alternative D results in a net loss of 2,100 lineal feet of gate space. As described in the Final EIS and in the Final LAX Master Plan, Alternative D makes up for this net loss of gate space with improved efficiency of all contact gate space and no remote gates. Contact gate space in Alternative D would increase by 4,230 lineal feet over the No Action/No Project Alternative; however, with Alternative D's elimination of the existing remote gates that would otherwise remain under the No Action/No Project Alternative, the net amount of airside gate space under Alternative D is less than that of the No Action/No Project Alternative.

Similar to above, the commentor's comparison of the seat capacities of an A380 and a 747-400 and the associated effective passenger pass-through capacity are factually incorrect. First, the commentor claims that the seat capacity of an A380 is "more than double the capacity of the largest aircraft in the current fleet, the 747-400." That statement alone is factually incorrect inasmuch as the seat capacity of an A380 is 550 to 600 passengers, while the seat capacity of a 747-400 is 390 to 436 (see Draft LAX Master Plan, Chapter IV, Page IV-2.14), which is nowhere near the 200+ percent greater seat capacity claimed by the commentor. The commentor then goes on to incorrectly indicate that the seat capacity of six A380-sized gates is equivalent to the capacity of 12 Boeing 747-400-sized gates, and thereby concludes that Alternative D does not account for six of these 12 hypothetical additional gates. Here too, the commentor's claim is incorrect in that the amount of gate frontage necessary to park six Airbus A380 aircraft is approximately 1,722 lineal feet. This same amount of space will accommodate seven Boeing 747-400 aircraft. As such, using the high seat capacity of each (600 seats for an A380 and 436 for a 747-400) would yield 3,600 seats for the six A380s and 3,052 seats for the seven 747-400s. This is a net increase of 548 total seats or about 18 percent more than the 747-400s, as compared to the 200+ percent increase claimed by the commentor.

It is important to again note here that Alternative D constrains the amount of gate space available to simultaneously park aircraft at the terminal. While Alternative D provides a suggested gate mix that would accommodate a particular fleet of aircraft, it is not the number of gates or even their types that create the limitation. The six Airbus A380 gates assumed in Alternative D are part of how the total and limited space is used. If the mix of aircraft types were to be varied in the Alternative, the result would vary the number of gates either up or down depending on the average wingspan of the entire fleet but the daily seat capacity would stay about the same based on the forecast of markets served.

The commentor asserts that reduced delay per operation and fewer cancelled flights anticipated under Alternative D due to airfield improvements will result in an increase in aircraft operations, and therefore greater capacity than disclosed in the Final EIS. This assertion assumes that future aviation forecasts are a function of airfield configuration alone. This is incorrect. The airfield improvements included in Alternative D are expected to increase the efficiency and safety of aircraft operations. However, the passenger activity that is expected to occur in 2015 with Alternative D takes account of conditions throughout the airport that bear on the airport's level of operations, not just airfield configuration. Here, if one also accounts for the design of the Alternative D gate facilities and the projected airline response to the constrained facilities, forecasts indicate that activity levels will likely be essentially equivalent to activity levels under the No Action scenario. For more information, please see Chapter 3, Alternatives of Part I of the Final EIS regarding the activity forecasts for Alternative D and also see Response to Comment FAL00001-11.

The commentor also states that, "LAWA retains the flexibility to create remote gates in available apron space, and/or retain the eight contact gates in Terminal 8, thereby boosting the total for Alternative D to 129 contact gates, 15% more than the existing number of gates." In other words, the commentor does not accept the sponsor's stated description of Alternative D as defined and analyzed in the Final EIS. Not only are the commentor's allegations pure speculation, which therefore do not require analysis under NEPA, they are also essentially a redefinition of the proposed project. Were LAWA to make substantial changes in the proposed action that are relevant to environmental concerns, addition NEPA analysis would be required.

Finally, the conclusions reached in the Final EIS and further discussed in this and other responses to comments are based on a detailed analysis and a tested methodology. Although the commentor's hired consultant may reach different conclusions based on his own selective analysis, the FAA has considerable experience and expertise in aviation forecasting. FAA's reliance on its experts, as well as the expertise of its consultants, is entirely appropriate under the Administrative Procedure Act, and refutes commentor's legal conclusion that the analysis is "arbitrary, capricious, or an abuse of discretion" under the APA.

For more information on the topics discussed in this response to comment, please see the following points of reference, as well as the detailed response to factual allegations and conclusions contained in this response. For issues regarding air cargo constraints, please see pages 3-60 and 3-61 in Chapter 3, Alternatives, of Part I of the Final EIS. Please refer to Response to Comment FAL00003-2 regarding the comparative capacity of Alternative D and the No Action/No Project Alternative and other Master Plan issues raised in this comment. Also, please see Part II, Volume 1 of the Final EIS for Topical Response TR-GEN-3 regarding actual versus projected activity levels. Please see Chapter 3, Alternatives, of Part I of the Final EIS regarding aviation activity forecasts and capacity constraints.

FAL00001-13

Comment:

D. The FEIS's Assumptions About Air Service Changes Arising Out of the Purported Limiting Factors of Gate and Cargo Capacity are Similarly Unsupported in Law or History.

To reach its ultimate conclusion that Alternative D's capacity will be constrained to "87% of the unconstrained 2015 O&D [Origination and Destination] passenger demand forecasts and 82% of the 2015 international passenger demand forecast", Master Plan Addendum, p. 3-6, the FEIS adopted, in whole cloth from its predecessor environmental documents, without any evidence in the Record of confirming analysis, "projections and expectations", Master Plan Addendum, p. 3-6, concerning air service changes at LAX resulting from the project. Those "expectations" are a graphic illustration of the hoary adage "garbage in - garbage out".

For example, the Master Plan "expects" that "high priority would be given by the airlines to accommodating O&D passengers." Master Plan Addendum, p. 3-6. No mechanism exists within the law for establishing such a priority. However, based on the following "expectation", i.e., "commuter operations would likely be reduced from 1996 levels, consistent with the forecast for the No Action/No Project Alternative and Alternative C in order to maximize the number of passengers that could be served with a limited number of operations", Master Plan Addendum, p. 3-6, it is intuitively plausible that this alleged "priority" arises by default out of the use of larger aircraft.

In this assumption concerning the use of larger aircraft lies the seed of a fundamental analytic fallacy. While it is "expected", because of the alleged priority to O&D and the resulting use of larger aircraft, that the projected number of Alternative D 0&D passengers as a percent of total passengers would be similar to the forecast for Alternative C, Master Plan Addendum, p. 3-6, it is also "expected" that the "projected number of connecting passengers would decrease due to the reduction in commuter flights", Master Plan, p. 3-6, thus giving rise to the ultimate conclusion that on average the number of passengers under Alternative D would be about the same as that of the NA/NP Alternative.

This "averaging" analysis obscures, among other things, the disproportionately great environmental impacts a shift to larger aircraft will have, holding the same number of passengers constant, as the FEIS purports to do between Alternative D and the NA/NP Alternative. Because they are omitted from the fleet mix entirely for purposes of environmental analysis, the even greater impact the NLAs will have on the "larger aircraft" component of the fleet mix, with the resulting increase in environmental impacts, is also ignored. In mitigation of these increased, but unacknowledged, impacts, the Master Plan merely reiterates the analytically unsupported "expectation" that "cargo operations would be equivalent to those forecast in the 2015 No Action/No Project Alternative." Master Plan Addendum, p. 3-7.

In the final analysis, the FEIS disavows the alleged constraints and the reduction in capacity purportedly resulting from them.

"However, it is important to understand that the levels of passengers that each Alternative is designed to accommodate are not finite limits where the airport would somehow be closed or where aircraft would

be redirected to some other facility when this number is reached. These levels are an indication of the number of passengers that can be accommodated at a reasonable level of service." FEIR, § 3.2.9.

While NEPA requires that "agencies shall make sure the purpose which is the subject of an Environmental Impact Statement is properly defined," 40 C.F.R. 1502.4(a), it is abundantly clear that: (1) despite thousands of pages of verbiage to the contrary, the only applicable constraint on capacity is a subjective concept called "reasonable level of service" which is undefined anywhere in the FEIS; (2) Alternative D is likely to vastly exceed levels of service reported in the FEIS before it exceeds a "reasonable" level of service just as the existing facility currently accommodates far more than the 40 MAP for which it was originally designed and with "minor" changes, could handle 78.9 MAP; and (3) as a result, the project description has been improperly attenuated, such that the environmental impacts of only a preliminary phase, that in which capacity reaches 78.9 MAP has been analyzed in the FEIS.

Response:

Please see Response to Comment FAL00003-2 regarding capacity and other Master Plan issues raised in this comment. In particular, Response to Comment FAL00003-2 addresses issues related to the definition of practical capacity and how this concept is applied in the LAX Master Plan and other similar airport studies nation-wide. Practical capacity analysis provides the proper context and definition for analyzing airport facilities with a "reasonable level of service." Also, please see Part II-Volume 1 of the Final EIS for Topical Responses TR-GEN-3 regarding actual versus projected activity levels in previous studies involving LAX, TR-RC-1 regarding the LAX Master Plan role in the regional approach to meeting demand, and TR-MP-2 regarding the SCAG Regional Transportation Plan (RTP).

Having considered the commentor's position and after reviewing the analysis in support of the Master Plan and the Final EIS, it is FAA's position that the issue of capacity has been adequately addressed, particularly as it relates to analyzing airport facilities based on a reasonable level of service. There are different ways to approach the issue of capacity analysis. Simply because commentor has offered an approach that differs from the one chosen by the FAA, by no means invalidates the FAA's analysis. The FAA has determined that for the purposes of the required analysis, the methodology selected was both adequate and appropriate for providing the FAA with the information needed to evaluate the project.

The commentor raises here the commonly held and wrong supposition that LAX was "originally designed to serve 40 million annual passengers (MAP)." The commentor then stretches this incorrect statement by going on to state "with "minor" changes, [LAX] could handle 78.9 MAP." Part II-Volume 1 of the Final EIS, Topical Response TR-GEN-3 provides a complete recount of the historical inaccuracy of these statements made by the commentor here as well as the proper context for previous design limitations of the LAX facilities. LAX as currently configured was not designed to accommodate 40 MAP, but rather the facility was updated with specific improvements that were necessary to enable LAX to accommodate the projected growth to 40 MAP.

The Final EIS assessed the full range of reasonably foreseeable impacts and not "only a preliminary phase" as asserted by the commentor. NEPA requires Federal agencies to take a hard look at reasonably foreseeable environmental impacts. Here, the forecast activity levels generated for each of the alternatives was based on widely accepted principles and methodology considered appropriate by FAA. As is standard FAA practice, as well as being common to airport planning in general, a planning horizon was used to provide a timeframe for reasonably foreseeable forecasts. The year 2015 was used consistently for all alternatives considered in the LAX Master Plan and EIR. The forecasted activity levels provide a reasonable basis upon which to analyze the reasonably foreseeable environmental impacts of the alternatives at 2015. NEPA does not require more.

FAL00001-14

Comment:

II. THE FEIS' AIR QUALITY ANALYSIS. PREDICATED ON THE FALSE BASELINE AND CONSTRAINTS ON CAPACITY IN ALTERNATIVE D IS ARBITRARY AND CAPRICIOUS.

A. The FEIS' Improper Treatment of the NA/NP Baseline and the Inaccurate Assumptions Underlying Alternative D Effect the Results of the Air Quality Analysis.

The FEIS' improper overestimation of the NA/NP Alternative's airfield components and Alternative D's reliance on airside assumptions that artificially diminish its operational impacts predictably spill over into

the FEIS' air quality analysis. To provide an indication of the potential air quality impacts of these unrealistic assumptions, Commentors developed a third, hybrid alternative "Revised Alternative D", combining emissions based on the airside attributes of Alternative C, which the FEIS acknowledges is virtually identical with Alternative D, and holding construction and surface traffic emissions constant. [See Attachment 1 to this letter for a full discussion of the methodology and analysis of Revised Alternative D.]

After modeling the emissions impacts of Revised Alternative D, even with the assumptions underlying the NA/NP Alternative and its projected emissions impacts held constant, the results are startling. First, as indicated in Table 2 and Figures I through 6, mitigated emissions under the Revised Alternative D increase from 4% to 18% less than emissions under the NA/NP Alternative (depending on the specific emissions species considered) to as much as 8% more than emissions under the NA/NP Alternative. Only emissions of VOC continue to be lower than emissions under the NA/NP Alternative - emissions of CO, NOx, SOx, and PM10 are all higher than those of the NA/NP Alternative. As illustrated in Figures 7 and 8 in Attachment 1, mitigated emissions under Revised Alternative D are equal to or higher than those of emissions from mitigated Alternative C for on-airport sources, and only 1% to 12% lower than mitigated Alternative C for all sources (as compared to 12% to 22% lower for Alternative D compared to Alternative C in the FEIS). Thus, the sensitivity of emissions and air quality impacts to aircraft activity levels (and the presumed gate constraints) is obvious. Note that while the Tables and Figures presented only illustrate emissions relationships in the year 2015, the same relationships would carry through to in influence interim year emissions estimates and the air quality.

Pages 15 through 18 contain the following:

Table 2. LAX Emission Estimates for 2015 (tons per year) [Page 15]

Figure 1. On-Airport Emissions in 2015 (tons per year) [Page 16]

Figure 2. Total Emissions in 2015 (tons per year) [Page 16]

Figure 3. On-Airport Emissions in 2015 Relative to the NA/NP [Page 17]

Figure 4. Total Emissions in 2015 Relative to the NA/NP [Page 17]

Figure 5. On-Airport Mitigated Emissions in 2015 Relative to the NA/NP [Page 18]

Figure 6. Total Mitigated Emissions in 2015 Relative to the NA/NP [Page 18]

Table 2: Please see original letter for table.

Figure 1: Please see original letter for figure.

Figure 2: Please see original letter for figure.

Figure 3: Please see original letter for figure.

Figure 4: Please see original letter for figure.

Figure 5: Please see original letter for figure.

Figure 6: Please see original letter for figure.

It is more problematic to extrapolate estimates of air quality concentrations as presented in the FEIS to Revised Alternative D, since such impacts depend on both magnitude and location of emissions releases. However, it can be ascertained that, as presented in the FEIS, Alternative C emissions lead to interim year exceedances of the NAAQS for NO2, and PM10. Moreover, these exceedances are over 150% of the NAAQS. Therefore, since on-airport emissions under Revised Alternative D are higher than those of Alternative C and total emissions are only modestly lower, it can be deduced that Revised Alternative D would also demonstrate exceedances of the same NAAQS. Alternative C also demonstrates interim year CO concentrations that are within about 5% of the NAAQS, so it is likely that Revised Alternative D, with higher on-airport emissions would also exceed the CO NAAQS during interim years. Upon buildout in 2015, the FEIS shows that Alternative C meets the NAAQS for all emissions species, but is within about 5% of the NAAQS for NO2. Therefore, once again, Revised

Alternative D, with higher on-airport emissions that Alternative C is likely to result in exceedances of the NO2 NAAQS.

B. The Air Quality Analysis in the FEIS Does Nothing to Remedy the Flaws in the FEIR's Analysis.

Commentors and others, in the course of the EIR review process, repeatedly pointed out analytic flaws that impaired, and even obviated, the air quality analysis and its conclusions. Those same flaws still exist in the FEIS. Specifically:

1. The FEIS Lacks Reliable Data Concerning Estimated Future Background Concentrations.

The FEIS does not provide data which clarifies the continuing uncertainty with respect to estimated future background concentrations. The importance of this omission cannot be overstated. Regardless of the accuracy and precision of on-site emissions estimates and associated air quality modeling, the overall impact of those estimates depends equally on the accuracy of the estimates of future background concentrations. If background concentrations are underestimated, air quality impacts will be equally underestimated.

Moreover, data required for the appropriate demonstration is available. The SCAQMD monitor used to estimate longer term background concentrations (the monitor designated as Station 094, South West Coastal L.A. County by SCAQMD) should be capable of serving as a long term indicator of the proportionality of response between measured concentrations and regional emission reductions during periods of varying wind direction.

Of additional concern is the differential treatment afforded background concentrations of PM10 in both the FEIR and FEIS. Whereas all other pollutant backgrounds are set in accordance with the ratio of emissions inventory estimates for 2015 to base year emissions inventory estimates, the PM10 background is set according to the ratio of modeled 2015 to base year PM10 concentrations in Central Los Angeles. The only explanation for this differential treatment is the single assertion that "this method allows for the inclusion of secondary PM10 formation." Analysis supporting the propriety of the application of the emissions rollback procedure and the Central Los Angeles PM10 modeling estimates to the situation at LAX is entirely lacking from the FEIS.

Finally, the overall sensitivity of the air quality analysis to the background concentration reduction is perhaps best demonstrated by examining forecast 2015 pollutant concentrations. Despite an assumed 50% reduction in the background concentration of NO2 between 1996 and 2015, on-site NO2 concentrations are forecast to increase. Similarly, while the background 24 hour concentration of PM10 is assumed to decrease by almost 50% between 1996 and 2015, overall on-site PM10 declines by only about 20%. Clearly, these reduced background concentrations are allowing significant emissions growth to occur from on-site sources. As a result, the integrity of the demonstrated AAQS compliance status hinges on the proper demonstration of background concentration propriety, a demonstration that has not yet been performed.

2. Reverse Thrust Emissions from Aircraft Are Not Included in the Air Quality Analysis.

The air quality analysis continues to lack reverse thrust emissions from aircraft. The underlying environmental documents have, at various times, used various excuses for this absence, including: (a) emissions factors and regulatory guidance for considering reverse thrust operations are not available; (b) emissions from reverse thrust are insignificant; (c) because runway length at LAX is sufficient, reverse thrust operations should be minimal; and (d) the methodology used to estimate the times in mode for approach, taxi, takeoff and climbout modes is sufficiently conservative to inherently account for any reverse thrust emissions. To this list, the FEIS adds that, because aircraft are assumed to carry their maximum allowable weight on takeoff, reverse thrust emissions are inherently considered.

Each of these arguments offered in support of the omission of reverse thrust emissions is inadequate, and in many cases purely speculative. Neither the FEIR nor FEIS offers any compelling evidence that reverse thrust emissions are inherently considered. Times in mode have been specifically tailored to reflect expected operational conditions at LAX, exclusive of reverse thrust operations. The argument that runway length is sufficient to minimize reverse thrust operations is equally spurious. Aircraft routinely (at LAX and elsewhere) utilize reverse thrust to minimize stopping distance and access the first safe runway turnoff. This both minimizes aircraft time on an active runway and reduces brake maintenance costs. Some airports and airlines restrict reverse thrust operations on longer runways, but there is no evidence in the Record that this is the case at LAX. On the contrary, independent studies in the late 1990s showed reverse thrust operations to be common at LAX.

There are methods by which reverse thrust emissions, even though there is no official guidance with respect to their calculation, can be estimated. For instance, the most common practice is simply to add reverse thrust time to takeoff time and allow EDMS to estimate combined takeoff and reverse thrust emissions simultaneously. This is not a novel approach that can easily be incorporated into the FEIS' analysis. Although the time in mode for reverse thrust is small, generally on the order of 15 to 20 seconds, such high thrust operational modes produce very high NOx per unit time relative to other operating modes. Based on the data presented in the FEIS and its underlying documents, a reverse thrust mode time of 15 seconds would increase the overall aircraft NOx inventory by about 10%. Moreover, these emissions occur at ground level. Therefore, there is simply no justification for their omission.

3. The Modeling of Emissions from Ground Support Equipment Is Unvalidated.

Although the population and activity of aircraft Ground Support Equipment ("GSE") at LAX can be estimated with a high degree of certainty by surveying current airport operators, the FEIS continues to rely on the FAA's EDMS model to estimate these parameters. Theoretically, this would be acceptable if there were some validation of the estimates produced by EDMS as consistent with actual population and activity statistics. No such validation is provided. Nevertheless, and without any factual support, the FEIS asserts that the approach employed is "believed" to produce a conservative estimate.

4. The Use of 100% Conversion to Electric GSE as a Mitigation Measure for Alternative D is Inappropriate.

The FEIS continues the reliance on the alleged commitment to convert 100% of LAX GSE to electric (or very low emission) power by 2015. Aside from the fact that, given the schedule contained in the 2002 Memorandum of Understanding between the California Air Resources Board and participating airlines makes this schedule vastly over-optimistic, the anticipated conversion cannot serve as a mitigation measure for Alternative D because it is set to take place whether or not Alternative D occurs. Therefore, it is appropriately included in the baseline NA/NP Alternative. That it is not appears attributable to the pervasive pattern in the environmental documents aimed at elevating the environmental impacts of the baseline and reducing those of the preferred alternative, Alternative D.

5. Incorrect Aircraft PM10 Emissions Factors are Still Being Used in the FEIS' Air Quality Analysis.

Despite repeated comments concerning the impropriety of the PM10 emissions factors used in the FEIR's air quality analysis, the same PM10 emissions factors underlie the FEIS' conclusion that PM10 emissions do not violate the NAAQS, and thus conform to the SIP. The emissions factors in the FEIS, however, consider only the nonvolatile Carbon portion of emitted Particulate. The FEIS relies on the FEIR PM10 analysis which in turn relies on documentary support that contains sufficient data to allow for the conversion of nonvolatile PM10 to total PM. Prior comments have specified a protocol for such conversion. This conversion is, however, absent from the FEIS. Thus it does not contain a supportable determination of total aircraft PM10 emissions from the project.

6. Gate Based Power and Air Continues to be Assumed for All Aircraft and, thus Auxiliary Power Unit Emissions Factors are Not Sufficiently Considered.

The assumption 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) results in an underestimation of APU and/or GSE emissions. A realistic emissions estimate for APU would be based on the current usage rate of existing gate based power and air systems at LAX. The rate is either already known or can easily be determined through a modest random survey of gate activity. An assumption of 100% usage certainly provides an indication of the ideal level of APU emissions, but the AAQS compliance demonstration must be based on real, not ideal, emissions levels. Moreover, as a result of the assumption of 100% gate based power, the FEIS continues to assume that PM emissions factors for all APU are zero. The impact of this omission is buffered by the fact that APU usage is assumed to be limited by the assumption of 100% gate based power and conditioned air, but even under this ideal assumption, APU are assumed to operate for 15 minutes per landing takeoff ("LTO") cycle.

In response to previous comments, the environmental documents state that the operational information required to estimate APU PM emissions rate is not available. However, even assuming that is correct, it does not mean that all methods are similarly restricted. In Commentors' previous comments on the DEIR and SEIR, a method was set forth that relies on regression analysis to relate aircraft PM to the

inverse of NOx emissions. This method is not unusual or ground breaking, but it does result in relationship coefficient significant at the 99% confidence level. Since APU are essentially small jet engines, this methodology can be applied to both main aircraft engines and APU. That it is not is a significant defect in the FEIS.

7. Default Aircraft Engine Assignments Continue to be Utilized in the FEIS Rather than More Appropriate LAX Specific Engine Assignments.

Aircraft emissions in the FEIS continue to be based entirely on the default engine assignments of the FAA EDMS model, as opposed to engine assignments tailored to operations at LAX. While this approach does not affect the relative emissions relationships between Alternatives, it can have a significant impact on the absolute level of aircraft emissions and, therefore, on associated AAQS compliance demonstrations. In response to previous comments on this issue, LAWA asserted that the use of EDMS engine assignments represents the most statistically probable aircraft/engine combinations in use at LAX. LAWA also cited the difficulty of engine identification for a particular aircraft and the groundless nature of the claim that LAX air carrier mix is inconsistent with EDMS default assumptions. All three assertions are unsupported, and, ultimately, incorrect.

The air quality report attached to these comments as Attachment 1 sets forth a detailed analysis of the sensitivity of emissions estimates to the proper allocation of aircraft engines. Using a Boeing 757-200 aircraft as an example, the analysis concludes, among other things, that the effect of tailoring aircraft engine assignments for that aircraft can be a variation in individual pollutants ranging from minus 90% to plus 45%, depending on the engine utilized. Variations for other aircraft can be greater or lesser depending on available engine characteristics. Analysis of the relationship of engines to emissions estimates, despite its importance, is still omitted from the FEIS.

8. Emissions from Heavy Trucks Are Still Omitted From FEIS On-Airport Truck Fleet Mixes.

The apparent omission of heavy duty truck traffic from the FEIS on-airport vehicle emissions estimates is inconsistent with the reality of Federal Express and other cargo carriers which operate substantial fleets of heavy trucks, and will have to increase those fleets when on-airport cargo sort space is purportedly limited. While in previous Response to Comments, LAWA has claimed that diesel truck emissions are included in both on and off-airport traffic emissions estimates, the Tables in the SEIR cited for that proposition (and which continue to be relied upon in the FEIS which contains no further analysis) contain no evidence of heavy truck inclusion in on-airport traffic estimates. While Table J3, which reflects the year 2000 fleet composition, does include passenger cars, light, medium and heavy duty trucks and buses, Tables J4 (fleet mix in 2013) and J5 (fleet mix in 2015) indicate zero Vehicle Miles Traveled ("VMT") fractions for light-heavy, medium-heavy and heavy-heavy trucks on all on-airport road links, even those for which heavy duty truck traffic is assumed in 2000. Without emissions estimates for heavy duty diesel trucks which are significant contributors to PM10, a pollutant for which the project is potentially nonconforming, the FEIS' air quality analysis is fatally flawed.

C. FAA's Conformity Determination is Based on the Same Flawed Assumption and Absence of Relevant Data as the FEIS' Air Quality Analysis.

Given the inadequacies of the underlying Air Quality analysis, the FAA's demonstration of conformity is predicated principally on the letter of August 12, 2004 From SCAQMD, purporting to certify that "the total of direct and indirect emissions from the action... together with all other emissions in the nonattainment (or maintenance) area would not exceed the emissions budget specified in the applicable SIP." 40 C.F.R. § 93.158(a)(5)(i)(A). The problem with this assumption is two-fold. First, such a determination must be "determined and documented by the State agency primarily responsible for the applicable SIP", Id., which, in this case, is not SCAQMD but the CARB. The Record, however, is devoid of such a determination by CARB. Therefore, the FAA's reliance on SCAQMD's determination is seriously misplaced.

Second, even if it could satisfy the relevant criteria for determining conformity, the FAA's Conformity Determination is based on the same equation of capacity between the NA/NP Alternative and Alternative D which compromises the FEIR's analysis. Moreover, the Conformity Determination reflects the same absence of data and requisite analysis concerning PM10 emissions factors, reverse thrust emissions, appropriate mitigation measures, including 100% electrification of GSE, and 100% gate based power, that compromise the FEIR. Consequently, and for all the reasons set forth above, the project has not been properly determined to conform to the SIP, and cannot proceed until such legally and analytically accurate determination has been made.

Response:

Part A of this comment, like many others, raises questions about the accuracy of the Alternative D's capacity as disclosed in the Final EIS. Please see Response to Comment FAL00003-2 regarding airport capacity. Based on the false premise that the Final EIS understates Alternative D's capacity, the comment sets forth a new hypothetical alternative and purports to analyze the air quality impacts flowing from that scenario. FAA has not reviewed the results indicated in the hypothetical analysis for accuracy nor the methodology used to reach the conclusions in the comment. This scenario is hypothetical and speculative, and does not require a response under NEPA.

It should be noted that assuming Alternative D airside emissions would be similar to Alternative C airside emissions is incorrect. As detailed in the Final EIS, design criteria for Alternative D do not allow for the same operational or gate capacity as is allowed in Alternative C. Due to the differences in operational parameters and gate capacity, it is not correct to assume that emissions from Alternative C would be essentially the same as from Alternative D; therefore, a comparison to the commentor's "Revised Alternative D" would not be correct.

Next, part IIB of the comment identifies a series of alleged flaws in the air quality analysis. The following references address the issues presented in part IIB of the comment. Please see Response to Comment FAL00001-29 regarding future background concentrations, Response to Comment FAL00001-30 regarding reverse thrust emissions, Response to Comment FAL00001-31 regarding GSE emissions, Response to Comment FAL00001-32 regarding mitigation of GSE emissions, Response to Comment FAL00001-33 regarding aircraft particulate matter emission factors, Response to Comment FAL00001-34 regarding gate power/air and APU emissions, Response to Comment FAL00001-35 regarding aircraft engine assignments, and Response to Comment FAL00001-36 regarding on-airport truck emissions.

Please see Responses to Comments FAL00001-5 and FAL00001-37 regarding the general conformity determination. While CARB is responsible for preparing and submitting proposed SIP revisions for all parts of California directly to USEPA, the SCAQMD is the responsible agency for developing SIP emission inventories for sources in the South Coast Air Basin. The only inventory of aircraft included in the SIP is found the 1997/1999 AQMP and 2003 AQMP developed by the SCAQMD. Furthermore, CARB did provide a letter (July 2004) to the FAA indicating which aircraft inventory (baseline) in the SIP should be used as the aircraft NOx budget. Please see Response to Comment FAL00001-5 regarding the state agency primarily responsible for the applicable SIP.

FAL00001-15

Comment:

III THE FEIS' AIRCRAFT NOISE ANALYSIS IS A VICTIM OF BOTH FAULTY ASSUMPTIONS AND ABSENCE OF SUPPORTING DATA AND ANALYSIS.

Relying on a comparison of the noise impacts of the NA/NP Alternative with those of Alternative D, the FEIS concludes that Alternative D's noise impacts are insignificant. In reaching that conclusion, the FEIS relies on the overstated impacts of the NA/NP Alternative, the flawed capacity analysis for Alternative D, and a series of analytic omissions, all of which, if properly included and addressed, lead to the opposite conclusion.

First, relying on the SEIR's Land Use Supplement Technical Report, S-1, Tables S-56 and 61, the FEIS concludes that Alternative D will cause virtually no additional noise sensitive uses to be impacted by a 1.5 dB increase within the 65 CNEL contour, the standard of significance employed in the FEIS.6 Other portions of the environmental documents, however, contradict that conclusion. For example, Topical Response TR-N-3.3 acknowledges that "more traffic will certainly mean more noise events, and may mean higher CNEL levels." Moreover, the FEIR acknowledges that future contours will "grow in areas where substantial changes in the airport runway configuration or runway use are proposed."

The reason for, and location of, these shifts become apparent in other sections of the environmental documents. The FEIR acknowledges, for example, that "changes in the runway use patterns are anticipated between now and 2015 that would result in a shift of heavy aircraft from predominant use of the south runway approach to the north runway approach, resulting in an enlargement of the 65 CNEL contour along the north approach and a shortening of the contour under the approach to the south runways." Topical Response, TR-N-6.1. The FEIR further acknowledges that there will be shifts in noise to the east. At least one runway in Alternative D is projected to be increased in length to 12,000 feet,

Response to Comment SPC00275-60, 1,280 feet to the east, and 340 feet south, Response to Comment SPC00275-59, and that "some areas within Inglewood would be newly exposed to 65 CNEL noise levels compared to the No Action/No Project Alternative." Response to Comment SPC00275-53.

The real issue, however, is with conditions and resulting impacts mentioned, but unanalyzed in the FEIS or supporting documents. Foremost among these unexplored details is the existence of the NLA A380 in the fleet mix, and its potential impacts. While the FEIR admits that at least seven airlines at LAX have ordered NLAs with delivery as early as 2006, FEIR, Comment SPC00298-6; that by 2015, 27 NLAs will serve LAX on a given "design day" (or 1% of total daily operations), FEIR, Response to Comment SPC00275-39; and that six new gates will be supersized and taxiways rebuilt to accommodate them, Supplemental Aircraft Noise Technical Report, Appendix S-C1, Table S7, 2015 Average Annual Day Operations in Fleet Mix Alternative D, lacks any reference to the A380 or any other NLA.

Moreover, the text of Appendix S-C1 asserts that, despite the shift from commuter to long distance aircraft claimed in support of the capacity "averaging analysis" described above, " by 2015 the proportion of heavy jet operations will decline to 31% (643 of 2121 total Ops.) compared to the No Action/No Project Alternative case which forecasts heavy jets to comprise 33% of the mix (706 of 2119 operations)", Appendix S-C1, § 3.1.1., p. 18. The only reason given for this notable omission is simply that "since the A380 has not been built, it cannot be modeled." FEIR, Response to Comment SPC00275-39.

That rationale is, however, patently inaccurate. Manufacturer's data exists which reveals that the A380 will weigh in excess of one million pounds, have a wing span as wide as 262 feet, and carry up to 600 passengers. FEIR, Chapter 2, § 2.3.7. That data also allows LAWA to determine the appropriate design standards for runways and gates to accommodate them. It would not be a stretch to model a selection of possible engine characteristics (Pratt & Whitney, Rolls Royce, other) and thereby arrive at a reasonable approximation of the A380's potential noise impacts. Nevertheless, no such modeling has been performed.

Further, the FEIR's assertion that the noise characteristics of the A380 are equivalent to those of the 747-400 is not an acceptable substitute for actual analysis (FEIR, Response to Comment SPC00236-6). The A380 will have a maximum gross takeoff weight approximately 325,000 pounds greater than the 747, and 52,000 pounds more thrust, which is almost equivalent to adding an additional engine. It is therefore reasonable to assume, in the face of no analysis in the FEIR, that noise from the NLAs will affect the noise attributable to Alternative D.

These differences are of concern because of potential additional differences in the operational characteristics of the A380 and aircraft in the existing fleet mix. For instance, LAX Aircraft Noise Abatement Operating Procedures and Restrictions, § 4, addresses conditions under which the "over ocean" (westerly nighttime arrival and departure) cannot be employed. "In the event ATC determine that existing weather provides for only easterly departure traffic flow, including a tail wind component that exceeds 10 knots from the east, ATC shall only permit departures on Runways 6R and 7L", Topical Response TR-N-5.1. However, when queried as to whether "large jumbos perform with tail winds below 2, 4, 6, 8 and 10 knots", the FEIR refuses to answer on the ground that "tailwind impacts on jumbo aircraft operations is not a comment on the contents of the DEIR or SEIR." Response to Comment SPC00236-6.

That answer begs the question. As the FEIR admits, the direction of operations at night is determined by weather conditions, and "[T]here are no prohibitions against nighttime easterly operations." Topical Response, TR-N-5.2. Given that, in determining CNEL levels, a 10 dB penalty is assessed on operations occurring between 7:00 p.m. and 7:00 a.m.; over ocean procedures are not always in effect due to wind and weather; some aircraft ignore the over ocean procedures even when they are in effect; and the FEIR lacks any information as to whether the A380 can depart to the west in certain tailwind conditions, it is easy to deduce that noise contours to the east of LAX will be most heavily impacted by the A380.

6 The Land Use Technical Report designates one private school in Los Angeles City as impacted.

Response:

Comment noted. Please see Response to Comment FAL00003-2 regarding capacity of Alternative D, and Topical Response TR-GEN-2 in Part II-Volume 1 of the Final EIS regarding No Action/No Project Alternative assumptions.

There is no inconsistency between the statements cited by the commentor. The statement "Alternative D will cause virtually no additional land use exposed to increases of 1.5 CNEL or more within the 65 CNEL contour" does not contradict the statement that "more traffic will certainly mean more noise events, and may mean higher CNEL levels," as stated in Topical Response TR-N-3.3 (see Part II-Volume 1 of the Final EIS). Topical Response TR-N-3 clarifies that increased traffic levels can, in some instances, result in a reduction in CNEL levels, depending upon the fleet mix and the loudness of individual aircraft in the fleet. Further, the CNEL may increase by levels of less than 1.5 decibels. An increase less than 1.5 decibels is not considered to be a significant impact under the thresholds of significance established in subsection 4.1.4, Thresholds of Significance, of Section 4.1, Noise, of Part I of the Final EIS. Finally, it is true that "future contours will grow in areas where substantial changes in the airport configuration or runway use are proposed," and these changes are acknowledged as described in the environmental consequences section for each alternative in the Final EIS.

Please see Response to Comment FAL00001-4 regarding the substitution of the 747-400 as a surrogate for all New Large Aircraft, including the A-380. The FAA's Office of Environment and Energy has advised the use of the 747-400 as a substitution to represent the noise and operating conditions of the A-380. Please see Response to Comment SPC00275-39 in Part II-Volume 11 of the Final EIS regarding the application of the 747-400 to represent all NLR.

In contradiction to the commentor's suggestion that "it would not be a stretch to model a selection of possible engine characteristics (Pratt & Whitney, Rolls Royce, other) and thereby arrive at a reasonable approximation of the A-380's potential noise impacts", such an approach would be inappropriate. The A-380 aircraft is designed with engines that have no specific surrogates within the available mix of engines included within the INM data bases - this is one of the reasons that substitution aircraft are used to best represent the non-existent future aircraft or those for which data is not available. To project the noise levels based on the commentor's suggested methodology would require significant speculation and guesswork regarding the operating characteristics and noise emissions qualities of the newly developed A-380, and consequently would produce results, if any, lacking reliability. This does not further the NEPA goal to produce an informed decision making process and an informed public.

By referring to the size, wingspan, and weight of the A-380, the commentor is apparently attempting to draw a direct relationship between the size and weight of an aircraft and the noise it produces. This is not a true relationship. For example, a Lear 25 business jet weighing approximately 15,000 pounds, produces the same total certificated noise energy as a Lockheed MD11 jumbo jet weighing 630,000 pounds and having vastly more thrust than the Learjet. See also Response to Comment FAL00001-4.

Lacking specific flight data, the NLA is expected to have the same tailwind acceptance characteristics as the 747-400, the substitute for the NLA in all noise evaluations. Thus, a critical component in determining the utility of the runway for various aircraft types is the runway length requirement during different tailwind components. The 747-400 aircraft requires less runway length than older versions of the model, in part owing to more advanced wing design. The A-380 is projected to require less runway length than the 747-400. Consequently, the commentors contention that the noise contours will be extended to the east based on the weight and ability of the A-380 to accept tailwinds of 2, 4, 6, 8, or 10 knots is inaccurate.

The commentor misstates the penalty of CNEL. The 10 decibel penalty is applied between the hours of 10 p.m. and 7 a.m. Between the hours of 7 p.m. and 10 p.m., a penalty of 4.77 decibels is applied. Nevertheless, the ability to operate during "over ocean" operations with a tail wind is dependent upon runway length requirements. The runway length requirement for the A-380 is less than that of the 747-200B, 747-200C, 747-300, or 747-400. Consequently, the easterly departure assumptions for nighttime operations applied in the Final EIS may in fact overstate the anticipated effect of the A-380 aircraft on noise contours east of LAX.

FAL00001-16

Comment:

IV. THE FEIS' ENVIRONMENTAL JUSTICE ANALYSIS IMPERMISSIBLY "AVERAGES" THE IMPACTS ON SURROUNDING MINORITY COMMUNITIES SO AS TO CONCLUDE THAT ALTERNATIVE D WILL CAUSE NO ENVIRONMENTAL JUSTICE IMPACTS.

In spite of its acknowledgment that "as a result of runway orientation, the minority and low income communities to the East bear the greatest burden of aircraft noise from LAX" [FEIS, Vol. A, Section

A.2.2.4, p. 2-68]; given Alternative D's undeniable capacity enhancing potential; and given that "the combination of longstanding runway orientation and more recent changes in demographic patterns in the area around LAX means that minority and low income communities are directly under the principal arrival flight path" Id., at p. 2-67, the FEIS arrives at the shocking denouement that "Alternative D would not result in disproportionately high and adverse noise impacts on minority and low-income communities." Id., p. 2-81.

This conclusion arises from two favorable assumptions: (1) that Alternative D is properly compared to a NA/NP Alternative baseline that includes future growth, rather than reflecting the status quo at the time of the commencement of environmental review; and (2) the propriety of an "averaging" process whereby the FEIS offsets the increased impacts of Alternative D on massive minority populations, against an alleged reduction in noise over non-minority populations (purportedly resulting from a shift in contours).7 The former has been addressed in detail above. The latter, however, has the pernicious effect of minimizing the actual impacts of Alternative D, as well as imbuing them with a purported "net beneficial effect". Id., p. 2-81

The FEIR does not shy away from reporting the project's real impacts on minority communities. For example the FEIR, section 4.2, reports that 5080 low income and minority citizens of communities east of the airport will be exposed to a 1.5 Db increase in the 65 CNEL contour under Alternative D, as compared to the 1996-7 Environmental Baseline, i.e., the year that environmental review commenced. Yet despite the increasingly minority character of surrounding communities after 1996-7 [FEIS, p. A.2-60], the FEIS concludes that "fewer people residing in minority and low income communities are exposed to 65 CNEL noise levels than in non-minority and low-income communities. Id., at p. 2-81.

By way of example, the FEIS concludes that, while 1630 minority and low-income individuals would be newly exposed to 65 CNEL noise levels by Alternative D, there would be a greater reduction of 1838 resulting from a shifted contour, netting a reduction of about 200 individuals affected by Alternative D. The FEIS then offsets that purported reduction against an alleged increase of 488 individuals exposed in non-minority communities, thereby arriving at the conclusion that the significant increases in operations and consequent noise resulting from Alternative D's 89.6 MAP capacity will actually have a "net beneficial effect." Interestingly, the FEIS' analysis omits the same "averaging" analysis for increases of 1.5 Db within the 65 CNEL contour, the standard of significance upon which the FEIS' Environmental Justice analysis purportedly relies.

Suffice it to say, the Environmental Justice analysis is a "house of cards", built upon an impermissible "average" of impacts, and, ultimately a skewed baseline for analysis, both manipulated to produce precisely the result reflected in the FEIS, i.e., a minimization of the significant noise, air quality, and Environmental Justice impacts of Alternative D.

7 The conclusion also results from the exclusive use of the "1.5 Db increase within the 65 CNEL contour" standard of significance contained in FAA guidance, rather than a measure of population merely impacted by 65 CNEL noise levels, as is required by CEQA.

Response:

Please see Response to Comment FAL00001-6 regarding different environmental justice conclusions presented in the Final EIS and the Final EIR.

The commentor does not appear to argue the fact that FAA has addressed the environmental justice analysis in the Final EIS using the standard and accepted NEPA framework, that of comparing impacts of an action alternative to conditions existing under the no action alternative. Nor could the commentor do so. Instead, the commentor expresses a desire to have the FAA abandon the statutory framework of NEPA in performing the Federal analysis, and to instead substitute the statutory framework of CEQA. Abandoning NEPA methodology in favor of CEQA methodology is neither required nor appropriate. As indicated in the Final EIS, and Response to Comment FAL00001-6, the FAA analyzed environmental justice impacts consistent with NEPA methodology and CEQ guidance on environmental justice analysis.

Based upon the appropriate NEPA framework, two facts underline the accuracy of the conclusion that Alternative D would not have disproportionately high or adverse effects in environmental justice communities. First, and of primary importance, not one minority or low-income community would be significantly impacted in 2015 by Alternative D. The analysis could be concluded based on this information alone, based upon CEQ guidance (i.e., this information alone is sufficient to reach the necessary conclusion, and further evaluation of the issue is not required based on CEQ guidance).

However, the conclusion regarding environmental justice is further supported by the fact that, when compared to conditions that would exist under the No Action Alternative, there would be a reduction in the total number of individuals in minority and/or low-income communities residing in the 65 CNEL contour. While the commentor may attempt to undermine the conclusions of the Final EIS by describing this analysis as impermissible "averaging" of impacts, under standard analytical methods of NEPA, the analysis shows that Alternative D does not disproportionately place the significant impacts of the project on minority communities, and in fact results in an overall improvement in conditions as compared to the No Action Alternative.

The majority of adverse effects associated with aircraft noise exposure historically have occurred and will continue to occur to the east of the airport, primarily over minority and/or low-income communities due to the orientation of the runways. However, as shown in Figure A2.2-9 in Section A.2.2, Environmental Justice (NEPA Analysis) in Volume A of the Final EIS, such effects are similar to the No Action/No Project Alternative, since Alternative D is designed to serve a future (2015) airport activity level of approximately 78.9 MAP which is comparable to that of the No Action/No Project Alternative. This is less than the 89.6 MAP capacity stated by the commentor.

The actual impacts of exposure of minority and/or low-income communities to 65 CNEL noise levels is presented in Table A2.2-4 in Section A.2.2. Although 1,600 individuals in minority and/or low-income communities would be newly exposed to these noise levels, there would be a reduction of 1,838 individuals in minority and/or low-income communities exposed to these noise levels compared to what would occur under the No Action/No Project Alternative. Therefore, since there is an overall reduction in population exposed to 65 CNEL noise levels in minority and/or low-income communities, noise effects on these communities under Alternative D would be beneficial. It is acknowledged that there would be a greater proportion of new exposure to the 65 CNEL contour in minority and/or low-income communities than in non-minority and/or non-low-income communities due to the existing orientation of the runways, as also occurs under the No Action/No Project Alternative. However, non-minority and non-low-income communities experience an overall increase in total population residing in the 65 CNEL contour, while minority and low-income communities experience an overall decrease in total population residing in the 65 CNEL contour. Thus, in light of the lack of any significant impacts in minority and/or low-income communities resulting from Alternative D, and the additional net benefit to these communities, there would be no disproportionately high and adverse impacts to these communities.

Finally, the commentor states, "Interestingly, the FEIS' analysis omits the same "averaging" analysis for increases of 1.5 Db within the 65 CNEL contour, the standard of significance upon which the FEIS' Environmental Justice analysis purportedly relies." Such a comparison cannot be presented because, as indicated above, under Alternative D no noise sensitive uses in environmental justice communities would experience such an increase.

FAL00001-17

Comment:

Commentors, therefore, reiterate their urgent request that the FAA reconsider its analysis and conclusions in light of existing law and acknowledged facts, with the goal of revealing the full impacts of Alternative D, including a demonstration of Conformity with the SIP that can withstand judicial scrutiny.

Commentors look forward to the FAA's prompt cooperation in these matters.

Response:

Comment noted. Please see Responses to Comments above. The comment requests reconsideration of information, analyses, and conclusions included in the Final EIS. FAA has determined the Final EIS was prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, as amended, CEQ Guidance regarding NEPA (40 CFR Part 1500), and the FAA Orders 1050.1E and 5050.4A.

FAL00001-18

Comment:

Summary

This constitutes a review of the air quality portions of the January 2005 Final Environmental Impact Statement (FEIS) for the LAX Proposed Master Plan Improvements and the included Final General Conformity Demonstration (FCD). It is important to note that the FEIS carries forward all of the previous air quality analyses performed for the proposed master plan improvements with little or no modifications. As a result, all of the comments provided in the June 4, 2004 comment letter in response to the release of the Final Environmental Impact Report (FEIR) for the same proposed improvements, as well as previous comment letters on earlier draft EIS/EIR releases, continue to apply. Given that specific air quality comments have been submitted on several occasions, this letter is structured to highlight those elements that are most fundamental to illustrating the continuing inadequacy of the FEIS air quality analysis and, as a result, the inability of that analysis to support the determinations required under both the National Environmental Policy Act (NEPA) and Clean Air Act Conformity provisions.

Response:

The FAA is not in receipt of the June 4, 2004 comment letter referenced in the comment, and no such letter was included with the commentor's submittal to the FAA on February 22, 2005. Part II of the Final EIS includes written responses to all comments received by the FAA on the Draft EIS/EIR and the Supplement to the Draft EIS/EIR.

FAL00001-19

Comment:

The major reason for this approach is that, while there are deficiencies of varying importance throughout the FEIS air quality analysis, there is but one fundamental assumption that allows the FEIS to conclude that emissions and air quality under the proposed alternative (Alternative D) are similar to baseline (i.e., No Action/No Plan) emissions and air quality. As such, the integrity of this single assumption is critical to the integrity of the associated air quality analysis. If the underlying assumption is reasonable, the basis for the analysis is sound and analysis components can be considered on the merits of the implemented methodologies and calculations. However, if the underlying assumption is itself fundamentally flawed, then debating the merits of the implemented methodologies and calculations is a distraction from the primacy of the flawed assumption. In effect, combining comments on a single overarching flaw with methodological comments allows one to lose sight of the forest for the trees. Such distraction continues to corrupt the conclusions of the FEIS, and the associated conformity determination.

Response:

Comment noted. Please see Response to Comment FAL00003-2 regarding the assumptions underlying the capacity calculations, and related information presented in Section 2.3, Consequences of Not Improving LAX, and Section 3.2, Alternatives Fully Evaluated, of Part I of the Final EIS. More technical supporting data is provided in Chapter I, Section 3, Alternative D Constrained Activity, of the Final Master Plan.

FAL00001-20

Comment:

Methodological Approach

The preferred alternative of the FEIS (Alt. D) continues to be very similar in terms of airport activity to the NA/NP alternative. While the propriety of this similarity is discussed in detail in the body of this letter, the implications of the assumed similarity are significant in regard to air quality impacts since airport-related air quality is primarily a function of the overall level of activity. To the extent that the comments presented in this letter affect the analyses conducted for all of the master plan alternatives,

the resultant impact on the NA/NP alternative and Alt. D can be expected to be similar. Where comments affect solely the analysis for Alternative D (or the NA/NP alternative), the relative relationship between the business as usual and build alternative may change. For obvious reasons, these latter comments are most important in judging the efficacy of the build alternative. The former comments, which might affect both the build and no action alternatives similarly, are primarily important in properly assessing the overall onsite and near-site air quality under either of the alternative futures.

The FEIS has been reviewed from a "top down" perspective. Essentially, this means that the presented material has been evaluated in terms of stated methodologies and, to the extent possible from presented materials, assessed in terms of whether those methodologies are reasonable and have been implemented as stated and appropriate. When possible, the consistency of analysis results has been considered against expectations derived from either previous experience or theoretical relationships. In a few instances, confirmatory analyses have been conducted to evaluate assertions presented in the FEIS. These analyses are best characterized as providing modestly detailed comparative calculations intended to evaluate issues where presented FEIS data appears either inconsistent or unexpected. Except when indicated by such data anomalies, efforts to replicate the various air quality analyses have not been performed. It is entirely possible (and likely in a document the size of the FEIS) that minor errors, that are not identified, are present in the various air quality analyses and results. To the extent that such errors would produce "major" shifts in analysis results, they should be inherently identified through various identified issues discussed in the body of the letter. However, minor discrepancies that produce relatively small errors in analysis results, may pass through a review at the associated level-of-detail without detection. As always, a more detailed review is possible, including a complete replication of the underlying modeling and associated analysis work, but such a review would require an allocation of resources well beyond those associated with this work.

It is important to note that the FEIS is not less comprehensive than most previous examples of similar documents. Nevertheless, there remain several areas of deficiency that could impact FEIS conclusions. Despite the underlying analysis, it is somewhat disconcerting that areas of deficiency are actually acknowledged in the FEIS, but subsequently dismissed through unsubstantiated claims of insignificance. Moreover, the responses to comments included as an integral component of both the FEIR and FEIS demonstrate a tendency to downplay any significant critiques brought to the attention of the project authority, so that the public comment process appears to be treated more as more of a challenge to defend than an opportunity to refine. Notwithstanding this situation, the discussion presented in the body of this letter presents continuing concerns with the air quality analysis portion of the FEIS.

Response:

Comment noted. Contrary to the commentor's assertion, the FAA does not, nor has it ever, acknowledged that the EIS is deficient. Rather, as amply demonstrated by the comprehensiveness and quality of analysis contained in the Final EIS, the document fully complies with the legal requirements of NEPA.

FAL00001-21

Comment:

The Flawed Assumption: Airport Demand Under Alternative D will be Virtually Identical to That Under the No Action/No Plan Alternative

Although there are other lesser assumptions that impact the air quality analysis of the FEIS, the assumption that airport demand is essentially unchanged between the preferred alternative and the no action alternative (78.9 million annual passengers (MAP) versus 78.7 MAP in 2015, a difference of only 0.2 percent) overwhelmingly defines the air quality relationship between the two alternatives. Because demand is assumed to be similar, emissions from aircraft, aircraft support equipment, and ground access vehicles are also similar. The subsequent implementation of mitigation measures, which by definition cannot influence the no action plan, then serve to differentiate the two alternatives by reducing emissions only for the preferred Alternative. The only exception occurs during the interim years between 2005 and 2015, when construction activity under the preferred alternative results in temporary emissions increases. With the exception of the construction emissions, the mitigated preferred alternative, as defined, must have lower emissions a priori.

Before examining this issue, it is perhaps important to note that this is not a new comment. The issue has been raised in all previous comment letters as well as by other commenters throughout the EIR/EIS

process. This discussion simply isolates and expands the issue due to its overwhelming influence on air quality analysis conclusions and, by extension, FEIS conclusions in general.

If the LAX Master Plan is not adopted as proposed, then it is estimated that LAX will handle approximately 78.7 MAP in 2015 under the NA/NP. According to the FEIS, operations would be "very inefficient and congested, and the quality of passenger/visitor service at LAX would be poor."

By comparison, unconstrained demand in 2015 is estimated to be 97.9 MAP (according to the FEIS). The additional demand is not satisfied under the no action alternative because it is assumed that anticipated airfield and terminal conditions result in an economic equilibrium between air travel supply and air travel demand at 78.7 MAP. In effect, it is simply claimed to be more efficient economically for additional demand (i.e., demand above 78.7 MAP) to be satisfied through other airports, other travel modes, or travel forbearance, i.e., market conditions will act as a travel demand constraint at LAX.

However, the travel demand constraints estimated for alternative D are not defined in the FEIS on the basis of economic forecasting, but rather on the basis of a design "bottleneck" intended to limit travel demand to a level below that which economic conditions would dictate. Table 1 illustrates that alternative D offers essentially the same airfield capacity enhancements as alternative C, as well as similar terminal and ground vehicle capacity - yet is predicted to satisfy only the same demand levels as the no action alternative which offers none of these service benefits. Clearly, market forces would dictate that additional travel demand would be expected for alternative D relative to the no action alternative, since both passengers and aircraft can more efficiently access the airport. To overcome these market forces, alternative D intentionally purports to introduce a "bottleneck" into the terminal system that separates the increased airfield capacity from the increased terminal and ground access capacity. By limiting the number of gates available to connect the enhanced airside and groundside facilities, alternative D purports to control travel demand to levels virtually identical to those of the no action alternative.

Table 1: Please see original letter for table.

How realistic of a throughput constraint is this design "bottleneck?" The answer depends entirely on how efficiently airlines can utilize these gates and how much potential for efficiency improvement or load shifting exists. In effect, gate capacity does not serve as a constraint to getting either aircraft or passengers to the airport. While runway configuration and capacity can effectively constrain the arrival and departure of aircraft, and terminal and ground access capacity can effectively constraint passenger arrival and convenience, gate capacity does neither. This is especially important under the preferred alternative since capacity on both sides of the gate is being increased. Terminal and ground access enhancements are encouraging more groundside demand, while runway and airfield improvements are encouraging more airside demand. The ability of gate limitations to serve as a countervailing force is questionable and demands a detailed analysis before it can be accepted as a reasonable and effective demand constraint. We have not been able to find any such analysis in the FEIS.

Given a situation where additional passenger demand exists and can easily be served through the additional capacity provided by improved airside facilities, airlines have only to increase gate efficiency from current levels to increase airport activity beyond that estimated in the FEIS. Since current airlines differ dramatically in their ability to utilize gates efficiently, there is dramatic potential for improvement. It is highly unlikely that airlines will forsake the increased capacity being offered through the alternative D improvements by maintaining gate efficiency at levels typical of current operations. Moreover, the FEIS itself appears to recognize this when it follows the description of the alternative D gate constraints with the qualifying statements:

"However, it is important to understand that the levels of passengers that each alternative is designed to accommodate are not finite limits where the airport would somehow be closed or where aircraft would be redirected to some other facility when this number is reached. These levels are an indication of the number of passengers that can be accommodated at a reasonable level of service. The airport can accommodate additional aircraft and passengers beyond these levels; however, the result is a degraded level of service." [FEIS, Page 3-57]

Since there is capacity "pressure" on both sides of the terminal gate, it is unrealistic to expect gate efficiency to remain constant with the implementation of alternative D. While gate availability may well serve as a capacity constraint at the point where no additional efficiency improvements are possible, that point is well beyond current gate utilization characteristics. Thus, the assumed constancy of annual airport passenger service at about 79 MAP under both the no action alternative, for which gate capacity

is not an important constraint, and alternative D, for which gate capacity is the only important constraint, cannot be viewed as a realistic assessment of likely airport activity under the two alternatives.

To provide an indication of the potential impacts of the unrealistic assumption of airport activity, this report contains an emissions inventory estimate for a version of alternative D that is more consistent with the estimates produced for the other airport build alternatives (Revised Alternative D). This estimation treats both airside and groundside airport demand in accordance with the capacity enhancements actually proposed under alternative D. On the airside, alternative D proposes airport enhancements that are functionally equivalent to or in excess of those of alternative C (see for example, the runway parameters presented in Table 1 above, or the more detailed design descriptions of the FEIS). Therefore, if the assumed gate restrictions to not constrain airport activity as presumed in the FEIS, airside improvements can be expected to adequately support the same aircraft activity as estimated for alternative C in the FEIS. Similarly, proposed alternative D includes both terminal area and ground vehicle accommodations equivalent to those of alternative C. While the two alternatives differ in the configuration of their proposed groundside enhancements, they both are designed to accommodate and provide similar levels of service. As a result, it is reasonable to expect that a version of alternative D unconstrained by a presumed gate-based "bottleneck" will function similarly to alternative C in terms of aircraft activity, supporting an estimated 89.6 MAP.

Response:

Comment noted. The commentor incorrectly characterizes both the No Action/No Project Alternative and the various build alternatives, including Alternative D. The commentor then adds supposition about the alternatives contrary to the descriptions and analyses of these alternatives as documented in the Final EIS and the LAX Master Plan. The commentor then builds on these incorrect characterizations and supposition to offer a contrary outcome on the impacts associated with the implementation of Alternative D at LAX. The commentor offers no substantive analyses of these claims. For the reasons described in the Final EIS, and summarized below, the FAA concludes that the analysis of the practical capacity of LAX in the Final EIS, as modified by implementation of the Alternative D improvements, is designed to provide the decision-maker with the reasonably foreseeable environmental impacts arising out of the implementation of the various alternatives.

The commentor asserts as a generally held view that the "runway configuration and capacity can effectively constrain the arrival and departure of aircraft, and terminal and ground access capacity can effectively constraint passenger arrival and convenience." This generally held view would, by extension, also hold that there is at least the same amount or more airspace capacity either side of the runways such that the runways and the way in which they are used will constrain capacity. Therefore, the commentor would agree that just because there was more airspace capacity available doesn't mean that it will necessarily be used if a key system component like the runway has lesser capacity. Despite this generally stated view, the commentor takes issue with the use of gate space as a constraining factor in the airport system when there are other system components like the airfield and the terminal buildings and ground access system with more capacity available on either side of the system "bottle neck."

1. The commentor incorrectly asserts that, "In effect, gate capacity does not serve as a constraint to getting either aircraft or passengers to the airport." To make this statement one would have to accept that aircraft gates and the space needed to create them is an unneeded element in the air transportation system. This is simply not the case. The gate and the space in which it exists is one of the key elements in the passenger aviation system. It is the fundamental link between aircraft operations and the passengers they serve. It is the definitive point in the system by which airlines sell their product; that is aircraft seats to a particular destination at a particular time at a particular price. When a person buys an airline ticket they don't find a "takeoff" time and a "landing" time on it. Likewise, they don't find a "go-through-security" time or a "pick-up-baggage" time. Instead they find a departure time and an arrival time as measured from the time the aircraft pushes back from the departure gate and the time that it pulls up to the arrival gate. This time, any delays beyond 15 minutes of the scheduled time and the reason for any delays is reported to the U.S. Department of Transportation (DOT) and is available to passengers to ensure consumer protection. No other element of system performance is as closely watched and measured as on-time performance against each carrier's own flight schedule as published in the Official Airline Guide (OAG) (See 14 CFR Part 234.4).

2. Contrary to the assertions in the comment, the actual, practical capacity of an airport is not determined by adding up the separate theoretical potential throughput of each separate element of an airport. Practical capacity is a forecast of activity determined by how those several components will function together in reality. Practical capacity is not based solely on "market assumptions," as the comment asserts. It is based on the physical capacity of the various functional elements of the airport

and how they work together in reality, with proper regard to how the market is likely to respond to and utilize the airport. Contrary to the assertion in the comment, the theoretical "physical capacity" of each component of an airport -- gates, runways or other components of the airport -- does not disclose the overall capacity of the airport as an operating whole. NEPA requires FAA to analyze impacts from a broader perspective.

The FAA has forecasted activity levels on the basis of the practical capacity of the airport, taking into account physical constraints and also the effects of delay and demand on airport usage. This is quite different from the way that the comment suggests activity levels should be established (physical capacity alone). The agency acknowledges that some of the individual components of the airport could support a higher level of activity, if one were to consider physical capacity only. As the Final EIS points out, the runway systems for Alternatives C, D, and the No Action Alternative have virtually identical physical capacity. However, simply having physical capacity to support an activity level does not provide any certainty or assurances mandate that the market will make adjustments to utilize the entire physical capacity -- especially where, as here, there are alternatives to using LAX (i.e., ability to select from several other major commercial airports in the Los Angeles region).

3. The commentor asserts that, "[t]he ability of gate limitations to serve as a countervailing force is questionable and demands a detailed analysis before it can be accepted as a reasonable and effective demand constraint. We have not been able to find any such analysis in the FEIS." In the Final EIS, and throughout the joint NEPA and CEQA process, the FAA and LAWA utilized well-accepted and rational methodologies to establish the maximum practical capacity for LAX, under each of the build Alternatives and the No Action Alternative. These methodologies predict the anticipated future use of the airport for each alternative based on agency and industry experience, as well as rational principles. A primary tool in determining the practical capacity of each of the LAX Master Plan alternatives is FAA's computer model known as SIMMOD. SIMMOD, FAA's Airport and Airspace Simulation Model, is a comprehensive planning tool for airport designers and managers, air traffic planners, and airline operations analysis. The SIMMOD analysis defines airside performance in terms of aircraft taxi time, delay, and throughput, and was used to assess the relative performance of the different Master Plan alternatives in terms of capacity and delay at various levels of demand.

For the Final EIS analysis, the SIMMOD model was originally calibrated as part of the Master Plan's analysis of existing conditions during the 1994 baseline year to assure that it could accurately depict replicate operating conditions at LAX and produce accurate measures of future performance. The SIMMOD model was later recalibrated as the Master Plan baseline year was updated to 1996 and then recalibrated once again when the baseline year was updated to 2000.

After the model was calibrated, it was then used to calculate an estimate of future aircraft operations for each alternative at an acceptable level of delay. The physical limitations of each alternative (e.g., available gates and number of runways) were factored into the model, which was used to analyze numerous combinations of aircraft/gate/taxiway/runway combinations. To provide the most realistic data, the analysis also factored in other relevant assumptions that affect airport capacity at LAX. These assumptions included primary runway operating configurations, applicable noise abatement procedures, airspace operating assumptions, and airfield operating assumptions.

The SIMMOD was used to analyze design day flight schedules for Alternative D for the years 2005, 2008, 2013, and 2015 to aid in the evaluation of each alternative and to provide input for the analysis of reasonably foreseeable environmental impacts. The design day aircraft operations profiles associated with Alternative D are presented in Appendix F of the LAX Master Plan. Appendix F depicts operations profiles by aircraft type, by fix (i.e., a "fix" is a navigation point in the airspace around LAX over which arriving and departing aircraft are routed by air traffic control depending on the flight's origin or destination) the specific flight path immediate to the airport during aircraft arrival and departure), and by user group for Alternative D for 2005, 2008, and 2015 (operational profiles are not shown for 2013 because the a 2013 activity level was identified solely for the purpose of the air quality analysis and was conservatively assumed to be equivalent to 2015, inasmuch as the Master Plan improvements affecting operational profiles would be completed by 2013).

Passenger activity profiles for Alternative D are also presented in Appendix F of the Master Plan. The number of passengers on each flight was determined using the load factor and aircraft size assumptions presented in Section 3 of the Addendum to the Draft Master Plan. The tables in Appendix F set forth number of originating, terminating, and connecting passengers by terminal by hour for 2005, 2008, 2013, and 2015. See also, LAX Master Plan Supplement to the Draft EIS/EIR, Appendix S-E, Supplemental Air Quality Impact Analysis, p. 4; LAX Final Master Plan, Appendix E, Alternative D Airside Analysis.

The analysis provided by the SIMMOD model is the same type of analysis and methodology used by FAA and major airports for assessing demand/capacity relationships and for estimating existing and future delay. These same methodologies are also commonly used by both government and industry to plan for future airport facility requirements. For example, the SIMMOD model was used in forecasting practical capacity in the following airport improvement projects:

- FAA Record of Decision for Proposed 9,000-Foot Fifth Runway and Associated Projects, Hartsfield Atlanta International Airport, Fulton and Clayton Counties, Georgia, September 27, 2001, http://www.faa.gov/ARP/environmental/5054a/RODatl01.htm (SIMMOD used to analyze maximum arrival and departure delay relief resulting from new independent parallel runway);

- FAA Record of Decision for Proposed Replacement Runway, Runway Extension and Associated Development at Cleveland Hopkins International Airport, Cleveland, Ohio, November, 2000, http://www.faa.gov/arp/app600/5054a/CLEROD.pdf (SIMMOD used to forecast peak period capacity over fifteen-year planning period);

- FAA Record of Decision for Proposed New Parallel Runway and Associated Work at Miami International Airport Miami-Dade County, Florida, December 1998, http://www.faa.gov/arp/app600/5054a/rodmia.doc (SIMMOD used to analyze peak capacity with acceptable level of delay for proposed commuter runway);

- FAA Record of Decision, Lambert- St. Louis International Airport, September 30, 1998, http://www.faa.gov/arp/ace/stl/stl.htm (SIMMOD used to analyze capacity and delay).

Moreover, the validity of FAA/LAWA's practical capacity analysis is corroborated by comments provided by the airline industry. For example, the Los Angeles Airlines Airport Affairs Committee (AAAC) represents more than 80 airlines serving LAX and the Air Transport Association of America, Inc. (ATA) is the primary trade association of the U.S. scheduled airline industry, representing 23 airlines, including all major domestic passenger and cargo air carriers. In joint comments to the LAX Master Plan Addendum and the Supplemental Draft EIR/EIS, the AAAC and the ATA commented specifically on the capacity of Alternative D. See Final EIS/EIR Volume 11, Comment SPC002978-30. The AAAC and ATA acknowledged that rather than meeting the projected increase in demand for air travel at LAX for 2015 (98 MAP), the LAX Master Plan "incorporates infrastructure bottlenecks intended to constrain capacity to levels commensurate with the 'no-build' alternative. Those constraints will cause capacity to fall short of local demand at LAX by 20 million annual passengers by 2015." Final EIS/EIR Volume 11, Comment SPC002978-30.

Having considered the commentor's position and after reviewing the analysis in support of the Master Plan and the Final EIS, it is FAA's position that the issue of capacity has been adequately addressed. There are different ways to approach the issue of capacity analysis. Simply because commentor has offered an approach that differs from the one chosen by the FAA, by no means invalidates the FAA's analysis. The FAA has determined that for the purposes of the required analysis, the methodology selected was both adequate and appropriate for providing the FAA with the information needed to evaluate the project. For more information on FAA's position on airport capacity and capacity analysis, please see Response to Comment FAL00003-2.

The commentor also incorrectly asserts that, "[g]iven a situation where additional passenger demand exists and can easily be served through the additional capacity provided by improved airside facilities, airlines have only to increase gate efficiency from current levels to increase airport activity beyond that estimated in the FEIS." Improved gate efficiency beyond the already highly efficient use of this limited resource is already assumed into the Alternative D gate capacity analysis. It is the improved efficiency and accessibility of the proposed gates that allow for the gate space to be reduced from approximately 25,000 lineal feet today down to approximately 23,800 lineal feet in Alternative D in 2015 to serve about the same level of passenger activity as forecasted for the No Action/No Project Alternative. If the airlines are not able to improve their efficiency as projected in Alternative D, the activity associated with the Alternative will be less than projected, not more as speculated by the commentor. By comparison, the LAX Master Plan unconstrained gate requirements call for 276 narrow body equivalent gates (NBEG) or about 36,700 lineal feet of gate space. Alternative D delivers only 65 percent of this unconstrained requirement. To put this deficiency into perspective, Alternative D is short of the unconstrained gate requirements by the equivalent of 54 Boeing 747 gates.

Alternative C in the LAX Master Plan was designed to balance the terminal and gate capacity of LAX with the constrained operational capacity of the four runways. This alternative required 222.2 NBEG or

approximately 29,500 lineal feet of gate space to achieve this objective. Alternative D delivers only 80 percent of the gate space required to balance the gates with the four runways. To put this deficiency into perspective, similar to the comparison with the unconstrained requirements, Alternative D gate capacity is short of the four runway capacity by the equivalent of 24 Boeing 747 gates.

By reconfiguring the available gate space as suggested in Alternative D, LAX would be better prepared to accommodate the changes in the peak hour fleet mix (particularly for large aircraft serving international passengers) with fewer delays. Today, nearly all of the contact gates at LAX are accessed via a single taxilane in a cul-de-sac. Each arriving or departing aircraft must wait for all others to clear the cul-de-sac before it can proceed. Likewise, one aircraft arriving or departing the cul-de-sac can and does block the free flowing operation of as many as 15 other aircraft. While Alternative D does not completely eliminate this physical limitation at LAX, it greatly reduces the number of gates impacted by these current constraints. It is this physical change to the gate layout that allows for the slight reduction in delays between Alternative D and the No Action/No Project Alternative (See Appendix E, of the Final Master Plan).

The commentor also incorrectly asserts that gate capacity is not an important constraint in the No Action/No Project Alternative. As described in Part I, Chapter 3, Page 3-26 of the Final EIS and as analyzed and documented in the Draft LAX Master Plan, Appendix 5J, Section 3, Page V-J.93, all of the facilities at LAX, including the gates, would be experiencing congestion, delays and passenger inconvenience all year and not just during peak periods, poor weather and holidays as is the case presently. While the airport access roads and curb fronts were found to be the most constraining to passenger activity, aircraft gates were the most constraining on aircraft operations in the No Action/No Project Alternative.

As stated at the beginning of this response, the commentor incorrectly characterizes both the No Action/No Project Alternative and the various build alternatives, including Alternative D. The commentor then adds supposition about the alternatives contrary to the descriptions and analyses of these alternatives as documented in the Final EIS, the LAX Master Plan and summarized here. The commentor then builds on these incorrect characterizations and supposition to offer a contrary outcome on the impacts associated with the implementation of Alternative D at LAX. Specifically, the commentor incorrectly concludes, "[t]herefore, if the assumed gate restrictions do not constrain airport activity as presumed in the FEIS, airside improvements can be expected to adequately support the same aircraft activity as estimated for [A]lternative C in the FEIS." The gate space limitations of Alternative D, as described in the Final EIS and herein, are clearly greater than those of Alternative C. Alternative D has only 80 percent of the gate space associated with Alternative C and only 65 percent of the unconstrained gate requirement.

The commentor's unsupported and contrary conclusions to those of the Final EIS and the LAX Master Plan continue with the statement, "[s]imilarly, proposed [A]lternative D includes both terminal area and ground vehicle accommodations equivalent to those of [A]lternative C. While the two alternatives differ in the configuration of their proposed groundside enhancements, they both are designed to accommodate and provide similar levels of service." In fact, the Alternative D and Alternative C landside facilities were designed to support the level and type of passenger traffic associated with each alternative specifically. In particular, Alternative C allowed for higher peak hour passenger loads because the terminal gate space allowed for the much higher proportion of widebody aircraft.

The commentor's string of unsupported and contrary positions concludes with the statement, "[a]s a result, it is reasonable to expect that a version of [A]lternative D unconstrained by a presumed gate-based "bottleneck" will function similarly to [A]lternative C in terms of aircraft activity, supporting an estimated 89.6 MAP." As demonstrated in the Final EIS, the LAX Master Plan and herein, this is not a "reasonable" expectation. The airline representative organizations AAAC and ATA said it best as quoted previously and repeated here, rather than meeting the projected increase in demand for air travel at LAX for 2015 (98 MAP), the LAX Master Plan "incorporates infrastructure bottlenecks intended to constrain capacity to levels commensurate with the 'no-build' alternative. Those constraints will cause capacity to fall short of local demand at LAX by 20 million annual passengers by 2015." Final EIS/EIR Volume 11, Comment SPC002978-30.

FAL00001-22

Comment:

Under an assumption of 89.6 MAP, aircraft, APU, and GSE emissions under this revised version of alternative D will also be similar to the emissions from those same sources as predicted for alternative C. Ground access vehicle emissions cannot be taken directly from alternative C as the ground services configurations of the two alternatives are significantly different. However, it is reasonable to assume that at least off-airport ground access emissions and parking related emissions for alternative D will scale proportionally with annual activity up to a point where congestion affects cause disproportionate impacts. Should congestion affects cause significant impacts between 78.9 MAP and 89.6 MAP, the emissions estimates calculated via an assumption of proportionality will be too low - so implementing an assumption of proportionality is actually conservative and ground access emissions may be higher. Nevertheless, based on the information available in the FEIS, an assumption of proportionality is appropriate if additional uncertainty is to be avoided.

Therefore, under Revised Alternative D, aircraft, APU, and GSE emissions are assumed to be similar to those of alternative C.1 Off-airport ground access vehicle and parking related emissions are scaled upwards by 13.6 percent, the ratio of 89.6 MAP to 78.9 MAP. Even though there is more activity on the airport, it is assumed that on-airport vehicle and stationary source emissions are identical to those estimated in the FEIS for alternative D. Similarly, alternative D construction emissions are unchanged as the airside work is similar to that proposed under alternative C and the groundside work will not change (i.e., the people mover concept is continued, but under an assumption of higher annual activity). Table 2 presents the resulting emission inventory estimates under the heading "Hybrid C/D."2

As indicated in Table 2 and Figures 1 though 6, mitigated emissions under the revised alternative emissions D shift from a state of being 4-18 percent less than emissions under the NA/NP (depending on the specific emissions species considered) to a state where they are as much as 8 percent more than emissions under the NA/NP. Only emissions of VOC continue to be lower than emissions under the NA/NP - emissions of CO, NOx, SOx, and PM-10 are all higher than those of the NA/NP. As illustrated in Figures 7 and 8, mitigated emissions under revised alternative D are equal to or higher than those of mitigated alternative C for on-airport sources and only 1-12 percent lower than mitigated alternative C for all sources (as compared to 12-22 percent lower as alternative D is analyzed in the FEIS). Thus, the sensitivity of emissions and air quality impacts to aircraft activity levels (and the presumed gate constraints) is obvious. Note also, that while the tables and figures presented below only illustrate emissions relationships in 2015, the same relations would carry through to influence interim year emission estimates and air quality.

While it is more problematic to extrapolate estimates of air quality concentrations as presented concentrations in the FEIR/FEIS to revised alternative D since such impacts depend on both the magnitude and location of emission releases, some observations are possible. First, as presented in the FEIS, alternative C emissions lead to interim year exceedances of the NAAQS for NO2 and PM-10. Moreover, these exceedances are over 150 percent of the NAAQS. Therefore, since on-airport emissions under Revised Alternative D are higher than those of alternative C and total emissions are only modestly lower, it is almost certain that revised alternative D would also demonstrate exceedances of these same NAAQS. Alternative C also demonstrates interim year CO concentrations that are within about 5 percent of the NAAQS, so it is likely that revised alternative D, with higher on-airport emissions, could also exceed the CO NAAQS during interim years. Upon buildout in 2015, the FEIS shows that alternative C meets the NAAQS for all emission species, but is within about 5 percent of the NAAQS for NO2. Thus, revised alternative D, with higher on-airport emissions than alternative C could result in exceedances of the NO2 NAAQS.3 Finally, alternative C, alternative D, and revised alternative D all continue to violate the CAAQS for PM-10, but these violations are considerably more substantial for alternative C and revised alternative D.

1 It should be noted that for this analysis, aircraft VOC emissions for alternative C differ from those presented in the FEIS and associated documents by approximately 9 percent since the FEIR/FEIS failed to covert EDMS HC estimates to VOC. The FEIS did implement this conversion for both the NA/NP and alternative D, but HC estimates for alternatives A, B, and C were not converted before the analytical focus of the FEIR/FEIS shifted to alternative D. To convert the emission estimates for this analysis, the average of the conversion factors used in the FEIS for the NA/NP (9.09 percent) and alternative D (9.03 percent) was utilized.

2 This alternative is also referred to as the "Revised Alt. D" alternative in the charts and narrative that follow.

3 Note that all of these assessments do not consider the potential emissions and air quality impacts of the other estimation issues raised in this letter. To the extent that those issues increase emissions and air quality concentrations, they will carry over to further exacerbate the potential implications discussed in this section that result solely from the underestimation of airport activity.

Table 2: Please see original letter for table.

Figure 1: Please see original letter for figure.

Figure 2: Please see original letter for figure.

Figure 3: Please see original letter for figure.

Figure 4: Please see original letter for figure.

Figure 5: Please see original letter for figure.

Figure 6: Please see original letter for figure.

Figure 7: Please see original letter for figure.

Figure 8: Please see original letter for figure.

Response:

Comment noted. Based on the false premise that the Final EIS understates Alternative D's capacity, the comment sets forth a new hypothetical alternative and purports to analyze the air quality impacts flowing from that scenario. FAA has not reviewed the results indicated in the hypothetical analysis for accuracy nor the methodology used to reach the conclusions in the comment. This scenario is hypothetical and speculative, and does not require a response under NEPA.

Operational emission estimates of VOC (based on HC estimates) for all alternatives are provided in Attachment 4 of Appendix F-B of the Final EIS. Operational emission estimates for all other criteria pollutants for all alternatives are provided in Attachment 7 of Appendix F-B of the Final EIS.

The FAA acknowledges that the Final EIS presents emissions of VOC for aircraft in the Alternative D and No Action/No Project Alternative scenarios and emissions of HC for aircraft in the Alternative A, B, and C scenarios. Since the factor to convert HC to VOC for turbofan aircraft is 1.0947 and the factor for turboprop aircraft is 1.0631, and since VOC emissions were presented for all other sources, the use of HC for aircraft in Alternatives A, B, and C result in a difference for total VOC emissions for each of these alternatives of less than 8 percent. Even considering this difference, the relative ranking of alternatives would remain unchanged if the aircraft HC emissions are converted to VOC (Alternative D VOC emissions would continue to be lower than VOC emissions for Alternatives A, B, and C, which would, in turn, continue to be lower than the No Action/No Project Alternative VOC emissions). Finally, the HC emissions for Alternatives A, B, and C are not used in any dispersion modeling that was conducted for the NEPA analysis, nor in the Final General Conformity Determination. Therefore, the use of HC values instead of VOC values for Alternatives A, B, and C does not change any conclusions presented in the Final EIS.

Please see Response to Comment FAL00003-2 regarding airport capacity, and Topical Response TR-GEN-3 in Part II-Volume 1 of the Final EIS regarding actual versus projected activity levels.

FAL00001-23

Comment:

Clearly, the reliability of the assumed design constraints is the key factor in determining the significance of the FEIS-estimated air quality impacts. For alternatives A, B, and C, runway capacity is the design constraint. The NA/NP is constrained by landside access limitations. Thus, all four of these alternatives

are constrained either by the ability of aircraft or passengers to access the airport. Conversely, alternative D is constrained by neither of these market forces. Instead, alternative D actually increases the ability of both airlines and passengers to access the airport, but places a structural design constraint between supply and demand. Such a constraint can only function as designed if it represents a true barrier that cannot be compromised through operational changes. There is no such assurance in the FEIS. Moreover, natural market forces provide the pressure required to "breach" the constraint. Air carriers will recognize the unsatisfied passenger demand available under alternative D and attempt to improve operational efficiency to tap the market. If efficiency improvements can be made for the given number of aircraft gates and gate configurations, pent-up demand is available to reward that improvement. In effect, there is a design incentive to improve efficiency (and increase emissions) under alternative D that does not exist under the NA/NP.

Response:

Please see Responses to Comments FAL00003-2 and FAL00001-21 regarding capacity issues raised in this comment.

FAL00001-24

Comment:

While neither LAWA nor the FAA has the authority to physically limit the number of aircraft or passengers that access LAX, they do have the authority and the requirement to develop mitigation measures to offset emissions and air quality impacts. Therefore, given the FEIS reliance on an untested and singular "bottleneck" to restrict emissions and air quality impacts to levels required under state and federal rules, it is only reasonable to support that reliance with assurances that those thresholds will not be breached. Anything less is tantamount to rewarding the underestimation of airport activity, an underestimation that is more critical to the potential approval of alternative D than any mitigation measure currently proposed. One method to accomplish this safeguard would be through the imposition of contingency mitigation measures that would take effect automatically and immediately at any point when actual activity levels exceed the assumptions used to justify implementation of the alternative. While this approach would still not satisfy the obligation to utilize reasonable planning assumptions, it would at least place the airport authority and neighboring communities in equivalent risk positions, whereas alternative D as currently designed places all associated risk on the communities alone. Without question, the reliability of future airport activity estimates is the key to assessing the propriety of the FEIS and the FEIS does nothing to support the efficacy of the assumed gate constraints for Alternative D.

Response:

Comment noted. Please see Response to Comment FAL00003-2 regarding capacity issues, the reasonableness of the planning assumptions used in the Final EIS, and other Master Plan issues raised in this comment.

The commentor expresses concern that the forecasts for Alternative D are incorrect and that the design constraints will not function as anticipated. The commentor states that contingency measures should be in place in the event that "actual activity levels exceed the assumptions used to justify implementation of the alternative." It should be noted that in approving Alternative D, the Los Angeles City Council adopted the LAX Specific Plan. In doing so, the City Council indicated its commitment to the design plan of Alternative D and the capacity forecasts of Alternative D. This is demonstrated by numerous elements of the LAX Specific Plan, which requires annual monitoring of passenger and cargo activity levels at LAX to continually validate that Alternative D will function as anticipated. Furthermore, prior to implementation of individual project components of Alternative D, additional study at the local level is required by the LAX Specific Plan. Finally, although FAA and LAWA do not anticipate this to occur, should the annual monitoring of activity levels suggest that activity levels may exceed the forecast levels, the LAX Specific Plan requires a Specific Plan Amendment Study (see the LAX Specific Plan regarding the requirements of the Specific Plan Amendment Study). Each of these elements of the LAX Specific Plan presents the local jurisdiction with an opportunity to respond to evolving conditions at the airport.

FAL00001-25

Comment:

Finally, it is important to note that the California Air Resources Board has also questioned the derivation of the airport activity constraints for alternative D (see issue #3 in a March 3, 2003 letter to the FAA that is included as Attachment A-1D to the FCD) and specifically requested that FAA provide an explanation of what steps would be taken to ensure that the assumed levels of activity were not exceeded. The record does not reveal what, if any, actions the FAA took in response to this inquiry.

Response:

Please see Response to Comment FAL00003-2 regarding capacity and other Master Plan issues raised in this comment.

The commentor is correct that, in its review comments on the draft general conformity protocol, as noted in Attachment A-1D to Appendix A of the Final General Conformity Determination, the California Air Resources Board (CARB) asked FAA what would ensure that the assumed level of activity would not be exceeded. The commentor is incorrect that the record does not reveal how FAA responded to this comment from CARB. Attachment A-2A to Appendix A of the Final General Conformity Determination contains details of a presentation made by FAA to CARB on October 14, 2003, providing its responses to CARB's comments on the draft general conformity protocol. This presentation reveals that FAA responded to CARB's comment regarding the assumed level of activity by adding discussion of planning assumptions and constraints to Section 4.1 of the protocol. Section 3.1 of the Final General Conformity Determination expanded on the discussion of planning assumptions and constraints from the protocol, clearly noting that the activity level will be constrained by airside gate access for aircraft (a physical constraint). Section 3.1 of the Final General Conformity Determination also notes that the 2004 RTP indicates that LAX is expected to reach a passenger demand level of 78 MAP in 2015, which prediction is generally consistent with the market forecasts developed by the LAX Master Plan team to support Alternative D in 2015.

FAL00001-26

Comment:

Additional Issues in FEIS

While the overall sensitivity of FEIS and FCD conclusions to airport activity estimates renders the accuracy of those estimates of primary importance in assessing FEIS and FCD conclusions, there continue to be a number of other issues that influence the emissions and air quality impacts of either or both of the NA/NP alternative and alternative D. A discussion of each of these issues follows.

Response:

Comment noted. Please see Responses to Comments below.

FAL00001-27

Comment:

8-Hour Ozone and PM-2.5 NAAQS: Portions of the Los Angeles area that include LAX were classified as federal nonattainment areas for the 8-hour ozone NAAQS on April 30, 2004 (69FR23857, effective June 15, 2004) and PM-2.5 NAAQS on January 5, 2005 (70FR00943, effective April 5, 2005). While there are currently no official State Implementation Plans for either 8-hour ozone or PM-2.5 in the Los Angeles area (the state has three years from designation to develop an attainment SIP), the U.S. Environmental Protection Agency (EPA) has already amended federal transportation conformity requirements to include provisions for both 8-hour ozone and PM-2.5 (published July 1, 2004, 69FR40004, effective August 2, 2004). Under the revised transportation conformity requirements, EPA provides a one year grace period (as required under the federal Clean Air Act for newly designated nonattainment areas) for affected areas to incorporate 8-hour ozone and PM-2.5 into their conformity demonstrations. No similar revisions have yet been implemented for federal general conformity

requirements, which are the specific requirements that govern the LAX conformity determination, but such revisions are undoubtedly forthcoming.

Response:

At the time of this writing, and consistent with the information included in the comment, the general conformity rule (40 CFR 93 Subpart B) has not been revised to address either the 8-hour ozone or the PM2.5 national ambient air quality standards. USEPA made plain in its Final Rule to Implement the 8-Hour Ozone National Ambient Air Quality Standard (69 Fed. Reg. 23591) its understanding that the Clean Air Act does not require the application of the conformity rule until one year after designation of a nonattainment area. Therefore, a general conformity evaluation for either the 8-hour ozone or the PM2.5 national ambient air quality standards is not required for the proposed action. If the general conformity determination for Alternative D lapses, or if the conforming program for Alternative D is changed in the future such that there is an increase in the total direct and indirect emissions above the de minimis threshold levels, the FAA would be required to prepare a new general conformity determination that would be required to address, at that time, the 8-hour ozone or the PM2.5 national ambient air quality standards.

FAL00001-28

Comment:

Therefore, while it is clear that no specific regulatory requirements yet exist for the inclusion of 8-hour ozone and PM-2.5 in the LAX Master Plan amendment process, such requirements will be in place for future plan amendments and it would be appropriate, albeit not mandatory, for the project authority and the FAA to consider the impacts of the proposed improvements of these pollutants. In fact, in a letter dated March 3, 2003, the California Air Resources Board recommended just such consideration (see issue #16 in a March 3, 2003 letter to the FAA that is included as Attachment A-1D to the FCD). The FEIS is very clear in stating that the demonstration of compliance with PM-10 standards is being viewed as a surrogate for demonstrating compliance with PM-2.5 standards (FEIS page 4-656) and indicates that the South Coast Air Quality Management District (SCAQMD) has confirmed their agreement with this approach. However, one cannot conclude that PM-10 impacts are equivalent or proportional to PM-2.5 impacts. This is due to the fact that virtually l00 percent of combustion related particulate is PM-2.5. Therefore, while the numerical stringency of PM-2.5 standards is increased relative to PM-10, associated emissions do not decrease proportionally.

Ambient PM-2.5 concentrations due to combustion sources (i.e., aircraft, vehicles, etc.) will be similar in magnitude to combustion related PM-10. In 2015, the FEIS is showing, for alternative D, a 24-hour PM-10 concentration of 65 µg/m3 (micrograms per meter cubed) against a PM-10 NAAQS of 150 µg/m3, and an annual average PM-10 concentration of 35 µg/m3 against a PM-10 NAAQS of 50 µg/m3. For PM-2.5, the corresponding NAAQS are 65 µg/m3 (24-hour) and 15 µg/m3 (annual), so it is very possible that the airport would have difficulty demonstrating compliance with the PM-2.5 standard. While there is insufficient data in the FEIS to make a similar assessment for 8-hour ozone, it likely that the focus on VOC and NOx emissions as surrogates for assessing ozone impacts would result in little, if any, change in ozone-related analysis.

Response:

The commentor makes three basic assertions in this comment: (1) 8-hour ozone concentrations should have been modeled, instead of relying on VOC and NOX emissions as surrogates, (2) PM2.5 concentrations should have been modeled, and (3) if modeled, the PM2.5 concentrations would likely exceed the National Ambient Air Quality Standard (NAAQS).

With regard to items (1) and (2) above, the commentor duly noted that analysis of 8-hour ozone and PM2.5 impacts are not mandatory at this time. Prior to completing the Draft General Conformity Determination, the CARB was provided with preliminary findings of the analysis on October 14, 2003, and solicited for comments (see Appendix A-2a, Final Clean Air Act General Conformity Determination, of Volume A of the Final EIS). In addition, CARB also had the same opportunity as the general public to comment on the Draft General Conformity Determination when it was published in January 2004. CARB chose not to provide comments on the Draft General Conformity Determination during the public comment period, but did provide information to FAA on July 23, 2004, regarding aircraft emission budgets in the SIP.

SCAQMD was included in the development of the Final EIS modeling protocol (see Attachment A of Technical Report 4, Air Quality Technical Report) as well as the Protocol for General Conformity Evaluation. In addition, SCAQMD was contacted on December 17, 2003, prior to completion of the Final EIS or the Draft General Conformity Determination to determine if they were expecting an analysis of PM2.5 in the evaluation. SCAQMD confirmed that it would be premature to fully analyze PM2.5 since the SCAQMD has not yet developed significance thresholds or methodology guidance regarding PM2.5 analysis. In addition, background concentrations of PM2.5 in the vicinity of the airport are not currently available. Lacking specific regulatory guidance regarding PM2.5 analysis and representative background concentrations, preparing emissions estimates or modeling concentrations of PM2.5 would have produced results with no consistent context in which to evaluate their significance. Thus, FAA and LAWA were hampered in their ability to produce meaningful emissions estimates or concentrations modeling for PM2.5. During development of the Final EIS modeling protocol, SCAQMD had stated that the airport should not conduct ozone modeling, since ozone is a regional photochemical pollutant and modeling of a single source would not provide meaningful results. Therefore, based on coordination with CARB and SCAQMD, 8-hour ozone and PM2.5 analyses were not conducted for the Final EIS.

Regarding item (3), approximately 90 percent of the airport's contribution to the peak PM10 concentrations noted by the commentor are caused by paved road fugitive dust emissions. The PM10 emissions from fugitive dust are significantly higher than PM2.5 emissions from fugitive dust (approximately a factor of four times higher based on the USEPA's AP-42 Compilation of Air Pollutant Emission Factors). It should also be noted that, for the predicted PM10 concentrations cited by the commentor, the future background concentrations represent a significant portion of the impact (43 of the 65 micrograms per cubic meter for the 24-hour average value and 24 of the 35 micrograms per cubic meter for the annual average value). Therefore the contributions from all LAX-related sources to the maximum predicted PM10 concentrations represent approximately one-third of the total (22 of the 65 micrograms per cubic meter for the 24-hour average value and 11 of the 35 micrograms per cubic meter for the annual average value). This suggests that non-fugitive dust sources (e.g., combustion sources) contribute approximately 2 micrograms per cubic meter for the 24-hour average value and 1 microgram per cubic meter for the annual average value. While there currently exists no representative background data for PM2.5 in the vicinity of LAX, available data collected by SCAQMD for other locations in the South Coast Air Basin clearly suggest that PM2.5 ambient concentrations are less than PM10 ambient concentrations. Therefore, it is just as likely that PM2.5 concentrations in the vicinity of the airport will be better than the PM2.5 NAAQS.

Please also see Response to Comment FAL00001-27 regarding PM2.5.

FAL00001-29

Comment:

Issues Common to FEIS and Prior Environmental Documents

Significant Uncertainty Remains in Estimated Future Background Concentrations: As was the case with previous EIR/EIS documents, the FEIS continues to rely on large assumed reductions in ambient background concentrations between 2000 and 2015 to minimize predicted air quality concentration impacts relative to the federal and state AAQS. In effect, emissions in the airport environs are being allowed to increase within the constraints of applicable AAQS through emissions decreases expected to occur offsite as reflected in reduced ambient baseline concentrations. While there is nothing inherently wrong with such reliance providing offsite emission reductions can be reasonably expected to affect background concentrations in the manner presumed, it is not possible to adequately determine this likelihood from either the discussion or data included in the FEIS, or its predecessor documents.

The importance of this cannot be overstated. Regardless of the accuracy (and precision) of onsite emission estimates and associated air quality modeling, the overall air quality impact of those estimates depends equally on the accuracy of the future background concentrations. If background concentrations are underestimated, air quality impacts will be equally underestimated. In effect, the reliability of the air quality analysis conducted for the FEIS depends equally an the accuracy of the very detailed onsite emissions and air quality analysis and the very "generic" background emissions and air quality analysis. Support demonstrating the reliability of the latter continues to be lacking.

The emissions rollback method employed in both the FEIR and FEIS is a generally recognized method for estimating future background concentrations. However, the applicability of the general method to conditions at LAX must be adequately investigated and validated to provide sufficient assurance of

reliability. This investigation and assurance are deficient in the FEIR/FEIS. Without undertaking the appropriate demonstration analysis for the project authority, it is only possible to delineate the type of questions that it would be appropriate to investigate and resolve. Without technically sound answers to these and other questions that might arise during the course of the analysis, it is impossible to place a high degree of certainty in the future background concentration estimates and, by extension, estimated future ambient concentrations.

For example, can concentrations around LAX be expected to decline proportionally with total emission reductions in the South Coast Air Basin? This is precisely the assumption made in the FEIR/FEIS. While this is a generally utilized assumption for estimating future concentrations, there are features associated with LAX that render the unadjusted application of this method questionable. Foremost is the fact that LAX lies within a coastal environment that limits emission reductions to the west. Since a significant portion of air movement occurs in both easterly and westerly directions, it might well be expected that regional emission reductions will have a larger impact during easterly wind conditions (since the bulk of regional emission reductions will occur to the east of LAX). How westerly wind background concentrations are affected is unclear.

The FEIR implies that the maximum background concentrations occur during periods of easterly winds and this is supported by data presented in Table 2 of Attachment Y of the Air Quality Technical Report (Technical Report 4). This lends support to the premise that the regional emissions rollback methodology might be appropriate. However, Table 2 also shows that the short term (i.e., one hour) maximum background concentrations for NO2 and SO2 are similar during periods of westerly wind. The maximum NO2 concentration is 0.14 ppm during westerly winds, versus 0.15 ppm during easterly winds. Similarly, the maximum SO2 concentration is 0.018 ppm during westerly winds, versus 0.021 ppm during easterly winds. In short, the westerly wind background for these two pollutants is 85-95 percent of the easterly wind background. Unless background conditions reflect a well mixed composite of regional emissions, and this is increasingly unlikely as one moves away from the centroid of regional emissions, it seems unlikely that background concentrations will respond proportionally to regional emission reductions during periods of both easterly and westerly winds. This uncertainty reaches a peak at regional border sites such as LAX.

An analogous situation exists for PM-10, where the maximum background concentration was measured during a 24 hour period in which winds were predominately from the west (15 of 24 hours according to Attachment Y of the Air Quality Technical Report (Technical Report 4) of the FEIR/FEIS). It is not clear that such a concentration be expected, as was assumed in the FEIR/FEIS, to decline proportionally with PM-10 concentrations in central Los Angeles. Perhaps under well mixed conditions, but an appropriate demonstration needs to be made for a coastal area such as LAX.

Data required for the appropriate demonstrations should exist. The SCAQMD monitor used to estimate longer term background concentrations (the monitor designated as station 094, Southwest Coastal LA County by SCAQMD) should be capable of serving as a long term indicator of the proportionality of response between measured concentrations and regional emission reductions during periods of varying wind direction. If this response is truly regional in nature and independent of wind direction (even in the coastal environment associated with LAX), then changes in wind direction-specific concentrations over time will reflect the same degree of proportionality with emission reductions. If not, an appropriate adjustment to the assumed background concentration estimation methodology is required.4

Of additional concern is the differential treatment afforded PM-10 in both the FEIR and FEIS. Whereas all other pollutant backgrounds are set in accordance with the ratio of emissions inventory estimates for 2015 to base year emissions inventory estimates, the PM-10 background is set according to the ratio of modeled 2015 to base year PM-10 concentrations in central Los Angeles. The only explanation for this differential treatment in the FEIR/FEIS is the single assertion that "this method allows for the inclusion of secondary PM-10 formation." Without further support, it is difficult to assess the propriety of this approach. It is clear, however, that SCAQMD PM-10 emissions inventories reflect an approximate 11 percent increase between 1997 and 2015, while FEIR/FEIS background concentrations indicate an approximate 48 percent decrease during this same period (24-hour background concentrations of 82 µg/m3 in 1996 versus 43 µg/m3 in 2015). Secondary PM cannot account for this level of difference. As potential support, the expected changes in secondary PM precursor emissions, currently lacking in the FEIR/FEIS, should be provided along with additional supporting material as an integral component of the FEIS. Moreover, given the fact that continuing exceedances of the 24-hour PM-10 AAQS represent the major AAQS issue associated with the estimated FEIR/FEIS ambient concentrations in 2015, it is most appropriate to ensure proper characterization of the background PM-10 concentration since any underestimate will further exacerbate AAQS compliance.

The overall sensitivity of the air quality analyses to the background concentration reduction is perhaps best recognized by examining forecasted 2015 pollutant concentrations. Despite an assumed 50 percent reduction in the background concentration of NO2 between 1996 and 2015, onsite NO2 concentrations are forecasted to increase. Similarly, while the background 24-hour concentration of PM-10 is assumed to decrease by almost 50 percent between 1996 and 2015, overall onsite PM-10 declines by only about 20 percent. Clearly, these reduced background concentrations are allowing significant emissions growth to occur from onsite sources and, as a result, the integrity of the demonstrated AAQS compliance status hinges on the proper demonstration of background concentration propriety, a demonstration that has not been performed to date.

In summary, substantial reductions in estimated ambient baseline concentrations continue to reflect a major mechanism by which the FEIS demonstrates compliance with AAQS. As a result, it is imperative that a sufficient level of effort be devoted to the justification of the estimated values. The environmental documents devote literally hundreds, if not thousands, of pages of support to the onsite emissions inventory and dispersion modeling assumptions, but comparatively little in analytical support for the assumed background concentration reductions. The FEIR/FEIS does include a robust set of monitoring data for the onsite air quality monitor that was operated in 1997 through early 1998, but additional analysis supporting the propriety of the emissions rollback procedure and the central Los Angeles PM-10 modeling estimates to the situation at LAX is entirely lacking. Without such support, it is simply not possible to rely on the presented future ambient concentrations.

4 At the risk of introducing a concern that might detract from the wider issue being discussed, it is also worth noting that the SO2 one-hour data published by SCAQMD for station 094 differs by an order of magnitude from that published in the FEIR/FEIS. For 2000, the FEIR/FEIS indicates a one-hour background SO2 concentration of 0.017 ppm, while data published by SCAQMD indicates 0.17 ppm. The 0.017 ppm concentration must be inaccurate since it is actually lower than the FEIR/FEIS 24-hour concentration of 0.020 ppm, which is a physical impossibility. In fact, the lowest annual one-hour maximum SO2 concentration published by SCAQMD for station 094 between 1994 and 2002 is 0.03 ppm. Data in Attachment Y of the Air Quality Technical Report (Technical Report 4) of the FEIR/FEIS supports the reported maximum one-hour onsite monitoring station concentration of 0.021 ppm, but it is not clear why this is so much lower than similar data measured at station 094 (although the measured annual maximum for station 094 during the period the onsite monitoring station was in operation was 0.03 ppm, the lowest measured annual maximum during the 1994-2001 period).

Response:

The methods for estimating future background ambient concentrations were developed in coordination with SCAQMD, the local agency with expertise in air quality analysis. Preparation of the Air Quality Modeling Protocol for Criteria Pollutants (Attachment A of Technical Report 4 of the Final EIS) included three meetings with the SCAQMD staff in which the District's comments on the protocol were solicited and incorporated into the protocol. The method and data used to estimate the future background concentrations were specifically addressed in these discussions, and SCAQMD concurred with the final approach. Thus, after consulting with State representatives with particular knowledge of conditions in the vicinity of LAX, the linear rollback method was used for the gaseous pollutants, as described in the protocol. The linear rollback method applied in the protocol has been used by the SCAQMD in both the 1997 AQMP, which includes the South Coast Air Basin emission budgets of the currently approved SIP, and the 2003 AQMP. With respect to estimating future background concentrations for PM10, FAA and LAWA consulted with SCAQMD regarding the method to be used for this particular pollutant, and FAA used the method recommended by the SCAQMD. Thus, the "differential treatment" identified in the comment represents nothing more than the FAA's decision to adopt a method recommended by the local agency with expertise in air quality in the South Coast Air Basin. Therefore, the method and data used to estimate future background concentrations reflect accepted methodology and are reasonable and appropriate for the Final EIS air quality impact analysis.

While the commentor is correct that SCAQMD has predicted an increase in total PM10 emissions in the South Coast Air Basin between 1997 and 2015, the commentor incorrectly implies that PM10 concentrations will not undergo a significant decrease during the same period. As noted in the aforementioned Air Quality Modeling Protocol for Criteria Pollutants, the future year background concentrations of PM10 at LAX were estimated from the ratio of future year to existing PM10 concentrations (not emissions) for downtown Los Angeles multiplied by the current PM10 concentrations at the airport, where the future year concentrations for downtown Los Angeles were the concentrations predicted by SCAQMD with controls.

The commentor asks if the concentrations around LAX can be expected to decline proportionally with total emission reductions in the South Coast Air Basin. The commentor notes that because the peak background concentrations occur during periods of easterly winds, the method used might be appropriate, then raises a concern about the fact that the concentrations under westerly winds reach values that are 85 to 95 percent of the peak values under easterly winds. Since there are very few emission sources west of the airport (Pershing Drive and Vista del Mar are the two streets west of the runways before Dockweiler Beach), elevated concentrations under westerly winds are most likely due to pollution that had blown out to sea under easterly winds and is returning when the wind shifted around to the west again. In that case, the reduction in regional emissions will have the effect of lowering ambient concentrations regardless of the wind direction.

The commentor is correct that the one-hour maximum SO2 concentration for 2000, shown as 0.017 ppm in Table F4.6-5 of the Final EIS, is in error. The correct value, as pointed out by the commentor, is 0.17 ppm; this value is correctly provided in Table S26 of Appendix S-E to the Final EIS. However, this has no effect on the predicted maximum one-hour SO2 concentration for Alternative D, since the future background concentrations are based on linear rollback of the on-site monitored SO2 concentrations as presented in the Air Quality Modeling Protocol for Criteria Pollutants (Attachment A of Technical Report 4 of the Final EIS) and discussed with SCAQMD as noted above.

FAL00001-30

Comment:

Reverse Thrust Emissions from Aircraft are Not Considered: The air quality analysis continues to be deficient because it does not address reverse thrust emissions from aircraft. At various times, LAWA has declared that: (1) emission factors and regulatory guidance for considering reverse thrust operations are not available, (2) emissions from reverse thrust are insignificant, (3) because runway length at LAX is sufficient, reverse thrust operations should be minimal, and (4) the methodology used to estimate the times-in-mode for approach, taxi, takeoff and climbout modes is sufficiently conservative to inherently account for any reverse thrust emissions. To this list, the FEIS adds the argument that because aircraft are assumed to carry their maximum allowable weight on takeoff, reverse thrust emissions are inherently considered.

Each of the arguments offered in support of the omission of reverse thrust emissions is inadequate, and in many cases is pure speculation. The FEIS offers no compelling evidence that reverse thrust emissions are inherently considered. Times-in-mode have been specifically tailored to reflect expected operational conditions at LAX, exclusive of reverse thrust operations. The argument that runway length is sufficient to minimize reverse thrust operations is equally spurious. Aircraft routinely (at LAX and elsewhere) utilize reverse thrust to minimize stopping distance and access the first safe runway turnoff. This both minimizes aircraft time on an active runway and reduces brake maintenance costs. Some airports and airlines restrict reverse thrust operations on longer runways, but there is no evidence that this is the case at LAX. Independent studies in the late 1990s showed reverse thrust operations to be common at LAX.5

Although the FEIS is correct in stating that there is no official guidance or emission factors for addressing reverse thrust emissions, common practice has existing since at least the mid 1990s. Takeoff or climbout emission factors are generally recognized to be consistent with those of reverse thrust operations as all three are high thrust modes. In fact, the most common practice is simply to add reverse thrust time to takeoff time and allow the EDMS to estimate combined takeoff and reverse thrust emissions simultaneously. This is not a novel approach and can easily be incorporated into the FEIS analysis. In short, the argument that guidance methods do not exist is irrelevant. What is important is that air quality estimates be as accurate as data allows, and there is sufficient data to estimate emissions from reverse thrust operations.

Although the time-in-mode for reverse thrust is small, generally on the order of 15-20 seconds, such high thrust operational modes produce very high NOx per unit time relative to other operating modes. Based on the data presented in the FEIR/FEIS, a reverse thrust mode time of 15 seconds would increase the overall aircraft NOx inventory by about 10 percent.

5 See, for example, Analysis of Techniques to Reduce Air Emissions at Airports, Energy and Environmental Analysis, September 1997.

Response:

While conducting the air quality impact analysis for the Final EIS, the FAA provided to the airport, on May 22, 2002, information regarding default assumptions used in EDMS for aircraft takeoff weight. The default takeoff weight is the maximum weight capacity of the airframe. Using the maximum takeoff weight generates the highest time in mode for takeoff and climbout, and the highest emissions for these operating modes. As FAA noted at that time, using the default assumption takeoff weight in EDMS may be overly conservative, since not every aircraft operating out of LAX will be loaded to its maximum takeoff capacity. However, the default takeoff weight was used, and its use results in a takeoff/climbout time-in-mode that can also account for emissions from reverse thrust due to the conservative nature of the default assumption. In other words, using a realistic weight factor to determine takeoff/climbout time-in-mode, plus additional time in takeoff/climbout to represent reverse thrust (as suggested in the comment) would likely produce results consistent with the results obtained here using the default EDMS takeoff/climbout weight assumptions. In summary, as a practical matter, assuming that all aircraft depart LAX at the maximum recorded takeoff weight, as was done for the general conformity evaluation, accounts for emissions approximately equal to those from reverse thrust, and does so in a manner consistent with the general approach suggested by the commentor.

Please see Response to El Segundo Comment III.B.1.b (page C-11 (second paragraph)) in Appendix C of Appendix A-2a, Final Clean Air Act General Conformity Determination, of Volume A of the Final EIS regarding reverse thrust emissions, for more specific information.

FAL00001-31

Comment:

Ground Support Equipment (GSE) Populations: The population and activity of aircraft ground support equipment (GSE) at LAX can be estimated with a high degree of certainty by simply surveying current airport operators. Despite this, the FEIS continues to rely on the FAA's EDMS model to estimate these parameters. This would be acceptable if there was some demonstration that the estimates produced by EDMS were consistent with actual population and activity statistics, but no such demonstration is provided. In their response to previous comments, LAWA states that either approach is acceptable under FAA guidelines and also claims, without providing supporting evidence, that the approach employed is "believed" to produce a conservative estimate. It is exactly such support that the verification from suggested comparison to ground counts is intended to provide.

The "acceptability" of the suggested ground count method versus that employed in the FEIS is not the critical issue. The accurate depiction of LAX GSE operations (and emissions) is the issue of importance and that can easily be demonstrated by providing a comparison of actual GSE populations and activity to those assumed in the EDMS modeling. The fact that the FAA has added the option of quantifying GSE emissions through such an airport "census" approach is clear evidence that the agency also supports the maximum possible use of local data. Only through a ground truth validation of the EDMS assumptions can the air quality impacts of LAX GSE be accepted with confidence.

Response:

The method used in the Final EIS to estimate GSE emissions is one of two possible approaches available in the EDMS model. Since the original protocol for the air quality impact analysis (see Attachment A of Technical Report 4, Air Quality Technical Report) was developed before the GSE population method was available, the analysis uses the method that calculates GSE emissions based on the number of landing and takeoff operations (LTOs) that occur. This approach is acceptable to the FAA and has been the approach used throughout the development of the Final EIS. This approach has been used extensively in previous airport NEPA air quality impact analyses. Final NEPA documents for George Bush Houston Intercontinental Airport (July 2000), Lambert - St. Louis International Airport (December 1997), Oakland International Airport (December 2000), Phoenix Sky Harbor International Airport (November 1993), and Seattle - Tacoma International Airport (February 1996) are a few examples of where this approach has been used before. The fact that two methods are available means nothing more or less than that one of two equally acceptable methods can be chosen. The existence of one method does nothing to suggest the lack of credibility of the other. Finally, NEPA does not require that environmental analyses be reproduced every time a new method of analysis becomes available. The NEPA process would never be complete were this true.

On May 10, 2004, the California Air Resources Board provided the FAA with estimates of GSE emissions in 2005 from all airports in Los Angeles County. This information is included in Appendix C, (Attachment C-6B, page 6) of Appendix A-2a, Final Clean Air Act General Conformity Determination, of

Volume A of the Final EIS. On page 9 of Attachment C-6B, a comparison between the GSE NOX emissions for LAX from the General Conformity Determination and those emissions estimated from the CARB data indicate reasonable correlation (1,222 tpy versus 1,229 tpy, a variation of less than 1 percent) in 2005. Therefore, the GSE emission estimates using the LTO-based method are the result of accepted methodology and produce reasonable and credible results.

FAL00001-32

Comment:

Use of Electric GSE to Fully Mitigate GSE Emission by 2015: The primary emissions mitigation measure employed under alternative D is the conversion of 100 percent of airport GSE to electric (or very low emission) power by 2015. While this is a laudable goal and should be pursued with vigor, the likelihood that it will be accomplished in the suggested timeframe is minimal at best. In 2002, the California Air Resources Board entered into a Memorandum of Understanding (MOU) with various participating airlines to reduce emissions of GSE in the South Coast Air Basin. Under this MOU, airlines have agreed to meet specified fleet average emissions levels by 2010 as well as introduce zero emission GSE into the existing GSE fleet to attain an aggregate fleet penetration rate of 30 percent by that same year. Those goals also demonstrate that a level of zero (or near zero) GSE emissions are unlikely to be attained by 2015. In seven years between 2003 and 2010, the MOU will result in the conversion of approximately 30 percent of the GSE fleet to zero emission status. The alternative D mitigation measure will require the conversion of the remaining 70 percent of equipment to zero emission status in five years. The likelihood of success on that time schedule is obviously very small. It is therefore important that the FEIS indicate specific alternative (and quantifiable) mitigation measures that will be implemented in the event that the GSE conversion measure does not proceed as planned.

It is also important to note that the GSE electrification program could be carried out to the benefit of LAX patrons and neighbors regardless of the fate of alternative D, or any other build alternative. If as stated in the FEIR/FEIS, "LAWA continues its commitment to air quality improvement programs for activities over which it has direct control," then this program should be implemented and carried through to completion under any of the LAX alternatives, including the no action alternative. There is simply no activity upon which the electrification of GSE is dependent that is tied to any of the build actions. This measure cannot, therefore, be said to be a specific mitigation measure for Alternative D.

Response:

The commentor states that achieving a 100 percent zero emission GSE fleet by 2015 at LAX is not likely, and notes that under the GSE Memorandum of Understanding (MOU) only 30 percent of the fleet will be zero emission equipment by 2010. However, compliance with the MOU will yield an overall reduction of GSE NOX+HC emissions between 2003 and 2010 of 80 percent; emissions of other GSE pollutants will also be reduced. Therefore, only an additional 20 percent reduction of the baseline GSE NOx+HC emissions, beyond that associated with the MOU, will be needed between 2010 and 2015. LAWA has committed to achieving the airport emission inventory identified in the Mitigation Monitoring and Reporting Program (MMRP) and in Mitigation Measure MM-AQ-1 (LAX Master Plan Mitigation Plan for Air Quality, LAX MP-MPAQ), which includes the conversion of GSE to zero or near-zero emission equipment by 2015 under Mitigation Measure MM-AQ-4 (Operations-Related Mitigation Measure). If, at some future date, it is determined that achieving a zero emission GSE fleet by 2015 may not occur, LAWA will be required to develop and implement mitigation measures that have not been accounted for in the airport emission inventory contained in the MMRP and in MM-AQ-1. This will be achieved in response to the enforcement mechanisms that backstop the MMRP and are detailed in MM-AQ-1.

The commentor is correct in noting that the conversion of GSE to zero emission equipment is not specific to Alternative D. The GSE MOU is applicable to all commercial airports in the South Coast Air Basin, and will occur regardless of the alternative selected. Therefore, reductions associated with the GSE MOU are included in all alternatives, including the No Action/No Project Alternative. However, the GSE MOU does not require 100 percent conversion to zero emission equipment. Rather, it requires that 30 percent of the fleet that existed in 1997 be zero emission vehicles (ZEV) by 2010, and that 45 percent of "new" GSE fleet be ZEVs by 2010. In addition, the GSE fleet-average NOx+HC emissions must be 2.65 g/bhp-hr. This level of fleet-average emissions were assumed under the No Action/No Project Alternative. However, the build alternatives (Alternatives A, B, C and D) offer more opportunity and flexibility for the installation of the infrastructure needed to achieve a zero emission fleet by 2015 due to the extent of planned construction activities under the build alternatives. Finding the space necessary in an appropriate location for infrastructure under the No Action/No Project Alternative is less likely than under the build alternatives, since space to support infrastructure needed to achieve a zero

emission GSE fleet under the No Action/No Project Alternative by 2015 may not be available without very extensive construction. Therefore, the build alternatives are assumed to achieve zero emissions from GSE by 2015, while the No Action/No Project Alternative may not. While the analysis assumed that the GSE MOU is accomplished by 2010, and affects all alternatives similarly, only GSE emissions from the build alternatives (Alternatives, A, B, C, and D) are assumed to be affected by Mitigation Measure MM-AQ-4, and GSE under the No Action/No Project Alternative are conservatively assumed to still have some associated emissions in 2015.

FAL00001-33

Comment:

Incorrect Aircraft PM Emission Factors are Used in Air Quality Analyses: The FEIS continues to rely on the incorrect application of its cited methodology for estimating aircraft PM-10. The emission factors employed in the FEIS consider only the non-volatile carbon portion of emitted particulate. The reference documents for the cited PM estimation method are presented in Attachment H of the Air Quality Technical Report, Technical Report 4 of the FEIR/FEIS. The first document included in that Attachment is a June 1999 report entitled "Aircraft Engine Particulate Matter Data." On page 3-1 of that report, it is clearly stated that "The particulate emission indices plotted are directly emitted soot (non-volatile) mass, and do not consider secondary particulate formation." Yet, it is these emission indices that were used to estimate aircraft PM. It is important to note that it is not only secondary particulate that is omitted from the emission indices (as implied by the quoted report statement), but directly emitted volatile and non-carbonaceous PM mass as well. Attachment A of the June 1999 report is a March 1999 report entitled "Estimate of Particle Emission Indices as a Function of Particle Size for the LTO Cycle for Commercial Jet Engines." This is the University of Missouri report cited as a main PM reference by the FEIR/FEIS. As stated on page A-5 of the report, "Table 4 provides "first of a kind" estimates of number and mass-based EI's [emission indices] for the LTO cycle of four popular engines currently in use in the commercial fleets. The EI's are provided for both non-volatile (soot) particulates and for the total particulates for both high and low fuel sulfur contents." Cited Table 4 thus provides the means to convert non-volatile PM to total PM. It is this conversion that is lacking in the FEIS.

The data presented in Table 4 show the total PM to non-volatile PM ratio to be about 2.6 for low sulfur (about 70 ppmW) jet fuel and 14.7 for high sulfur (about 675 ppmW) jet fuel. EPA data demonstrates that U.S. jet fuel averages about 600 ppmW sulfur. As a result, the appropriate adjustment factor for the FEIS PM estimates would be about 13.2, unless specific data for operations at LAX indicate a different average fuel sulfur content. In the absence of such data, I estimate that aircraft PM emissions are underestimated by approximately a factor of 13.

Additional uncertainty arises through the assumed density of carbonaceous soot particles. This uncertainty is also discussed on page A-5 of the University of Missouri report. For the FEIS emission factors, a value of 1 gram per cubic centimeter (g/cc) was assumed, which is within the range of generally accepted values of 1-2 g/cc. However, given this range, actual PM emission rates could be twice as high as estimated in the FEIR/FEIS, and this uncertainty is in addition to the factor of 13 underestimation noted above - so that PM emissions could be underestimated by as much as a factor of 26.

Attachment 9 to the FEIS Air Quality Appendix F-B shows aircraft emissions to constitute about 2 of the estimated 65 µg/m3 24-hour average PM-10 concentration for mitigated alternative D, along with similar estimates for the no action alternative. If aircraft PM is, in fact, underestimated by a factor of 13-26, then both aircraft-related and total ambient PM concentrations will go up accordingly. If we assume proportionality between emissions and ambient concentrations, overall PM-10 concentrations might be expected to increase by 24-50 µg/m3, bringing total estimated PM-10 to 89-115 µg/m3. This would clearly exacerbate the already demonstrated noncompliance with the PM-10 CAAQS and increase the potential for violations of the PM-10 NAAQS. Given that even these levels assume the virtual elimination of GSE PM through the electrification mitigation measure, it is clear that any backsliding from full implementation of the GSE electrification program may have significant implications for AAQS compliance.

Response:

The commentor's basic statement, that the emission factors used to estimate particulate matter (PM) from aircraft engines do not account for the volatile fraction and non-carbon fraction, is incorrect. Similarly, the statement that aircraft PM emissions are underestimated by a factor of 13 is also

incorrect. The method for estimating aircraft engine PM emissions is included in Attachment H of Technical Report 4, Air Quality Technical Report.

While the method used in the Final EIS does include black carbon measurements from the University of Missouri, it also includes previous AP-42 emission factors from studies conducted on aircraft engines in the late 1960s and early 1970s as well as a theoretical estimate of a larger number of aircraft. The resulting emission factors presented in the Final EIS are weighted heavily toward the theoretical approach, which relies on the mass concentration versus smoke number curve presented on page B-1 of Attachment H in Technical Report 4. This curve is based on the mass of all compounds collected, not just carbon. Therefore, the emission factors developed using this approach do account for all collected compounds, and no adjustment to these factors is necessary. The commentor is correct that this analysis assumed a uniform density of 1 g/cc for non-volatile (soot) particles. As stated in Attachment A to Attachment H of Technical Report 4 of the Final EIS, the density of black carbon particles is unknown and represents the major uncertainty in this analysis. However, as also noted by the commentor, this value is within the generally accepted values of 1 - 2 g/cc, thus the commentor's own statements indicate that the density factor is reasonable and the purported error suggested in the comment represents an attempt to substitute the commentor's judgment for the agency's. As also stated in Attachment A to Attachment H of Technical Report 4 of the Final EIS, the magnitude of the uncertainty introduced by the density factor is a factor of two, and while a more detailed analysis of sensitivity and uncertainty could be undertaken by anyone evaluating this analysis, such a hypothetical treatment is not required by NEPA, nor in FAA's opinion would it significantly improve the decision-making process.

It should be noted that the formation of secondary particulate matter emissions is not usually accounted for in stationary source emission inventories, and secondary particulate matter emissions are difficult to assess in anything less than a regional domain (such as the entire South Coast Air Basin). The modeling experts contacted during development of the Draft General Conformity Determination (Dr. Pat Ryan, Sonoma Technology Inc.; Mr. B. Kim, SCAQMD; and Mr. T. Servin, CARB) indicated that secondary PM formation modeling for a single source would not provide meaningful results. Therefore, secondary PM formation was accounted for in the Final General Conformity Determination by scaling emissions presented in the 2003 AQMP (see Section 5.3.2 of Appendix A-2a, Final Clean Air Act General Conformity Determination, of Volume A of the Final EIS).

A joint NASA/FAA/USEPA study of aircraft PM emissions was completed in 2004. Preliminary results were presented at a workshop held in Cleveland, Ohio, November 8-10, 2004. The USEPA's preliminary results indicated that the total (volatile plus non-volatile) PM emission indices ranged from 75 mg/kg fuel burned (low thrust setting) to 250 mg/kg fuel burned (high thrust setting). These values fall in the range of values used in the Final EIS, 95 to ~600 mg/kg fuel burned. The final USEPA report on the study is expected to be completed this summer (2005).

FAL00001-34

Comment:

Gate-Based Power and Air Continues to be Assumed for All Aircraft: The assumption 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) is optimistic and, therefore, results in an underestimation of APU and/or GSE emissions. Experience at airports with fixed gate-based power and air systems, including LAX, has demonstrated that even when gate-based equipment is available, not all airlines or aircraft will utilize it consistently. The most realistic emissions estimate for APU would be based on the current usage rate of existing gate-based power and air systems at LAX. The rate is either already known or can easily be determined through a modest random survey of gate activity. An assumption of 100 percent usage certainly provides an indication of the ideal level of APU emissions, but the AAQS compliance demonstration should be based on the most likely, not the ideal, emissions level.

APU Emission Factors for PM are Not Considered: The FEIS continues to assume that PM emission factors for all APU are zero. The impact of this omission continues to be buffered by that fact that APU usage at LAX is assumed to be limited due to an assumption of 100 percent usage of gate-based power and conditioned air, but even under these ideal assumption, APU are assumed to operate for 15 minutes per LTO cycle. In response to previous comments on this issue, LAWA has stated that the operational information required to estimate APU PM emission rates is not available and concludes that

"any calculation of PM10 from APUs would be a gross speculation at best, and not representative of acceptable scientific or engineering methods or ethics."

While there is insufficient information to estimate APU PM emission rates using the approach employed in the FEIR/FEIS for aircraft PM, that does not mean that all methods are similarly restricted. Comments on both the DEIR and SEIR set forth a method that relies on regression analysis to relate aircraft PM to the inverse of NOx emissions was described. This approach results in relationship coefficients significant at the 99 percent confidence level and since APU are essentially small jet engines, can be applied without sacrificing either engineering methods or ethics, to both main aircraft engines and APU. This method and the developed coefficients have already been described in detail in previous comments on the DEIR/SEIR. Suffice it to say that the assumption of zero APU PM is both clearly an assumption and clearly incorrect. Engineering ethics dictate the development of the best possible estimate given available data and simply deferring to a "best case" emission estimate of zero is clearly not the most appropriate engineering method or ethical approach to estimating the AAQS impacts of airport operations. For what it is worth, the regression approach cited above estimates APU PM emission rates that average about 5 grams per kilogram of fuel consumed.

Response:

In summary, the commentor provided three basic statements: (1) the assumption that 100 percent of air carrier gate power and preconditioned air needs will be satisfied by gate-based electrical systems is optimistic, (2) APU PM emissions are not considered and (3) the commentor has provided a reasonable and scientifically sound and verified method for estimating PM emissions from APU.

With regard to Item (1), the assumption that all gates will have preconditioned air and power is based on a LAWA commitment and is part of the Master Plan designs (including the No Action/No Project Alternative). Even with gate power and preconditioned air, the analysis assumes that every aircraft APU will operate for 15 minutes per landing/takeoff operation (LTO) cycle, as noted by the commentor and in Section 2.2.2 of Appendix F-B, Air Quality Appendix. While the pilots have the choice of using or not using gate power and preconditioned air, many airlines are encouraging use of these systems to minimize fuel costs. Therefore, the APU emission estimates based on 15 minutes of operation per LTO cycle, which were calculated and included in the analysis, should be considered reasonable.

With regard to Item (2), a recent study conducted by the US Air Force (Gerstle, et al., 1999 - Volume 3) indicated that total PM emissions from APUs range from 0.48 to 0.72 grams per kilogram of fuel burned. These measured results are an order-of-magnitude lower than the estimate provided by the commentor. Therefore, the accuracy of the method provided by the commentor is questionable. The APU fuel flow rates are an order-of-magnitude lower than aircraft engine fuel flow rates, and the PM emissions are directly proportional to the fuel flow rate at a constant load. Therefore, the PM emissions from APUs will be negligible and have no discernable impact on ambient air quality in the vicinity of the airport.

Finally, with regard to Item (3), with the information provided in Appendix F-B, Attachment 4, and knowing that the sulfur content of the fuel used in APUs is the same as that used in aircraft engines, one can estimate APU fuel use relative to aircraft fuel use. Using the aircraft PM emissions in Appendix F-B, Attachment 7, and the ratio of APU fuel to aircraft fuel use, together with the aircraft PM concentrations in Attachment 9, the PM concentrations attributable to APUs are predicted to be less than 0.1 ug/m3 for the 24-hour average, and less than 0.05 ug/m3 for the annual average. These concentrations are negligible relative to the NAAQS. As noted in the paragraph above regarding Item (2), the method proposed by the commentor predicts APU PM emissions that are an order-of-magnitude higher than measured values. The commentor's method also relies on the same, outdated (early 1970s) aircraft PM and NOx measurements that were considered outdated for the LAX Master Plan air quality impact analysis. The research in engine design over the last 30 years has led to reduced fuel use for given thrust settings, which tends to shift PM and NOx emissions in opposite directions. It was for this reason, i.e., outdated PM data not appropriate for current or future aircraft engines, that led to the development of the methodology used in the Final EIS for estimating aircraft PM. The Final EIS methodology is considered to be more accurate than the methodology proposed by the commentor.

FAL00001-35

Comment:

Default Aircraft Engine Assignments Continue to be Utilized in Lieu of More Appropriate LAX-Specific Engine Assignments: Aircraft emissions in the FEIS continue to be based entirely on the default engine assignments of the FAA EDMS model, as opposed to engine assignments tailored to operations at LAX.

While this approach does not affect the relative emissions relationships between alternatives, it can have a significant impact on the absolute level of aircraft emissions and, therefore, on associated AAQS compliance demonstrations. In response to previous comments on this issue, LAWA claims that the use of the EDMS default engine assignments represents the most statistically probable aircraft/engine combinations in use at LAX. LAWA also cited the difficulty of engine identification for a particular aircraft and the lack of evidence that the LAX air carrier mix is inconsistent with EDMS default assumptions. All three assertions are incorrect.

The EDMS default engine reflects the "most popular" engine for an airframe based on total airframe sales. This includes all air carriers operating that airframe, regardless of the location of those operations. If, and only if, the distribution of air carrier-specific operations at LAX is similar to that for the national aircraft fleet as a whole, will the probability of encountering a particular aircraft/engine combination be similar to the EDMS default assignments. Such a comparison can be made to justify the use of the EDMS defaults, but there is no evidence presented in the FEIS that such an exercise has been undertaken. In the absence of the comparative analysis, it is statistically most likely that LAX (or any other airport) will exhibit variation about the mean EDMS distribution. It is the magnitude of this variation that will affect airport emission estimates.

The FEIR/FEIS claims that aircraft/engine tracking is difficult, and that is true. However, there are several aircraft census databases that track airframe ownership by air carrier and identify the associated characteristics of those airframes, including equipped engines. The use of such a database allows the uncertainty of the EDMS "most popular" overall engine to be refined to the level of individual air carriers. Since operations at the air carrier level of detail are known at individual airports, including LAX, this allows for a substantially increased level of certainty in determining the probability of encountering a particular aircraft/engine combination at a given airport. In short, the EDMS distribution reflects the probability across all airports, while an air carrier-specific distribution allows for distributions to be tailored to a specific airport in accordance with the relative frequency of carrier-specific operations at that airport. Only in the limited case where local airport operations are statistically similar to aggregate operations across all airports will the two distributions coincide.

An example can perhaps best illustrate the sensitivity of emissions estimates to the proper allocation of aircraft engines. While the following presented statistics are a few years old (perhaps three) and were originally generated for another project, their illustrative value is unaffected. According to the FEIR/FEIS, the Boeing 757-200 will account for nearly 18 percent (65,532 of 371,577) of LAX operations under alternative D in 2015 (from Attachment E of the S-4 Supplemental Air Quality Technical Report of the SEIR). The B757-200 is available with either Pratt & Whitney or Rolls-Royce engines. Table 3 illustrates the relative population of in-use B757-200 engines for U.S. air carriers. As indicated, the EDMS default engine, the Pratt & Whitney PW2037 is, in fact, the most prevalent engine, accounting for about 46 percent of B757-200 engines.

Table 3: Please see original letter for table.

At this point, we can make the first observation about using EDMS defaults, namely that even ignoring airport-to-airport differences, the EDMS default does not imply that the majority of aircraft possess a given engine. As illustrated, on average, more B757-200's will utilize an engine other than the PW2037. Statistically, 46 out of 100 will use the PW2037, while the remaining 54 will not. So, the probability of a B757-200 utilizing a PW2037 for operations at LAX is actually less than 50/50 on the basis of national statistics.

A statistically reliable method of addressing this situation (on a national population basis) is to use a weighted average engine. This can be accomplished either by introducing a new "composite" engine into EDMS or disaggregating the total number of B757-200 operations into multiple (properly weighted) components, each associated with a different engine. Either approach accomplishes the same goal of better tailoring aircraft emission estimates to expectations. As indicated by the differences in the emission rates included in the table above for the various engine options as well as a weighted national average engine, the effects of tailoring aircraft engine assignments can be significant, with variations for individual pollutants ranging from about -90 percent to +45 percent for this aircraft. Variations for other aircraft can be greater or lesser depending on available engine characteristics. This is why proper engine assignment, rather than simple reliance on EDMS defaults, is critical.

Despite the magnitude of the potential emissions differences, it is critical that it be understood that the data reflected in Table 3 above does not yet reflect any airport-specific population data, but instead is based on national average data. Table 4 shows how the B757-200 engine populations break out by major U.S. air carrier. It is this data that is critical in tailoring an airport assessment to local conditions.

While the FEIR/FEIS is correct in that local tracking of aircraft engines is limited at best, "census-type" databases tracking aircraft sales do exist and can be accessed to develop carrier-specific tables such as that shown in Table 4 for the B757-200. While this does not allow the specific engine associated with each operation at an airport to be determined, it does allow for the development of more reliable statistics at the airport level-of-detail than does the use of EDMS default engine assignments. Using these data, air carrier-specific engine assignments can be identified and individual airport "default" engine assignments can be developed by weighting the air carrier specific engine data by the fraction of aircraft operations accounted for by that carrier. Clearly, when America West, American, Continental, and US Airways B757-200's utilize LAX, they do not do so with a PW2037 engine. The bottom line is that it is not only possible to develop a tailored airport-specific emissions analysis using readily available data, but such tailoring should be an integral component of any airport emissions analysis.

Table 4: Please see original letter for table.

Note also that the above statistics as well as the EDMS defaults represent data for domestic air carriers only. To the extent that LAX is encouraging international flights, the exercise summarized above will need to consider both domestic and international air carriers. Although the B757-200 is not a long range aircraft, it can illustrate the necessity of considering foreign aircraft configurations when one recognizes that on a worldwide basis, the Rolls-Royce RB211 engines, not the Pratt & Whitney engines, are the dominant engine for the B757-200.

Response:

The commentor states that LAX-specific aircraft engine assignments should have been used instead of EDMS default engine assignment. The commentor also sets forth an alternative data source, the use of which the commentor believes would result in a more precise identification of engine use at LAX.

The engine assignments for each airframe modeled in the Final EIS is spelled out in the protocols developed for air quality impact analysis (Attachment A of Technical Report 4, Modeling Protocol for Criteria Air Pollutants) and general conformity determination (Appendix A-2a, Final Clean Air Act General Conformity Determination, of Volume A of the Final EIS). The air quality impact analysis protocol was reviewed by the South Coast Air Quality Management District (SCAQMD) on three separate occasions prior to conducting the analysis. The general conformity protocol was reviewed by four independent agencies including the SCAQMD, California Air Resources Board, USEPA Region 9, and Southern California Association of Governments. None of these reviewers, each with some jurisdiction over air quality impacts in the South Coast Air Basin, provided substantial comments regarding engine selection.

In addition, if the analysis were to be developed today, the aircraft emissions would likely be lower than those presented in the Final EIS. This statement is based on the development of longer range B737 aircraft. In the analysis conducted for the Final EIS, many of the longer routes (cross country) are assumed to be flown by the larger B757 aircraft. If the development of future aircraft activity began today, many of these routes would be assumed to be flown by B737 aircraft. As noted in a correspondence with the California Air Resources Board and SCAQMD (see Appendix C, Attachments C-5A1 and C-5A2 of Appendix A-2a), the newer B737 aircraft have lower emissions than the B757 aircraft for all pollutants. Therefore, the analysis presented in the Final EIS is conservative (provides higher emissions than may actually occur).

Finally, the commentor suggests that the analysis undertaken by FAA and LAWA is unreliable because it relied upon default assumptions contained in EDMS. Instead, the commentor suggests a different data source, the use of which, in their opinion, is a critical component of air quality analyses at airports. The use of default engines in EDMS air quality impact analyses has been a standard practice since the development of EDMS 3.0 (1997) and is most applicable to large hub national airports such as LAX that handle many airlines, aircraft types and total operations. These large hub airports with many operations are most likely to have fleet mixes that represent the national mean. Analyses at small airports with few airlines and operations are more likely to have fleet mixes that do not represent the national mean. Therefore, it is unlikely that the analysis proposed by the commentor would produce results that are any more conservative than that presented in the Final EIS.

FAL00001-36

Comment:

It is Still Not Clear that Heavy Trucks are Properly Considered in On-Airport Fleet Mixes: from data presented in the FEIR/FEIS, it appears that on-airport vehicle emission estimates continue to exclude heavy duty truck traffic. Such an assumption is not consistent with the fact that Federal Express and other cargo carriers operate substantial fleets of heavy duty vehicles. In response to previous comments on this issue, LAWA has claimed that diesel truck emissions are included in both the on-airport and off-airport traffic emission estimates. However, LAWA has provided no additional evidence for this assertion in the FEIR/FEIS and continues to cite data tables presented in the SEIR as evidence of the emissions inclusion. After another review of Attachment J of the S-4 Supplemental Air Quality Technical Report from the SEIR, there is still no evidence of heavy truck inclusion in the on-airport traffic estimates. Table J3, which indicates the year 2000 fleet composition, does include passenger cars, light duty trucks, medium duty trucks, heavy duty trucks, and buses. However, bath Tables J4 (fleet mix in 2013) and J5 (fleet mix in 2015) indicate zero VMT fractions for light-heavy, medium-heavy, and heavy-heavy trucks on all on-airport road links, even those for which heavy duty truck traffic is assumed in 2000. VMT on all of the cargo facility links is indicated as being comprised of 60.4 percent gasoline light duty trucks, 39.4 percent gasoline medium duty trucks, and 0.2 percent diesel light duty trucks. Since these data are not indicated to have changed in the FEIS, it appears that on-airport heavy truck emissions are not considered.

Response:

The Final EIS, Appendix F-B, Attachment 5 presents a breakdown by roadway of the emissions from on-airport roadway traffic in tons per year (tpy) and grams per vehicle mile traveled (g/VMT). Inspection of the on-airport cargo roadway links indicates that the diesel PM emission factor (g/VMT) is much higher than for the other roadways around the airport, indicating the inclusion of more diesel-fueled vehicles, such as heavy-duty trucks. In addition, the Final General Conformity Determination included a CD-ROM with detailed emission inventory spreadsheets for on-road, on-airport sources. These inventories clearly include diesel heavy duty trucks in the analysis. The diesel PM emission factors were derived from EMFAC2002 for each of the EMFAC2002 diesel technology categories.

FAL00001-37

Comment:

The Determination of Conformity

The FDC concludes that NOx, NO2, and PM-10 emissions exceed conformity thresholds and does provide an associated conformity analysis for each. However, as a threshold issue, this analysis must be viewed in the context that associated emission rates are underestimated due to the issues presented in this letter and, as a result, conformity conclusions could (and would) be affected for alternative D were the FEIS revised to properly address the various emissions issues discussed.

Federal conformity requirements allow for the use of various approaches to demonstrate conformity. Generally, these approaches can be summarized as follows:

1. Demonstrate that the emissions increases are specifically identified and accounted for in the associated SIP,

2. For ozone and NO2, demonstrate that emissions are fully offset by other measures in the nonattainment area,

3. For pollutants other than ozone and NO2, demonstrate through air quality modeling that the emissions do not increase the frequency or the severity of NAAQS exceedances,

4. Demonstrate that the state has certified that the emissions increases are accounted for in the applicable SIP emissions budgets, or

5. Demonstrate that the state has certified that it will revise the applicable SIP emission budgets to include the emissions increases.

The FCD relies on criterion 4 to demonstrate conformity for NOx and NO2 and criterion 3 to demonstrate conformity for PM-10. The FCD purports to demonstrate that emissions of NOx and NO2 do not exceed the emissions budgets specified in the approved SIP (criterion 1), but it does not actually do this and could not adequately demonstrate conformity without an associated certification from the state that the emissions budgets are not exceeded. Despite significant effort in the FCD to illustrate that project emissions are within the applicable emissions budget, this effort is unconvincing because there is no way to determine what component of the applicable SIP budget is associated with emissions at LAX.

The closest the FCD gets to an actual emissions budget comparison is for aircraft and APU emissions, where FEIS emissions estimates for alternative D are compared to LAX-based aircraft emission estimates from the approved SIP (the 1997/99 AQMP). However, this comparison is flawed for several reasons. Foremost is the fact that the SIP budget as developed includes emissions from reverse thrust operations, which continue to be excluded from the FEIS and FCD despite repeated comments. As indicated further in this and previous comments, such inclusion can be expected to increase NOx and NO2 emissions by at least 10 percent. An increase of this magnitude would be sufficient to alter the relationship between alternative D emissions and the approved SIP budget for LAX aircraft operations. The FCD also provides associated aircraft emission budgets from the 2003 AQMP that purport to be for LAX, but these emissions are so inconsistent with those of both the 1997/99 AQMP and the FCD that there is simply no way they can be for LAX operations alone.

A secondary aspect that renders the aircraft emissions comparison obsolete is that the 1998 Regional Transportation Plan upon which the LAX emissions budget is based, clearly states that operations at LAX (and El Toro, which was assumed to be operational) "cannot be estimated ... due to lack of air traffic simulation modeling ability."6 Therefore, LAX was assumed to be unconstrained from a growth perspective and it was further assumed that operations would have to be redistributed among the other airports in the region once definitive modeling analysis was available. Thus, the emissions estimated for LAX are essentially regional placeholders and cannot be used to support an airport-specific emissions budget since budgets for other airports will be correspondingly underestimated. In effect, this emissions estimation approach left the 1997/99 AQMP without an airport-specific emissions budget.

Similar difficulties exist with regard to determining a specific emissions budget for GSE, stationary sources, motor vehicles, and construction activities. The approved SIP emission budgets are simply not sufficiently detailed to allow LAX-specific budgets to be determined. While the FCD attempts to show that the level of emissions from LAX is but a fraction of the areawide emission budgets for each source category, these comparisons are ultimately irrelevant as there is simply no way to know how the LAX emissions (regardless of their magnitude) compare with the level of emissions assumed in the SIP for activity at LAX.

Ultimately, this entire demonstration is effectively relegated to academic status through a letter dated August 12, 2004 from the SCAQMD that states that the emission estimates developed for alternative D are below the applicable SIP budgets. Since such a certification is an allowable conformity determination option (see criterion 4 above), the issue of comparing emissions to specifically identified emission budgets (criterion 1) is avoided. It should be emphasized that the FCD is not supported by any emissions comparison, and it is solely the state certification that provides the necessary basis for conformity.

For PM-10, the FCD relies on conformity criteria 3 as there are no PM-10 emission budgets for aircraft operations in the applicable SIP. Though the associated modeling analysis found peak concentrations to be below both the 24-hour and annual NAAQS, it is important to note that concentrations as high as 90 percent of the NAAQS were estimated. Since the emissions leading to this concentration are underestimated due to the emissions inventory impacts of the alternative D activity underestimate discussed above and various additional inventory shortcomings discussed below, it is entirely possible that exceedances of the annual PM-10 NAAQS could well be observed were these various shortcomings corrected.7

6 See FCD Attachment C-1.

7 The FCD concludes that the net emissions increases of both VOC and CO are below the significance thresholds for conformity determination. This conclusion is based on the emission estimates presented in the FEIS and could, and likely would, change were the issues presented in this letter properly

addressed. Since no specific conformity demonstration was performed for either pollutant due to the conclusion that neither exceeded the conformity emissions threshold, no further comment is possible.

Response:

The commentor indicates that emissions are underestimated due to "issues presented in this letter," and the conformity conclusions could be affected. It should be noted, however, that the general conformity evaluation was based on Alternative D as designed, including CEQA-related mitigation measures. Therefore, FAA has concluded, appropriately, that Alternative D as designed conforms to the purpose of the approved SIP and is consistent with all applicable requirements.

The commentor notes that FAA "could not adequately demonstrate conformity without an associated certification from the state that the emissions budgets are not exceeded," implying that this approach may be unacceptable. However, the commentor has already acknowledged that one of the approaches allowed to demonstrate conformity is itemized as "4. Demonstrate that the state has certified that the emissions increases are accounted for in the applicable SIP emissions budgets." It should be noted that the criterion to which the commentor refers, found at 40 CFR 93.158(a)(5)(i)(A) does not require a certification by the state, but merely a determination and documentation by the state agency primarily responsible for the applicable SIP that the total of direct and indirect emissions from the action result in a level of emissions which, together with all other emissions in the nonattainment or maintenance area, would not exceed the emissions budgets specified in the applicable SIP.

The commentor claims that the "SIP budget as developed includes emissions from reverse thrust operations." That statement, however, is untrue. While the special study prepared to support emission estimates from aircraft for the 1997 AQMP (see the next paragraph below) addressed the modes of approach, taxi, take off, and climbout, emissions associated with reverse thrust were not identified or estimated. Therefore, the emission estimating methodology used to support the Final General Conformity Determination is consistent with the emission estimating methodology used in developing the SIP budget. The commentor further notes that emissions due to reverse thrust were not explicitly accounted for in the general conformity evaluation. While this is true, the typical approach to addressing reverse thrust emissions has been to assume that the emission factors and time-in-mode for takeoff and climbout are conservative and account for reverse thrust. As FAA pointed out in the responses to comments received on the Draft General Conformity Determination (Appendix C, Section 2.3, Response to El Segundo Comment III.B.1.b. in Appendix A-2a, Final Clean Air Act General Conformity Determination of Volume A of the Final EIS), the conservative approach to estimating emissions from aircraft using EDMS more than compensates for potential emissions from reverse thrust. In summary, as a practical matter, assuming that all aircraft depart LAX at the maximum recorded takeoff weight, as was done for the general conformity evaluation, implicitly accounts for emissions approximately equal to those from reverse thrust, and does so in a manner consistent with the general approach suggested by the commentor. Please see Response to Comment FAL00001-30 for additional information regarding emissions from reverse thrust.

The commentor also claims that the 2003 AQMP aircraft emission budgets for LAX presented in the Final General Conformity Determination could not be correct. However, the emission budgets for LAX were developed by SCAQMD and transmitted by SCAQMD to LAWA. The aircraft emission budgets in the 2003 AQMP are based on two primary sources of information including: (1) a special study commissioned by SCAQMD and prepared by Energy and Environmental Analysis, Inc. (1999); and (2) the Southern California Association of Governments (SCAG) 2001 Regional Transportation Plan (RTP) aviation forecasts by airport for 2025. The Energy and Environmental Analysis study presents emissions estimates for aircraft and auxiliary power units for each airport and air base in the South Coast Air Basin (SCAB) for the 1997 baseline year. The aviation forecasts were used to develop airport-specific aircraft and APU emissions for the years between 1997 and 2025. FAA notes that the aircraft emission budgets in the 2003 AQMP are, in the final analysis, moot with respect to the Final General Conformity Determination since that determination is based on the emission budgets in the approved SIP.

The commentor contends that the LAX emissions in the 1998 RTP are a "placeholder" since LAX was assumed to be unconstrained, and that this leaves the 1997/99 AQMP "without an airport-specific emissions budget." However, the emissions from all aircraft activity in the SCAB were estimated for the 1997/99 AQMP based on studies commissioned by SCAQMD. The LAX-specific emission inventories for aircraft and APU operations were transmitted by SCAQMD to LAWA for use on the LAX Master Plan EIS/EIR and General Conformity Determination. The summation of aircraft/APU emissions from all airports and air bases in the SCAB are presented in two line items in Appendix III, Attachment A of the 1997 AQMP (Aircraft-Government and Aircraft-Other). Therefore, the approved SIP does indeed have underlying airport-specific emissions budgets for aircraft and auxiliary power units.

The commentor indicates that the emissions comparisons presented in the Final General Conformity Determination for emission sources other than aircraft, such as GSE, stationary sources, motor vehicles, and construction activities, are irrelevant "as there is simply no way to know how the LAX emissions . . . compare with the level of emissions assumed in the SIP for activity at LAX." While this type of evaluation is indeed challenging, SCAQMD-- the State agency responsible for developing the AQMP, which serves as the primary basis for that portion of the California SIP that deals with the SCAB--has in fact completed this evaluation. The SCAQMD determined and documented that the emissions associated with Alternative D are within the emissions budgets in the approved SIP, based on its analysis of the emissions comparisons presented in the Draft General Conformity Determination as well as on other pertinent information. Work began on the LAX Master Plan in 1995, and the SCAQMD was informed and aware of the plan in time to include anticipated growth in the 1997 AQMP. Again, the 1998 RTP developed by SCAG provides the projected activity levels for LAX that would have been considered in the 1997 AQMP.

The commentor indicates that the general conformity evaluation "is not supported by any emissions comparison, and it is solely the state certification that provides the necessary basis for conformity." It should be noted that the Final General Conformity Determination, Section 5.2 contains a significant amount of emissions comparisons which were reviewed in depth by SCAQMD. Following SCAQMD's review of the Draft General Conformity Determination and much of the supporting documentation, SCAQMD sent a letter to FAA on August 12, 2004, which not only provided their documentation of a determination that Alternative D emissions are within the SIP budgets (as required by the general conformity regulations) but also found that the methodologies and emission estimates used were acceptable.

The commentor notes that, because the PM10 emissions for Alternative D are underestimated "due to the emissions inventory impacts of the alternative D activity underestimate discussed above," exceedances of the annual PM10 national ambient air quality standards could be observed. However, the PM10 emissions, along with all other emissions associated with Alternative D were based on Alternative D as designed, including related mitigation measures. Therefore, since the modeled PM10 concentrations, including future background, were predicted to be less than the national ambient air quality standards, Alternative D conforms to the approved SIP.

FAL00002 Zimmerman, Martin County of Los Angeles 2/22/2005

FAL00002-1

Comment:

On behalf of the County of Los Angeles, I am submitting the attached comments prepared by the County's Department of Public Works concerning the Off-Airport Surface Transportation Section of the Final Environmental Impact Statement. These comments focus on traffic growth, traffic mitigation measures, proposed improvements for the intersection of La Cienega Boulevard at Lennox Boulevard, fair share contributions towards transit enhancement, discrepancies regarding unmitigated intersections, and increased traffic projections.

Under separate cover, and in conjunction with the Cities of Hawthorne, Inglewood, and Culver City, the County is also submitting comments on the Air Quality section of the Final EIS.

Thank you for your serious consideration of these comments.

Response:

Comment noted. Responses to the County of Los Angeles, Department of Public Works' comments on the Final EIS are provided below. Please see the responses to comment letter FAL00001 which address comments on the Final EIS submitted by the County of Los Angeles, City of Inglewood and City of Culver City.

FAL00002-2

Comment:

As requested, we have reviewed the Off-Airport Surface Transportation Section of the Final Environmental Impact Statement (FEIS) for the Los Angeles Airport Master Plan (LAX). The off-airport transportation information contained in the FEIS augments the information in the Final Environmental Impact Report (FEIR).

The Playa Vista II development, now referred to as the Village at Playa Vista, is included in the FEIS and in the third addendum of the FEIR. The Village at Playa Vista is a related project to the LAX Master Plan and we concur with its inclusion, at the traffic volume shown, in the FEIS.

We are pleased that the FEIS was able to account for the relatively recent change in traffic growth due to the downsizing of the Village at Playa Vista development. However, we are concerned that other growth isn't properly reflected in the study. For example, are the project horizon years (project build out and peak construction year) analyzed appropriately? The airport construction is projected to peak in 2008 which is only three years away if the airport construction is underway this year. Is this realistic? Shouldn't the study be revised to reflect more reasonable horizon years?

Response:

Comment noted. Although it was originally assumed in the Final EIS that construction of Alternative D improvements would begin in late 2004, it is now expected that such construction will begin in 2005. This delay of several months is not expected to preclude the ability to complete Alternative D by 2015, which is approximately 10 years hence, nor would it warrant a major revision of the overall construction phasing program anticipated for Alternative D. Based on the overall phasing program developed for Alternative D, the year 2008 was identified as the peak year for project (Alternative D) construction traffic, with the highest levels of activity anticipated to occur in the earlier part of 2008. A delay of several months in starting construction of Alternative D would shift some of the peak activity levels to the latter part of 2008 and is not expected to result in traffic impacts that are substantially different from those presented in the Final EIS.

FAL00002-3

Comment:

We have not been consulted regarding the feasibility of some of the traffic mitigation measures in the FEIS. Based on our preliminary assessment, most of the proposed improvements have not been completely scoped.

The proposed improvements for the intersection of La Cienega Boulevard at 111th Street includes the removal of on-street parking on the east side of La Cienega Boulevard. Also, the proposed improvement for the intersection of Inglewood Avenue and Lennox Boulevard includes the removal of parking on Inglewood Avenue south of Lennox Boulevard. We ask that the study quantify the amount of on-street parking that would be removed so that we can determine the impact it will have on the businesses at these locations. Other mitigation measures should be explored before we consider removal of parking.

Response:

NEPA requires the FAA to consider available mitigation to address significant impacts resulting from each alternative analyzed in an EIS. NEPA does not require, however, that a complete mitigation plan be formulated and adopted. While all the proposed traffic mitigation is considered by LAWA and FAA to be feasible, FAA recognizes that LAWA will need to work cooperatively with local agencies having authority over implementation of proposed mitigation measures. If a proposed mitigation is not approved by an authorizing transportation agency, LAWA has committed to work together with the City of Los Angeles Department of Transportation and the authorizing transportation agency to develop an alternative mitigation of equivalent effectiveness.

Other traffic mitigation options were considered at this intersection to avoid the removal of parking, but they either did not fully mitigate the project impact at this intersection or they involved the acquisition of

private property. The traffic mitigation in the Final EIS is considered feasible and not unduly burdensome for those seeking parking in the vicinity.

As stated in Table A2.1-4 of Section A.2.1, Off-Airport Surface Transportation, of Volume A of the Final EIS, the mitigation at La Cienega Boulevard and 111th Street (I/S # 67) would involve the removal of parking on the east side of La Cienega Boulevard. It is expected that approximately 165 feet of curb parking on the east side of La Cienega Boulevard would need to be removed in order to install the third northbound through lane and the second northbound left-turn lane on La Cienega at 111th Street.

The removal of parking on Inglewood Avenue south of Lennox Boulevard would only be required to mitigate this intersection (I/S # 310) if the Lennox Boulevard Interchange on the I-405 Freeway is not constructed. The Lennox Boulevard Interchange is a traffic mitigation measure itself. LAWA is working with Caltrans and the FHWA toward the design approval of the Lennox Boulevard Interchange; however, additional NEPA documentation will be required before final approval. The mitigation at Inglewood Avenue and Lennox Boulevard is only included in the alternative traffic mitigation plan, Table A2.1-6 of Section A.2.1 of Volume A of the Final EIS. This alternative mitigation plan would be used if the Lennox Boulevard Interchange is not constructed. The amount of parking required for removal would depend on the length of the proposed right-turn lane approved by County of Los Angeles. However, there is an existing bus zone on the northbound departure of the intersection that could be relocated to the approach of the intersection. This would allow for the installation of the northbound right-turn lane and the establishment of parking where the bus zone is currently located.

FAL00002-4

Comment:

The proposed improvements for the intersection of La Cienega Boulevard at Lennox Boulevard for triple left turn lanes on the westbound approach for the Alternative Mitigation Plan (without the Lennox interchange) is not acceptable. The unincorporated community of Lennox will be significantly impacted by this improvement which will attract more airport traffic through this residential community. We wish to continue to stress the importance of the Lennox Boulevard interchange with the San Diego Freeway as the only mitigation that will address the current as well as the projected airport and growing area traffic. The County was not consulted with respect to the incorporation of ATSAC/ATCS system or equivalent type of improvements in the project for traffic mitigation purposes. The County does not use the ATSAC/ATCS system. Incorporation of such improvements to mitigate traffic impacts in the unincorporated areas must be discussed with the County prior to their acceptance as mitigation measures.

Response:

As the commentor stated, the traffic mitigation at the intersection of La Cienega Boulevard and Lennox Boulevard with proposed triple left turn lanes for westbound traffic is only included in the alternative traffic mitigation plan. Triple left turn lanes have been used successfully for many years in the City of Los Angeles (Howard Hughes Parkway & Sepulveda Boulevard, Federal Avenue/San Vicente Boulevard & Wilshire Boulevard are two examples) and are a feasible installation at this intersection. However, it is recognized that this proposed mitigation would require Los Angeles County approval prior to installation. The triple left turn lanes are not included in the recommended traffic mitigation plan, which includes construction of the Lennox Boulevard Interchange on the I-405 Freeway and elimination of the La Cienega Boulevard & Lennox Boulevard intersection. Approval of the Lennox Boulevard Interchange is being pursued by LAWA. On February 1, 2005, LAWA received conceptual approval of this interchange by the Federal Highway Administration (FHWA). Further environmental documentation for this interchange will need to be completed prior to final approval by Caltrans and the FHWA. If, however, the Lennox Boulevard Interchange is not approved and the alternative traffic mitigation plan is implemented to mitigate project impacts, LAWA will work together with the City of Los Angeles Department of Transportation and the County of Los Angeles to develop an acceptable alternative traffic mitigation at La Cienega Boulevard and Lennox Boulevard that also reduces the traffic impact at this intersection to a less than significant level.

It is not intended that the County of Los Angeles be required to incorporate the ATSAC/ATCS system to control their traffic signals. All traffic mitigations that are proposing a traffic signal enhancement state that the signal would be upgraded to ATSAC/ATCS equivalent. This was intended only to describe a state-of-the-art signal control system similar to what is used in the City of Los Angeles. It is recognized that jurisdictions outside of the City of Los Angeles use other traffic control software. It is acknowledged

that LAWA must receive approval for any proposed signal upgrades, as well as all other proposed traffic mitigations, from the authorizing transportation authority.

FAL00002-5

Comment:

It is stated that a fair share contribution to the Metropolitan Transportation Authority's Metro Rapid Program or other transit enhancements to benefit transit to and from LAX is no longer needed for some of the key intersections in the area including the intersection of Lincoln Boulevard and Marina Expressway (SR 90). This is inconsistent with how other developments in West Los Angeles, specifically the Playa Vista project, have mitigated their traffic impact. Consequently, some fair share contribution towards transit enhancements seems to be necessary.

Response:

As stated on page A.2-1 in Section A.2.1, Off-Airport Surface Transportation, of Volume A of the Final EIS, on September 22, 2004 the Los Angeles City Council approved the Playa Vista Phase II development, now referred to as the Village at Playa Vista, as a much smaller, less intense development project than was originally proposed. When a revised traffic impact analysis was completed using the projected trip generation numbers for the reduced Playa Vista Phase II development, the results showed that some of the intersections which had been impacted using the trip generations for the original (larger) Playa Vista Phase II development were no longer impacted, or impacted to a lesser degree. Lincoln Boulevard and the Marina Expressway (SR 90) was one of the intersections which had smaller project-related impacts using the reduced trip generation numbers for Phase II of the Playa Vista development. Therefore, the mitigation component to provide a fair-share contribution to MTA's Metro Rapid Program or other enhancements to benefit transit to and from LAX was no longer needed. The mitigation proposed in the recommended traffic mitigation plan only calls for providing a fair-share contribution to Los Angeles County's Route 90 At-Grade Extension Project from Lincoln Boulevard to Admiralty Way. LAWA and Los Angeles County have exchanged correspondence to determine how this fair-share contribution will be calculated. It is FAA's understanding that this dialogue between the two agencies will continue.

FAL00002-6

Comment:

The conclusion of the Off-Airport Surface Transportation Section stated that there will be no unmitigated intersections and yet on page A 1-25, it indicates that two intersections (one partially in unincorporated County at Imperial Highway and La Cienega Boulevard) will remain unmitigated. This discrepancy should be corrected. All intersections should be fully mitigated.

Response:

Comment noted. The conclusion stated in the last sentence on page A.1-25 in Volume A of the Final EIS is accurate. The third sentence of the first paragraph on page A.2-45 in Section A.2.1, Off-Airport Surface Transportation, in Volume A of the Final EIS is revised as follows: All but two of the 25 impacted intersections would be fully mitigated through the mitigation plan developed in conjunction with the CEQA impacts analysis. The two remaining intersections cannot be filly mitigated due to physical constraints that hinder their mitigation to a less than significant level.

FAL00002-7

Comment:

Figures A2.1-1 through A2.1-3 show increased traffic on Admiralty Way between Bali Way and SR90 with Reduced Playa Vista. What is the reason for the increase?

Response:

The LAX Ground Access Model revealed that small increases in traffic volumes occur on various streets such as Admiralty Way as a result of drivers adjusting their travel paths to access streets that have

become less congested due to the reduction in Playa Vista Phase II trips. Data supporting the traffic model are provided in the LAX Ground Access Model Calibration and Validation Report, dated October 15, 1998. As described in this document, the model is fully calibrated and validated to provide forecasts of traffic within acceptable standards. This document is provided at the end of Technical Report 2b, Off -Airport Surface Transportation.

FAL00003 Armi, Osa Shute, Mihaly & Weinberger LLP 2/18/2005

FAL00003-1

Comment:

Please accept the following timely comments on the Federal Aviation Administration ("FAA") January 2005 Final Environmental Impact Statement ("FEIS")1 for the proposed Master Plan Improvements at Los Angeles International Airport ("LAX") ("Master Plan Project") and the attachments thereto. In addition, these comments and the technical report by Dr. J. Phyllis Fox and Dr. Petra Pless, attached hereto as Exhibit A, describe how the Clean Air Act Final Conformity Determination fails to comply with the requirements of section 176(c) of the Clean Air Act, 42 U.S.C. § 7506(c) and Title 40 of the Code of Federal Regulations, Part 93, Subpart B. These comments are submitted on behalf of the City of El Segundo ("El Segundo").

1 According to the Executive Summary of the FEIS, the FEIS is comprised of: 1) Volume A, which was released in January 2005 and contains information and analysis specific to the FEIS; 2) The First, Second and Third Addenda to the Final Environmental Impact Report ("EIR") for the LAX Master Plan Project; 3) Volumes 1 through 4 of the Final EIR; 4) Appendices and Technical Reports to the Final EIR; and 5) Response to Comments from the Final EIR. FEIS at A.1-2 to 1-3.

Response:

Comment noted. Please see Responses to Comments below. Responses to comments on the Final General Conformity Determination submitted by Dr. J. Phyllis Fox and Dr. Petra Pless on behalf of the City of El Segundo are provided in Responses to Comments FAL00003-44 through FAL00003-62 below.

FAL00003-2

Comment:

I. The FEIS Perpetuates the Fundamental Flaw of the FAA's NEPA Documents: It Bases Its Analysis on the Assumption That Capacity Will Not Exceed 78.9 Million Annual Passengers, Without Providing the Means of Enforcing Such a Limit and Without Justifying Its Assumptions.

On November 4, 2003, we submitted a comment letter on behalf of El Segundo in response to the July 2003 release of the Supplement to the Draft Environmental Impact Statement/Environmental Impact Report ("Draft EIS/EIR"). That letter included extensive comments about the likelihood that implementation of the Master Plan Project would result in a significantly greater capacity than the 78.9 million annual passengers ("MAP") assumed by the FAA2 as the current capacity of LAX.3 The comment letter was supplemented with a report prepared by Professor Adib Kanafani, an eminent expert in airport design and capacity, which demonstrates the capacity consequences of the Master Plan Project, also known as Alternative D.

El Segundo's November 4, 2003 comments, and Dr. Kanafani's accompanying report, remain relevant - and have yet to be adequately addressed by the FAA. The FEIS does not provide meaningful assurances that LAX is designed to cap capacity at 78.9 MAP. It simply declares that implementation of Alternative D will result in a capacity of 78.9 MAP based on market assumptions.

As we emphasized in the 2003 comment letter, the FAA's assertion that the capacity of Alternative D is 78.9 MAP is premised on a number of market-based assumptions about how airlines and the air transportation industry would respond to the configuration of Alternative D. These assumptions are not consistent with an analysis of the actual physical capacity of Alternative D, and the FEIS does not provide an adequate explanation or support for its market assumptions. Moreover, the Master Plan

Project as proposed fails to include facility limitations that would assure the maintenance of a 78.9 MAP capacity limitation. For further discussion of the failures of the FEIS to ensure capacity limits, see Exhibit B attached hereto (October 2004 report on the Final EIR capacity discussion, by Adib Kanafani).4

One of the primary stated purposes for the design of Master Plan Alternative D was to address environmental concerns by developing an alternative with a capacity to serve no more than 78.9 MAP. Given the importance that both the FAA and the public place on this issue, the FAA must provide concrete assurances that the project is designed to ensure that this capacity level will not be exceeded. Reliance on abstract and unsubstantiated market predictions does not represent adequate assurances.

As detailed in Dr. Kanafani's report, many specific elements of Alternative D indicate that the capacity of LAX will greatly exceed 78.9 MAP. For example, the airfield improvements envisioned in Alternative D will increase capacity as they will translate to more runway availability. Similarly, Alternative D calls for significant increases in square footage of terminal space and airport parking, without providing an explanation for why such major increases are necessary. More square footage means an ability to accommodate more people - in other words, greater capacity.

Dr. Kanafani's analysis provides a thorough examination of the physical capacity of LAX under Alternative D, and calculations utilizing a range of reasonable input for the variables relevant to actual capacity. As demonstrated in his analysis, a conservative estimate is that the terminal and gate configurations of Alternative D will result in a capacity of 87 MAP - far greater than the 78.9 MAP claimed by the FAA. A figure as high as 93 MAP is possible with fairly likely values of load factors and seating configurations. (Ex. B, pp. 14-15.) The FAA has offered no meaningful response to the data or comprehensive analysis of the gate capacity provided by Dr. Kanafani. The FEIS fails to respond to the capacity analysis, instead stating incorrectly that Dr. Kanafani's analysis is not inconsistent with the FAA's own unsupported assumptions. The FAA continues to confuse forecasts and market assumptions (which it used) with actual capacity analysis (which El Segundo used). In deriving its 78.9 MAP figure for Alternative D, not only does the FAA rely upon unproven market assumptions, but it also makes a number of assertions without providing any evidence of their validity. For example, the FAA assumes - without support - that air traffic will shift to other southern California airports when Alternative D's major improvements are built. It also ignores the technological advances that are already occurring in the airport industry, relies upon outdated seating configurations, and assumes use of old aircraft in deriving its estimates. In addition, it distorts the picture by failing to acknowledge that narrow-body equivalent gates can accommodate aircraft with widely varying numbers of passengers.

2 The Draft EIS/EIR and the Supplement to the Draft EIS/EIR were jointly prepared by Los Angeles World Airports ("LAWA") - the lead agency for purposes of the California Environmental Quality Act ("CEQA") - and the FAA - the lead agency for purposes of the National Environmental Policy Act ("NEPA"). In April 2004, LAWA separately released a Final EIR for the LAX Master Plan Project. The FAA has incorporated many components of the Final EIR into the FEIS that is the subject of this comment letter. While much of the FEIS was, therefore, jointly prepared by the FAA and LAWA, for purposes of simplicity, wherever possible, this letter refers only to the FAA as the agency responsible for preparation of the FEIS.

3 The FAA previously estimated the current capacity of LAX as 78 MAP. Not until it released the Supplement to the Draft EIS/EIR - and unveiled Alternative D - did the FAA place the current capacity at 78.9 MAP. Though a seemingly small increase involving only the addition of a decimal point and a single digit, this represents an addition of nearly 1,000,000 annual passengers. For purposes of consistency and ease of reading, we refer to the 78.9 MAP capacity assumption throughout this letter. The FAA has, however, offered no justification for the increase from 78 to 78.9 MAP.

4 This report was prepared after the release of the Final EIR in April 2004 and the First Addendum to the Final EIR in September 2004. Though the report refers to the Final EIR and the First Addendum to the Final EIR, it is equally applicable to the FEIS, as both the Final EIR and the First Addendum have been explicitly adopted by the FAA as part of the FEIS.

Response:

The commentor suggests that the Final EIS's analysis of future capacity after implementation of Alternative D is incorrect, and that the alternative approach suggested by the commentor is the more appropriate and accurate methodology to determine future capacity. The commentor's basic premise is that the physical capacity of LAX, after implementation of Alternative D improvements in 2015, will allegedly be greater than the passenger activity level forecasted by FAA in the Final EIS. The

commentor asserts that its view is based on what it describes as an "actual capacity analysis." For the reasons described in the Final EIS, and summarized below, the FAA concludes that its forecast of passenger activity, based as it is on an analysis of the practical capacity of LAX in the Final EIS, after implementation of the Alternative D improvements, provides the decision-maker with the reasonably foreseeable environmental impacts arising out of that alternative.

A. The FAA's Alternative D Practical Capacity Analysis vs. the Commentor's Consultant's Selective Physical Throughput Capacity Calculations

The forecast of passenger activity levels at an airport cannot be determined simply by adding up the separate theoretical potential throughput of each separate element of an airport. If that were the case, the anticipated design day peak hour activity level multiplied by 24 hours and then by 365 days would provide the supposed "physical throughput capacity" of an airport. Instead, the FAA and professional airport planners generally focus on forecasting an airport's "practical capacity."

Practical capacity is a forecast of activity determined by how an airport's various components will function together in reality, particularly given the market conditions projected in any given airport's market forecast. Practical capacity is not based solely on "market assumptions," as the comment asserts. It takes into account the expected physical characteristics of the various functional elements of the airport and how they are planned to work together, given how the market is likely to respond to, and utilize, the resulting airport. The theoretical "physical throughput capacity of each component of an airport -- gates, runways or other components of the airport -- does not disclose the overall capacity of the airport as an operating whole. NEPA requires FAA to analyze impacts from a broader perspective.

For the LAX Master Plan alternatives, including the No Action/No Project Alternative, the FAA has forecasted activity levels on the basis of the practical capacity of the airport, taking into account physical constraints and also the effects of delay and demand on airport usage. This is quite different from the way that the commentor suggests activity levels should be established by focusing on the physical throughput capacity of certain isolated components of the airport system. The FAA acknowledges that some of the individual components of the airport could obviously support a higher level of activity, if one were to consider physical throughput capacity only. As the Final EIS points out, for example, the runway systems for Alternatives C, D, and the No Action/No Project Alternative have virtually identical physical capacity. However, simply calculating physical throughput capacity to support a projected future activity level does not provide a sufficiently reasonable basis to conclude that the market will make adjustments to utilize the entire physical throughput capacity. This is especially true where, as here, there are alternatives to using LAX (i.e., ability to select from several other major commercial airports in the Los Angeles region) and where, as here, there are specific points in the overall airport system that may potentially cause unnecessary delay (e.g., the limited curbside facilities in the No Action/No Project Alternative and the limited gate facilities in Alternative D.) Assuming the market will make adjustments to utilize the entire physical throughput capacity is even more unreliable considering that the adjustments airlines and airport users would have to make are generally undesirable (such as scheduling flights evenly throughout all 24 hours of the day).

The comment and the underlying study by the commentor's consultant, Professor Adib Kanafani - Comments 2003 LAX Master Plan Addendum & Supplement to the DEIS/EIR, November 2003 (referred to henceforth as the "November 2003 Report"), would consider an isolated component (e.g., gates) and attempt to calculate the maximum number of airplanes and passengers that could theoretically use those gates at any given time, thereby determining their supposed physical throughput capacity.

In contrast, the FAA evaluates the projected flights and passengers who will use those gates during a similar period of time while also concurrently taking into account how those gates relate to the rest of the airport facilities and what sort of ensuing delay to airlines and passengers will likely come about until the delay factor reaches "unacceptable" levels. Obviously, if the remainder of the airport and the effects of unacceptable delay are disregarded, as is the case in the approach recommended by the November 2003 Report, the resulting "physical throughput capacity" number calculated for LAX will likely be substantially greater than the FAA's practical capacity figure. In FAA's opinion, however, the November 2003 Report's figure, on which the commentor relies, will likely bear substantially less correlation to the likely actual future activity levels at LAX, because the method set forth in the November 2003 Report fails to appropriately take into account the critical factors of the design of the remainder of the airport and the likely market response to unacceptable delay.

The comment attempts to oversimplify the relationship between market demand and airport capacity by alleging that market-based assumptions within the Final EIS are "not consistent with an analysis of the actual physical capacity of Alternative D, and the Final EIS does not provide an adequate explanation or

support for its market assumptions." As described in Section 2.3, Consequences of Not Improving LAX, in Part I of the Final EIS, air service and activity at any airport both influences and is influenced by the behavior of airport users, and where and how airlines provide service. A key element of that dynamic is the degree to which delay, resulting from constraints and inefficiencies in airport system facilities and operations, is either acceptable or unacceptable to airport users and airlines.

In the November 2003 Report, presented in Comments SAL00015-312 through SAL00015-333 in Part II-Volume 10 of the Final EIS, the commentor's consultant puts forth his analysis of the capacity characteristics of various facilities and systems at LAX under the No Action/No Project Alternative, Alternative C, and Alternative D. In many instances, the commentor's consultant questions and challenges the factors and calculations presented in the Draft LAX Master Plan Addendum and the Supplement to the Draft EIS/EIR, and simply offers his own rival sets of factors and numbers to arrive at different conclusions regarding the physical capacity of that particular facility or system. At best, the commentor's consultant's rival figures represent simply a disagreement among experts as to the appropriate specific factors or numbers to be taken into consideration. Beyond this, however, the commentor's consultant's analysis is presented as an overall methodology for determining airport capacity that is supposedly preferable to the FAA's methodology. However, the commentor's consultant's methodology is brought into question by its own inconsistency, as it focuses only on the physical throughput capacity of certain individual components of the airport system, while, without explanation, it otherwise accepts market forces for other individual components and the remainder of the airport system. The commentor's consultant's analysis never explains why market forces should be applicable to most of the airport system but should be disregarded in calculating the throughput capacity of certain other isolated system components. By contrast, the FAA's methodology views the airport as a complex system as a whole, which is subject to market forces arising from delays caused at any of various key points within the system.

Airport planning, operation, and improvements occur within the context of market demand, as it currently exists and is projected to occur in the future. Relative to LAX, this is reflected in Chapter 3, Forecasts of Aviation Demand (February 1996), and associated technical appendices within the Draft Master Plan. The information there provides the basis for the detailed breakdown of Design Day Operations by passengers, cargo, and general aviation and military, as well as fleet mix by category, flight schedules, and ultimately gate assignments. All of this information reflects market demand at LAX. Chapter V, Concept Development, of the Draft LAX Master Plan and Chapter 3, Alternative D Constrained Activity, of the Final LAX Master Plan provides an analysis of future activity levels and characteristics of constrained scenarios, whereby the future improvements planned for LAX do not fully accommodate the projected (unconstrained) demand. The constrained activity analysis reflects the fact that airport users and airlines react to excessive delay by choosing other options (i.e., a certain amount of the demand projected for LAX would go elsewhere, consequently resulting in a lower activity level).

As described in greater detail below, the SIMMOD simulation model is used to simulate airfield operating characteristics and delays, as can be used to evaluate and refine airport improvements. The commentor's two claims that market-based assumptions within the Final EIS are not consistent with an analysis of the actual physical capacity of Alternative D, and the Final EIS does not provide an adequate explanation or support for its market assumptions, miss the basic point. The entire Master Plan process is based on the market demand projected for LAX, and how the market is likely to respond to the future operational characteristics of LAX (i.e., practical capacity). It is not simply based on a list of market assumptions matched against calculations of physical capacity, with no regard for delay.

The commentor repeatedly generalizes that, in its view, the FAA's activity forecast relies on "unsupported" market assumptions. However, the commentor never identifies what specific market assumptions it finds to be inadequately documented and supported. Lacking this, FAA assumes that the commentor questions the basic assumption that, at a certain level of delay and inconvenience, airlines and airport users will react by directing their service/patronage to a new airport. In fact, this basic assumption is well documented and supported. For example, in March 2001, Southwest Airlines ceased operations at San Francisco International Airport and concentrated all of its San Francisco Bay Area service at Oakland and San Jose Airports (Los Angeles Times, Southwest's SFO Departure A Sign of the Not-on-Times, Christopher Reynolds, February 11, 2001). High delay rates, limited gates and a generally unreliable schedule caused by airport congestion and foggy weather led company officials to shift the carrier's operation to less congested regional airports. It is this type of market reaction that FAA's analysis of passenger activity takes into account. To the extent that the commentor intends to refer to other market assumptions, FAA is unable to substantively respond due to lack of specificity of the comment.

B. Widespread Use and Acceptance of the FAA's Methodology, Including the SIMMOD Model, as a Tool for Projecting the Practical Capacity of Airports

In the Final EIS, and throughout the joint NEPA and CEQA process, the FAA and LAWA have utilized well-accepted and rational methodologies to establish the practical capacity for LAX, under each of the build alternatives and the No Action/No Project Alternative. These methodologies predict the anticipated future use of the airport for each alternative based on agency and industry experience, as well as rational principles. A primary tool in determining the practical capacity of each of the LAX Master Plan alternatives is FAA's computer model known as SIMMOD. SIMMOD, FAA's Airport and Airspace Simulation Model, is a comprehensive planning tool for airport designers and managers, air traffic planners, and airline operations analysts. The SIMMOD analysis defines airside performance in terms of aircraft taxi time, delay, and throughput, and was used to assess the relative performance of the different Master Plan alternatives in terms of capacity and delay.

For the Final EIS analysis, the SIMMOD model was originally calibrated as part of the Master Plan's analysis of existing conditions during the 1994 baseline year to assure that it could accurately replicate operating conditions at LAX and produce accurate measures of future performance. The SIMMOD model was later recalibrated as the Master Plan baseline year was updated to 1996, and then recalibrated once again when a detailed comparison year analysis was undertaken for the year 2000.

After the SIMMOD model was calibrated, it was then used to calculate an estimate of future aircraft operations for each alternative at an acceptable level of delay. The physical limitations of each alternative (e.g., available gates and number of runways) were factored into the model, which was used to analyze numerous combinations of aircraft/gate/taxiway/runway combinations. To provide the most realistic data, the analysis also factored in other relevant assumptions that affect airport capacity at LAX. These assumptions included, among other features, primary runway operating configurations, applicable noise abatement procedures, airspace operating assumptions, and airfield operating assumptions.

The SIMMOD model was used to analyze design day flight schedules for Alternative D for the years 2005, 2008, 2013, and 2015 to aid in the evaluation of each alternative and to provide input for the analysis of reasonably foreseeable environmental impacts. The design day aircraft operations profiles associated with Alternative D are presented in Appendix F of the Final LAX Master Plan. Appendix F depicts operations profiles by aircraft type, by fix (i.e., a "fix" is a navigation point in the airspace around LAX over which arriving and departing aircraft are routed by air traffic control depending on the flight's origin or destination), and by user group for Alternative D for 2005, 2008, and 2015 (operational profiles are not shown for 2013 because a 2013 activity level was identified solely for the purpose of the air quality analysis and was conservatively assumed to be equivalent to 2015).

Passenger activity profiles for Alternative D are also presented in Appendix F of the Final LAX Master Plan. The number of passengers on each flight was determined using the load factor and aircraft size assumptions presented in Chapter 3 of the Final LAX Master Plan. The tables in Appendix F of the Final LAX Master Plan set forth the number of originating, terminating, and connecting passengers by terminal by hour for 2005, 2008, 2013, and 2015. See also page 4 of Appendix S-E, Supplemental Air Quality Impact Analysis, of the Final EIS, and Appendix E, Alternative D Airside Analysis, of the Final LAX Master Plan.

The analysis provided by the SIMMOD model is the same type of analysis and methodology used by FAA and major airports for assessing demand/capacity relationships and for estimating existing and future delay. These same methodologies are also commonly used by both government and industry to plan for future airport facility requirements. For example, the SIMMOD model was used in forecasting practical capacity in the following airport improvement projects:

- FAA Record of Decision for Proposed 9,000-Foot Fifth Runway and Associated Projects, Hartsfield Atlanta International Airport, Fulton and Clayton Counties, Georgia, September 27, 2001, http://www.faa.gov/ARP/environmental/5054a/RODatl01.htm (SIMMOD used to analyze maximum arrival and departure delay relief resulting from new independent parallel runway);

- FAA Record of Decision for Proposed Replacement Runway, Runway Extension and Associated Development at Cleveland Hopkins International Airport, Cleveland, Ohio, November, 2000, http://www.faa.gov/arp/app600/5054a/CLEROD.pdf (SIMMOD used to forecast peak period capacity over fifteen-year planning period);

- FAA Record of Decision for Proposed New Parallel Runway and Associated Work at Miami International Airport Miami-Dade County, Florida, December 1998, http://www.faa.gov/arp/app600/5054a/rodmia.doc (SIMMOD used to analyze peak capacity with acceptable level of delay for proposed commuter runway);

- FAA Record of Decision, Lambert- St. Louis International Airport, September 30, 1998, http://www.faa.gov/arp/ace/stl/stl.htm (SIMMOD used to analyze capacity and delay).

Moreover, the validity of FAA/LAWA's practical capacity analysis is corroborated by comments provided by the airline industry. For example, the Los Angeles Airlines Airport Affairs Committee (AAAC) represents more than 80 airlines serving LAX and the Air Transport Association of America, Inc. (ATA) is the primary trade association of the U.S. scheduled airline industry, representing 23 airlines, including all major domestic passenger and cargo air carriers. In joint comments on the Draft LAX Master Plan Addendum and the Supplement to the Draft EIR/EIS, the AAAC and the ATA commented specifically on the capacity of Alternative D. The AAAC and ATA acknowledged that, rather than meeting the projected increase in demand for air travel at LAX in 2015 (98 MAP), the LAX Master Plan "incorporates infrastructure bottlenecks intended to constrain capacity to levels commensurate with the 'no-build' alternative. Those constraints will cause capacity to fall short of local demand at LAX by 20 million annual passengers by 2015." (See Comment SPC00298-30 in Part II-Volume 11 of the Final EIS).

Having considered the commentor's position and after reviewing the analysis in support of the Master Plan and the Final EIS, it is FAA's position that the issue of capacity has been adequately addressed. There are different ways to approach the issue of capacity analysis. Simply because a commentor offers an approach that differs from the one chosen by the FAA, by no means invalidates the FAA's analysis. The FAA has determined that for the purposes of the required analysis, the methodology selected was both adequate and appropriate for providing the FAA with the information needed to evaluate the reasonably foreseeable environmental impacts of the proposed project.

Finally, with respect to the main text of the comment, FAA disagrees with the comment that the analysis of impacts based on the activity forecast for Alternative D can be valid only if FAA provides "adequate assurances" that the forecasted activity level will not be exceeded. NEPA requires Federal agencies to take a hard look at reasonably foreseeable environmental impacts. Here, the forecast activity levels generated for each of the alternatives was based on widely accepted principles and methodology considered appropriate by FAA. These forecasted activity levels provide a reasonable basis upon which to analyze the reasonably foreseeable environmental impacts of the alternatives. NEPA does not require more.

FAA notes, however, that at the local level, the City intends to keep a close watch on the actual passenger activity level at LAX. The LAX Master Plan has numerous mechanisms in place to monitor the reasonableness of the 78.9 MAP projection as the 2015 activity level. For example, the LAX Specific Plan requires the City to conduct further studies as it proceeds with several of the components of the overall plan. Additionally, each LAX Master Plan specific project will have its own environmental study undertaken pursuant to CEQA. These project-specific studies will evaluate, inter alia, the airport's capacity in connection with that specific project, and will evaluate and provide appropriate further mitigation measures as needed. Each of these anticipated subsequent studies to be undertaken as the LAX Master Plan Program is built out will provide data to validate the analysis contained in the LAX Master Plan and Final EIS, and opportunities for adjustment, should adjustments be necessary.

C. Other Miscellaneous Criticisms by Commentor's Consultant about the FAA's 2015 Activity Level Forecast Are Also Erroneous

In addition to the main points of the comment that are addressed above, there are several other erroneous statements in the comment.

1. Inclusion of the Next Generation Aircraft in the FAA's 2015 Projected Activity Level

The comment states that the FAA "ignores the technological advances that are already occurring in the airport industry, relies upon outdated seating configurations, and assumes use of old aircraft in deriving its estimates." To the contrary, the fleet mix forecast properly grows and adjusts the forecast as described in greater detail below. Further, it includes the specific next generation Boeing 737 type aircraft referenced in the commentor's consultant's November 2003 Report in the table referenced in that report - Table IV-2.3, Commercial Passenger Design Day Fleet, of the Draft LAX Master Plan.

2. Use of Appropriate Seating Capacity Estimates

With respect to the specific aspect of seating capacity, the following table shows a comparison between the high and low seat configurations used for the LAX Master Plan analysis and those suggested by the commentor's consultant in its November 2003 Report. The total number of seats reported in that report varies both up and down from the number reported for each aircraft type and for each airline by the industry standard, the Official Airline Guide (OAG), and the airlines themselves. Further, when totaled and weighted by the number of design day operations, the November 2003 Report's high and low ranges of total seats are likewise higher than those reported in the Final EIS because the latter relied on the seating configurations that it obtained from the OAG. This discrepancy used in the November 2003 Report causes both the "Low" and the "High" range used in the November 2003 Report to be higher than the seats by aircraft type reported by the OAG.

Comparison of LAX Master Plan Aircraft Seat Configurations to Commentor's Consultant's Report

	Master Plan Seat Range		Commentor Seat Range		Seat Range Comparison			Design Day Added Seats	
Aircraft Type	Low	High	Low	High	Low Range Difference	High Range Difference	Design Day Passenger Operations	Low Range	High Range
F100	98	98	98	98	0	0	4	-	-
A-300	270	285	275	280	5	-5	5	25	(25)
A-310	220	237	220	240	0	3	14	-	42
A-319	120	120	120	124	0	4	3	-	12
A-320	144	150	144	150	0	0	50	-	-
A-330	300	335	300	300	0	-35	21	-	(735)
A-340	303	335	303	380	0	45	19	-	855
737-300	118	134	128	130	10	-4	163	1,630	(652)
737-400	138	146	138	146	0	0	52	-	-
737-500	102	110	102	115	0	5	45	-	225
737-700	118	134	120	135	2	1	16	32	16
737S	102	110	105	110	3	0	22	66	-
747-400	390	436	390	410	0	-26	122	-	(3,172)
747	260	410	366	416	106	6	9	954	54
74M	234	234	234	416	0	182	17	-	3,094
74X	600	600	600	600	0	0	27	-	-
757	185	188	185	220	0	32	386	-	12,352
767-300	220	240	220	250	0	10	73	-	730
767	172	203	181	226	9	23	72	648	1,656
777	305	375	305	360	0	-15	55	-	(825)
AB3	270	285	280	280	10	-5	110	1,100	(550)
DC-10	260	310	280	275	20	-35	-	-	-
MD-11	284	375	285	300	1	-75	95	95	(7,125)
MD-80	142	147	143	150	1	3	76	76	228
MD-87	125	125	125	140	0	15	2	-	30
MD-90	150	150	150	150	0	0	34	-	-
MD-95	104	104	104	153	0	49	34	-	1,666
ATR-72	68	68	64	68	-4	0	25	(100)	-
ATR-42	46	46	46	46	0	0	53	-	-
BE1	19	19	19	19	0	0	38	-	-
C50	50	50	50	50	0	0	47	-	-
C70	70	70	70	75	0	5	5	-	25
CNA					0	0	43	-	-
DS-7	48	48	48	50	0	2	63	-	126
EM2	30	30	30	40	0	10	22	-	220
EMB	50	50	50	50	0	0	31	-	-
F50	50	50	50	50	0	0	20	-	-
F70	70	70	70	70	0	0	8	-	-
J31	19	19	19	19	0	0	43	-	-
S20	50	50	50	50	0	0	34	-	-
S36	36	36	36	36	0	0	6	-	-
SF3	34	34	34	34	0	0	36	-	-
SWM	19	19	19	19	0	0	58	-	-
Sum of Difference					**163**	**195**	**2,058**	**4,526**	**8,247**

The fleet mix forecast prepared for the Draft LAX Master Plan (Chapter IV, starting at page IV-2.9) was developed using the current fleet at the time it was prepared and projected significant changes in the

fleet through 2015. In particular, the fleet mix forecast reported seat capacities by aircraft type; however, it also projected a significant growth in seats per departure over the forecast period. As documented in the Forecasts of Aviation Demand (Chapter III, Section 10, page III-10.3, of the Draft LAX Master Plan), the "forecast envisions a net 25 percent increase in aircraft lift efficiency over the forecast period, which will primarily be achieved through an increase in the average number of seats per aircraft departure." The forecast goes on to state, "[t]he net increase in seats reflects the replacement of older small jets with newer large jet aircraft and the requirement for increase in aircraft gauge (average seats per departure) to balance passenger demand with capacity limitations in congested West Coast markets."

3. Use of Appropriate Annual Passenger Ratios

To further compound the aircraft seating errors described above, the November 2003 Report prepared by the commentor's consultant asserts on page 2 of Appendix A under "5. Seasonal Patterns" that "current and recent historic" ratios of design day to annual passenger factors (i.e., annual passenger ratio) allegedly have been consistently around 310. The report then goes on to vary these factors between 300 and 320 in various multiplication tables in Appendix A of the November 2003 Report. In reality, this ratio does vary given a whole range of year-to-year and seasonal traffic variations. In particular, the annual growth rate for total annual passengers is often higher or lower than the corresponding year's August activity. In recent years the average for this factor has been as low as 295. (It was even lower in 2001 at 276, but this was due to the very low levels of activity in the fourth quarter of that year.)

The indication of incorrect use of the annual passenger ratio by the commentor's consultant's November 2003 Report is revealed on the same page (page 2 of Appendix A under "5. Seasonal Patterns"). It states, "The implication of the [Master Plan] Addendum's assumption that the capacity constraint will cause traffic peaks to spread rather than accentuate is that these factors should rise and not decline." The LAX Master Plan's gate capacity constraint on "peak" activity to which the commentor's consultant refers comes in the design day on an hour-by-hour basis; it is not included within the LAX market's month-to-month seasonal peaks, as reflected by the annual passenger ratio (See page 3-65, forth bullet under "Air Service Changes" in Part I of the Final EIS).

As fully explained in the LAX Master Plan and acknowledged by the commentor's consultant, the use of the annual passenger ratio of 300 is made up of weighted averages for each segment of the market (i.e., domestic, commuters, Hawaii and international). This is a consistent planning factor to ensure that facilities are properly sized to handle seasonal peaks of activity that take place regularly throughout each year.

4. The No Action/No Project Alternative's Practical Capacity

Lastly, Footnote 3 in the comment states that the FAA previously estimated the current capacity of LAX as 78 MAP, and not until release of the Supplement to the Draft EIS/EIR did the FAA place the current capacity at 78.9. That statement is wrong. The three iterations of Chapter 3, Alternatives, that appear in the Draft EIS/EIR, the Supplement to the Draft EIS/EIR, and the Final EIR, as well as Section A.1.4, Summary Description of Alternatives, in Volume A of the Final EIS, have all consistently identified the 2015 MAP level for LAX under the No Action/No Project Alternative, based on the current practical capacity, to be approximately 78.7 MAP. With the exception of the Draft EIS/EIR (which did not include Alternative D), all of the documents noted above have consistently indicated that 78.9 MAP is the 2015 activity level associated with Alternative D, based on the practical capacity associated with the totality of the improvements proposed in Master Plan Alternative D. At no time has the FAA indicated the current capacity of LAX to be 78 MAP or 78.9 MAP.

FAL00003-3

Comment:

Many capacity-enhancing actions have already begun at LAX. These projects are improperly segmented from the Master Plan analysis. For example, the airport is proceeding with changes to the Terminal 2 baggage claim facilities and Tom Bradley International Terminal ("TBIT"). In fact, at its January 25, 2005 meeting, LAWA's Board of Airport Commissioners voted to approve the TBIT project and adopt the Final Mitigated Negative Declaration prepared for it. As detailed in comment letters that we previously submitted on behalf of El Segundo regarding the TBIT and Terminal 2 projects, characterizing these projects as separate from the Master Plan process is misleading and inaccurate.

See letters dated June 22, 2004 and July 30, 2004 attached hereto as Exhibits C and D. These projects, which themselves will have significant impacts, must be analyzed as elements of the larger Master Plan process, and their capacity-enhancing character must be acknowledged and evaluated.

Response:

This comment pertains to information included in earlier environmental documents prepared by LAWA pursuant to CEQA for projects unrelated to the Master Plan. FAA did not take part in the local decisions or environmental review related to the Tom Bradley International Terminal (TBIT) improvements or the Terminal 2 baggage claim facilities. Nor did FAA have any approval authority or federal action with respect to these improvements. Thus, they are not subject to NEPA. Please contact LAWA with questions regarding these local decisions. Please see Response to Comment AL00033-54 in Part II-Volume 3 of the Final EIS regarding improvements to Tom Bradley International Terminal (TBIT) under the No Action/No Project Alternative that are independent of the LAX Master Plan. In addition, please see Topical Response TR-GEN-2 in Part II-Volume 1 of the Final EIS regarding No Action/No Project Alternative Assumptions. The improvements referred to in the comment are intended to modernize the terminal facility and are not capacity-enhancing.

Since these improvements do not require NEPA review, they therefore cannot be improperly segmented from the existing NEPA analysis for the Master Plan improvements.

FAL00003-4

Comment:

The FAA simply used LAWA's inadequate documentation without revision, and in doing so neglected to use the release of the FEIS as an opportunity to address the failures of its previously released documents. Unfortunately, the First Addendum continues the previous pattern of making bold assertions regarding capacity limitations without offering any evidence to support such claims.5 For example, it specifically states that Alternative D offers the distinct environmental advantage over Alternatives A, B and C of limiting capacity to a level equivalent to the No Action/No Project ("NA/NP") Alternative. First Addendum at 5-2. However, it provides no means to enforce this assertion, and as El Segundo has demonstrated, the actual capacity of LAX under Alternative D would be about 90 MAP. The environmental documents fail to analyze the impacts of Alternative D because they erroneously assume an artificially low level of operations, far lower than the airport would actually be able to serve if this Plan is implemented.

5 As previously noted, the FAA expressly incorporates the First, Second and Third Addenda to the Final EIR into the FEIS. These Addenda are discussed in greater detail below. We discuss the First Addendum in this section, however, because it raises capacity-related issues.

Response:

Please refer to Response to Comment FAL00003-2 regarding the comparative capacity of Alternative D and the No Action/No Project Alternative and other Master Plan issues raised in this comment.

FAL00003-5

Comment:

The First Addendum does refer to the addition of a proposed new "re-study" requirement relating to capacity. It states that a "Specific Plan Amendment Study to address security benefits, traffic, and aviation activity" will occur when, inter alia, "the annual aviation activity analysis forecasts that annual passengers are anticipated to exceed 78.9 million." First Addendum at 3-2. Yet it provides no details about the nature or scope of such a study, nor does it suggest that any consequences will result from it. In addition, by making a predicted exceedance of 78.9 MAP a trigger for this study, the First Addendum appears to implicitly acknowledge the likelihood of such an occurrence.

Response:

Please see Response to Comment FAL00003-2 regarding capacity and other Master Plan issues raised in this comment.

While FAA can only speculate as to the intentions of the Los Angeles City Council with respect to its decision to include a Specific Plan Amendment Study in the LAX Specific Plan, it appears that the local decision makers were attempting to respond to local comment regarding concerns that capacity may exceed levels forecasted and disclosed in the Final EIR. While FAA and LAWA have documented the reasons that the forecast levels disclosed in the Final EIS are reasonable, a number of public comments, such as this one, have expressed doubt about the accuracy of the capacity evaluation of the Master Plan documents. Notwithstanding that it is not within FAA's role or purview to delineate details about the nature or scope of such a study, or the consequences of the study, the title and description of this provision of the Los Angeles International Airport Specific Plan (see Section 7.H.) would seem to suggest that the Specific Plan governing the overall implementation of the LAX Master Plan would be revised as necessary to update the development plan in light of any material changes in the specified assumptions. As a long-term development plan, this provision of the Specific Plan would appear to provide a regulatory mechanism for "mid-course corrections" in the implementation of the Master Plan, as necessary and appropriate based on how certain assumptions materialize over the course of time. While FAA approves an ALP based on a sponsor's Master Plan proposal after appropriate environmental review, FAA's approval of the ALP does not require the sponsor to build the entire development depicted on the approved ALP. FAA commends the local jurisdiction for being responsive to public comment and concern by indicating its intention to provide continuing review and disclosure of capacity at LAX. Far from an implicit acknowledgement that the City Council views exceedance of the forecast levels to be a likely event, it appears that the City Council has taken proactive steps to reassure the public of its commitment to the capacity constraints created by the design characteristics of Alternative D.

FAL00003-6

Comment:

Nor did the FAA use the opportunity of release of the FEIS to correct the analytical errors of and fill in the blanks left by the previous environmental review documents. Like all of the earlier documents released by the FAA, the FEIS makes broad assertions about Alternative D's capacity without supporting these assumptions with any, let alone sound, data. See e.g., FEIS at A.1-21. Moreover, the FAA's identification of Alternative D as both the environmentally and staff preferred alternative is premised on the alleged 78.9 MAP capacity of that alternative. The FAA identifies Alternative D as both the environmentally and staff preferred alternative based on claims of lower impacts from Alternative D than Alternatives A, B and C, and in some respects, the NA/NP Alternative. Yet these claims take for granted the unsupported assumption of a 78.9 MAP capacity. See FEIS at A.3-1 to 3-2. The lack of basis for these capacity claims, then, undermines the entire reasoning for selecting Alternative D as either the environmentally superior, or staff preferred, alternative.

Response:

Please see Response to Comment FAL00003-2 regarding capacity and other Master Plan issues raised in this comment. The FAA selected Alternative D as the environmentally preferable alternative because it results in more favorable environmental conditions, in many respects, than the No Action/No Project Alternative. FAA selected Alternative D as the preferred alternative because it was able to satisfy the purpose and need for the project, respond to public concerns regarding a regional airport solution to capacity in Southern California, while resulting in the least adverse environmental impacts.

FAL00003-7

Comment:

Further, none of the documents published by the FAA discusses the capacity of Alternative D as currently proposed (i.e., as modified by the Specific Plan, which made significant amendments to the Master Plan after the formulation of Alternative D) (see below for further discussion on the inconsistency between the Master Plan Project as analyzed and as approved). The capacity of Alternative D as modified by the Specific Plan may very well, because of the proposed phasing of airport improvements, exceed that of the original Alternative D. A competent capacity analysis must be completed and disclosed to the public and decision-makers before the Master Plan can be approved by the FAA.

Response:

On December 7, 2004, the Los Angeles City Council approved Alternative D for implementation. In doing so, the City Council approved the alternative in its entirety. As part of this approval, the City Council adopted the LAX Specific Plan, which approval included a restudy process that will be undertaken as individual components of the overall plan are implemented. In addition, as required by the LAX Specific Plan, as specific projects are considered and approved, additional CEQA environmental review will be required. No part of the City Council's action in approving Alternative D, or the LAX Specific Plan, changes the existing capacity analysis of the Final EIS. The FAA evaluated Alternative D as proposed, in its entirety.

Please see Response to Comment FAL00003-2 regarding capacity and other Master Plan issues raised in this comment.

FAL00003-8

Comment:

II. The FEIS Fails to Adequately Respond to Comments on Traffic, Air and Other Important Environmental Issues.

NEPA is intended to facilitate public participation in environmental decision- making. To that end, the NEPA regulations require the agency preparing an EIS to "[r]equest comments from the public, affirmatively soliciting comments from those persons or organizations who may be interested or affected." 40 C.F.R. § 1503.1(a)(4).6 The NEPA regulations also require the agency to "assess[,] consider ... and respond" to these comments. 40 C.F.R. § 1503.4(a). A final EIS must include and respond to all comments received on the draft EIS. Id.

The FEIS does not satisfy NEPA's mandate to provide meaningful responses to public comments. We submitted extensive comments on behalf of El Segundo on the Draft EIS/EIR in September 2001 and the Supplement to the Draft EIS/EIR in November 2003. These comments detailed the failure of the environmental review documents to address significant environmental impacts. The FAA's responses to comments do not adequately respond to the concerns raised by El Segundo. The FEIS perpetuates the failings of the Draft EIS/EIR and seeks to defend the assertions and conclusions of the prior documents, rather than providing meaningful public disclosures of impacts.

6 The NEPA regulations, issued by mandate by the Council on Environmental Quality, are binding on all federal agencies, except when compliance with them would be inconsistent with other federal laws. 40 C.F.R. § 1500.3. Further, "[t]he provisions of [NEPA] and of ... [the] regulations must be read together as a whole in order to comply with the spirit and letter of the law." Id. Accordingly, the NEPA regulations are treated as mandatory throughout this letter.

Response:

Part II of the Final EIS, as supplemented by Appendix AD-A of the September 2004 Addendum to the Final EIR, includes responses to all comments received on the Draft EIS/EIR and the Supplement to the Draft EIS/EIR. The comment contains only a general statement that responses to comments on the Draft EIS and Supplement to the Draft EIS did not adequately respond to the commentor's concerns. Due to a lack of specificity, FAA is unable to provide a substantive response to this comment. FAA took very seriously its mandate to provide meaningful responses to public comments. Responses to over 19,000 discrete comments were prepared. The comments and responses fill eleven volumes, and a total of 7,315 pages. Comments and responses to the two letters received from Shute, Mihaly & Weinberger LLP (AL00033 [Part II-Volume 3 of the Final EIS] and SAL00015 [Part II-Volume 10 of the Final EIS]) alone total 479 pages. The responses provide technical information and clarification pertaining to substantive issues raised in the comments.

FAL00003-9

Comment:

For example, the FAA fails to respond to the extensive comments previously submitted by air quality experts, Dr. J. Phyllis Fox and Dr. Petra Pless, on behalf of El Segundo. Those expert comments set forth the failure of the Draft EIS/EIR and Supplement to the Draft EIS/EIR to adequately analyze the air

quality effects of all four of the build alternatives. The FEIS includes a fragmented and incomplete presentation of air quality information that obscures public review. The FAA continues to neglect to analyze PM2.5 impacts, and utilizes flawed emissions standards in its air quality discussion. These analytical defects in the FAA's environmental documents result in vast underestimations of air quality impacts. They also result in a failure by the FAA to propose adequate mitigation measures for the significant air quality impacts. For further discussion on the failure of the FEIS to analyze air quality impacts, see Exhibit E (November 2004 report by J. Phyllis Fox, Ph.D., P.E., DEE, QEP, REA I/II and Petra Pless, D.Env.)7.

7 This report was prepared after the release of the Final EIR in April 2004 and First Addendum to the Final EIR in September 2004. Though the report refers to the Final EIR and the First Addendum to the Final EIR, it is equally applicable to the FEIS, as both the Final EIR and the First Addendum have been explicitly adopted by the FAA as part of the FEIS.

Response:

The comment expresses an opinion regarding the adequacy of the Final EIS. FAA has determined the Final EIS was prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, as amended, CEQ Guidance regarding NEPA (40 CFR Part 1500), and the FAA Orders 1050.1E and 5050.4A.

The Final EIS contains a detailed and thorough air quality impact analysis of the project operational and construction sources. Air pollutant emissions and concentrations were developed for all aspects of the project, as presented in Volume A; Section 4.6 (Air Quality); Appendices G, S-E, and F-B; and Technical Reports 4 and S-4 of the Final EIS, as well as in the Final General Conformity Determination.

With regard to PM2.5, FAA contacted the South Coast Air Quality Management District (SCAQMD) in December 2003 to determine if a PM2.5 analysis would be required or expected in the Master Plan EIS. The SCAQMD indicated that a PM2.5 analysis was not necessary for the LAX Master Plan EIS, noting that among other issues, the SCAQMD had not yet developed significance thresholds nor developed emission calculation methodologies for PM2.5. However, in March 2004, the SCAQMD did indicate that analysis of PM2.5 would be expected for the project-level CEQA documents that will be prepared as the individual projects implementing the Master Plan are developed. Please see Responses to Comments FAL00001-27 and FAL00001-28 regarding PM2.5. In addition, PM2.5 is addressed in Responses to Comments AL00033-329 in Part II, Volume 3, and PC02585-9 in Part II, Volume 8 of the Final EIS.

Lacking sufficient specificity in the comment to be certain, it is assumed that in the statement "The FAA continues to neglect to analyze PM2.5 impacts, and utilizes flawed emissions standards in its air quality discussion," the commentor is referencing the ambient air quality standards, which are concentrations. The Final EIS did not use flawed ambient air quality standards. Section 4.6, Air Quality, Table F4.6-3 presents the National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) in effect at the time the Final EIS was completed. This table includes the more recent 8-hour ozone NAAQS, 24-hour and annual PM2.5 NAAQS, annual PM2.5 CAAQS, and annual PM10 CAAQS. Please also see Response to Comment SAL00015-244 in Part II, Volume 10 of the Final EIS.

With regard to mitigation measures, the FAA has completed an extensive assessment of potential mitigation measures and selected those with potential air quality benefits to the project. The Mitigation Monitoring and Reporting Program (MMRP) lists the selected measures, and the individual measure implementation plans will provide the basis for ensuring compliance with the MMRP. FAA's intent has been to require all feasible mitigation measures that can be imposed consistent with 49 U.S.C. §47106(c)(1)(B). Please also see Responses to Comments AL00033-323 through 325, AL00033-333 through 337, AL00033-350, SAL00015-254 through 262, SAL00015-264 through 265, SAL00015-267 through 279, SAL00015-281, and SAL00015-289 in Part II, Volumes 3 and 10 of the Final EIS regarding mitigation measures for air quality and health risk.

Finally, please see Responses to Comments FAL00003-100 through FAL00003-139 regarding comments raised by Dr. Phyllis Fox and Dr. Petra Pless on the Final EIS air quality impact analysis and health risk assessment on behalf of the City of El Segundo. In addition, see Responses to Comments AL00033-140, AL00033-141 and AL00033-311 through AL00033-350 in Part II-Volume 3 of the Final EIS address comments raised by Dr. Phyllis Fox on the Draft EIS/EIR air quality impact analysis and health risk assessment; and Responses to Comments SAL00015-55 through SAL00015-65 and SAL00015-235 through SAL00015-289 in Part II-Volume 10 of the Final EIS address comments raised by Dr. Phyllis Fox and Dr. Petra Pless on the Supplement to the Draft EIS/EIR air quality and human

health and safety impact analysis. Please refer to the Final Clean Air Act General Conformity Determination in Appendix A-2a of Volume A of the Final EIS as well as Responses to Comments FAL00001-5 and FAL00001-37 regarding general conformity with the Clean Air Act.

FAL00003-10

Comment:

Similarly, the responses to El Segundo's expert analysis regarding the traffic impacts of the Master Plan Project seek to defend the FAA's faulty methodology. They fail to provide the necessary explanations, technical support, and documentation for the FAA's unsupported and self-serving assumptions and projections regarding future traffic. As with the FAA's "market" assumptions on capacity, its traffic modeling makes assumptions without providing any factual support. For example, the assumptions regarding the number of trips generated by the LAX Northside development are completely unsupported by land use projections. In addition, the FAA traffic modeling assigns to the freeway a number of car trips exceeding the freeway's capacity; in doing so it ignores the likelihood that cars will divert to surface streets, and ignores the impacts of those cars on the surface streets. The FEIS states that Alternative D will affect freeway segments, yet the FAA has failed to conduct any analysis on the freeway mainlines and interchanges, thus failing to disclose significant impacts and neglecting to address the need to design and implement effective traffic mitigation measures. Finally, the FAA documents fail to include any analysis of the impacts - and necessary mitigation measures - that would be associated with each phase or component of Alternative D. This is particularly important in light of revisions to Alternative D that eliminate the GTC and other Master Plan Project elements that were assumed in the FAA's traffic analysis. The FAA has provided no traffic analysis of the tens of thousands of airport trips that would be rerouted away from the proposed GTC, back to the Central Terminal Area. These and other fundamental analytical flaws are detailed in Exhibit F, attached (November 2004 analysis of Tom Brohard, PE.).8 The FAA's traffic analysis remains inadequate under NEPA.

8 This report was prepared after the release of the Final EIR in April 2004 and First Addendum to the Final EIR in September 2004. Though the report refers to the Final EIR and the First Addendum to the Final EIR, it is equally applicable to the FEIS, as both the Final EIR and the First Addendum have been explicitly adopted by the FAA as part of the FEIS.

Response:

The comment questions the analysis in the Final EIS related to traffic impacts associated with LAX Northside. As an initial matter, it is important to note that the FAA has not approved LAX Northside in the Record of Decision. In evaluating the environmental effects of LAX Northside under Alternative D, the Final EIS relies upon a mix of assumptions regarding the size and characteristics of this collateral development (see Response to Comment FAL00003-125). While this general level of planning may be appropriate in a situation where only programmatic approval is requested, FAA's approval of Alternative D is at the project level. Lacking sufficient detail and consistent planning assumptions, FAA has concluded that a decision regarding LAX Northside is not appropriate at this time.

Notwithstanding the above, the commentor has made several incorrect statements.

Relative to the assumptions for the number of trips generated by LAX Northside, page 3-33 in Part I of the Final EIS provides a specific breakdown of the nature and amounts of uses allowed within LAX Northside under the No Action/No Project Alternative (i.e., development allowed within LAX Northside based on existing entitlements). In the description of the uses for LAX Northside under Alternative D presented on page 3-81 in Part I of the Final EIS, it is stated that "The precise square footage and allocation of land uses associated with LAX Northside under Alternative D have not been identified, but would include a mix of office park, hotel, retail/restaurant, and research/development (R/D) business park uses, similar to the original LAX Northside Development." Footnote 5 in Table F4.3.2-4, Peak Hour Trip Generation of LAX Master Plan Alternatives, states "Collateral trips include those from LAX Northside, with reduced trip cap under Alternative D that would limit total trip generation within LAX Northside to a level comparable to the total trip generation under Westchester Southside." As such, the general types of land uses in LAX Northside under Alternative D can be ascertained and, inasmuch as the general types of uses allowed in LAX Northside are not dramatically different from those envisioned under Westchester Southside (i.e., office park, hotel, retail/restaurant, and research/development business park uses), order-of-magnitude amounts of various types of land uses for the purposes of the traffic analysis could be estimated based on information contained in the Final EIS. It is important to note that the operative assumption for the traffic analysis of each alternative is the actual trip generation

number that is input for the traffic model - not land use projections. As clearly indicated on page 3-81 of Part I of the Final EIS, the precise square footage and allocation of land uses associated with LAX Northside under Alternative D have not yet been determined; however, the reduction of the existing trip cap that specifically defines the maximum number of trips allowed in the AM peak hour and in the PM peak hour under Alternative D serves to substantiate the trip generation assumptions used for Alternative D. Finally, as indicated in the LAX Specific Plan adopted by the City Council in December 2004, more specifically, Section 12.c., Transportation Regulations, Project Trip Generation - LAX Northside Sub-Area Only, of the Specific Plan, the development of individual projects in LAX Northside under Alternative D will require trip generation estimates that account for all development within the subject area, and a comparison of the number of a.m. peak-hour trips and p.m. peak-hour trips to the trip cap established for Alternative D. The trip generation estimates will be subject to the review and approval of the City of Los Angeles Department of Transportation General Manager, and will be subject to later verification through actual trip counts during those peak hours.

The LAX Ground Access Model has not ignored a diversion of trips to surface streets in excess of freeway capacity. Just as it would be incorrect for transportation planning practices to assume that traffic would divert from an intersection operating over capacity (Level of Service F) until demand equaled capacity, it would be incorrect for transportation planning practices to assume that all trips above the capacity of the freeway will divert to surface streets. Changing the LAX Ground Access Model to perform as the commentor suggests would create unrealistic shifts in traffic patterns not representative of real world conditions.

The Congestion Management Program described in Section 6 of Technical Report S-2b of the Final EIS meets the requirements for analyzing the freeway mainline and interchanges. Additional analysis on the freeway mainlines and interchanges is not required. However, additional environmental documentation will be conducted during the Caltrans/FHWA review process for the proposed interchanges on the I-405 and I-105 freeways, which are traffic mitigations for Alternative D of the LAX Master Plan. The traffic studies for these proposed interchanges will further analyze their effects on the operation of the freeway mainline and adjacent interchanges.

The commentor incorrectly states that revisions to Alternative D would eliminate the GTC and other Master Plan Project elements that were assumed in the FAA's traffic analysis. While certain project components will require further review by Los Angeles City Council, pursuant to the requirements of the LAX Specific Plan, it is the FAA's understanding that LAWA intends to build all of Alternative D. The City Council's approval did not defer or eliminate any Alternative D project components. Therefore, there is no need to provide a traffic analysis for rerouting traffic from the GTC back to the Central Terminal Area.

Please also see Responses to Comments FAL00003-144, FAL00003-151, FAL00003-152, and FAL00003-160 below.

FAL00003-11

Comment:

III. The FEIS Conformity Analysis Does Not Comply with the Clean Air Act.

After carefully reviewing the Clean Air Act Final General Conformity Determination ("GCD") for LAX Proposed Master Plan Improvements, Alternative D, we have determined that the FAA has not cured the main flawed assumptions for its determination of conformity to the applicable State Implementation Plan ("SIP") that El Segundo identified in its February 6, 2004 letter on the Draft GCD and the attachments thereto. Therefore, as described below and in the technical report by Dr. J. Phyllis Fox and Dr. Petra Pless, attached hereto as Exhibit A, the Final GCD fails to comply with the requirements of section 176(c) of the Clean Air Act, 42 U.S.C. § 7506(c) and Title 40 of the Code of Federal Regulations, Part 93, Subpart B. Moreover, as discussed below, had the FAA performed an adequate analysis, it could not have found Alternative D to conform to the applicable SIP.

Response:

Please see Responses to Comments FAL00001-5 and FAL00001-37 regarding the air quality conformity determination. Also, please see Responses to El Segundo Comments I.B. and A.I.B.1.a. in Appendix C, Section 2.3 (pages C-9 and C-16) of Appendix A-2a, Final Clean Air Act General Conformity Determination, of Volume A of the Final EIS regarding development of the protocol used to

evaluate air quality conformity. FAA has complied with the appropriate criteria and procedures under the general conformity requirements at 40 CFR 93 Subpart B.

FAL00003-12

Comment:

A. The NA/NP Alternative is Unreasonably Inflated

Both the Draft and Final GCD include in their emissions estimate for the NA/NP Alternative, i.e. the baseline against which Alternative D is compared, projected emissions from the Northside and Continental City projects. Draft GCD 4-4, Final GCD 4-4. In fact, as El Segundo noted in its comments on the Draft GCD 4-4, these projects are likely never to be built, even if Alternative D is not approved, and are therefore inappropriately considered in the NA/NP Alternative. The FAA's response to these comments does not deny that no work has been undertaken on the Northside and Continental City projects since they were authorized in the early 1980s, but claims, without any support, that "if the Master Plan were not approved, it is reasonably expected that LAWA would pursue development of [the projects]." Final GCD at C-9 - C-10.

The FAA's bare assertion provides no evidence that LAWA has dusted off the decades-old plans to build these projects. Because the projects certainly do not qualify as "growth that would occur even if [Alternative D] were not constructed," (see Letter from Environmental Protection Agency ("EPA") to David B. Kessler (Jan 25, 1996), attached hereto as Exhibit G), their inclusion in the NA/NP emissions estimates is entirely inappropriate. As described in the attached technical report, the unreasonable assumption of a full buildout of these projects under the NA/NP alternative artificially inflates the baseline against which Alternative D emissions estimates are compared.

Response:

Please see Topical Response TR-GEN-2 in Part II-Volume 1 of the Final EIS regarding No Action/No Project Alternative assumptions, including assumptions regarding LAX Northside and Continental City.

The commentor is correct that buildout of the LAX Northside project has not occurred since the project was approved in 1983. However, the First Flight Child Care center was built within LAX Northside and a fire station is currently under construction. For further information regarding the appropriateness of including LAX Northside and Continental City in the No Action/No Project Alternative and the current state of those development projects, please see Response to Comment FAL00003-45.

FAL00003-13

Comment:

B. Alternative D Emissions are Underestimated.

As described in our comments on the Draft GCD, the FAA makes the unreasonable assumption that Alternative D will accommodate just 78.9 MAP and 3.1 million tons of cargo in 2015. However, as the City of El Segundo demonstrated in detail in its November 2003 comments on the Supplement to the Draft EIS/EIR, this capacity prediction of 78.9 MAP greatly underestimates LAX's actual capacity under Alternative D. As previously discussed, an independent evaluation by an airport design and capacity expert of the capacity of Alternative D established that a more realistic, though still conservative, capacity estimate for Alternative D, based on a methodical analysis of the proposed terminal and gate configurations, would be 87 MAP. By substantially underestimating Alternative D activity levels, both the Final and Draft GCD fail to disclose reasonably expected future emissions.

In response to this observation, the FAA argues that El Segundo's capacity analysis "arbitrarily continues to highlight the upper limit of potential passenger activity," and claims that El Segundo's expert report acknowledges a range of potential passenger activity that includes FAA's far lower estimate. Final GCD at C-21. FAA's comment, however, misses the mark because it mischaracterizes Professor Kanafani's analysis, which showed a range of results based on different assumptions, so that it was clear what the effects of different assumptions were. See Ex. B at 4, 6, 11, 14-15. His 87 MAP is explicitly a conservative estimate; the lower range is shown for comparison purposes and not because he or we think that is the actual capacity. Ex. B at 4, 14-15. El Segundo's approach - an effort to reach a reasonable projection of the airport's actual probable capacity - is the only one condoned by the Clean

Air Act. The statute provides that the agency must "assur[e]" that its action conforms with the applicable SIP. 42 U.S.C. § 7506(c)(1). The FAA's approach of basing its determination on a lower activity level derived from artificial and unjustified assumptions, rather than a more realistic higher one, frustrates the general purpose of the Clean Air Act, which is to protect and enhance the nation's air. 42 U.S.C. § 7401(b)(1); see Automotive Parts Rebuilders Ass'n v. E.P.A,720 F.2d 142, 159 fn. 66 (D.C. Cir. 1983) ("Statutes should be interpreted in a manner that will effectuate the purposes for which they were enacted.").

As described in the attached technical report, had the FAA employed the more realistic activity projection proffered by El Segundo's expert, it would have been unable to demonstrate conformity without additional mitigation. The Final GCD's responses to comments criticize El Segundo's earlier calculation of emissions based on the more realistic activity level of 87 MAP because it does not account for fleet changes. This response is flawed for two reasons. First, to achieve a conservative capacity estimate, the expert analysis submitted by El Segundo did not question the Master Plan's fleet mix assumptions, even though many of them appear to be unrealistic. Ex. B at 3. Moreover, El Segundo has requested from FAA the modeling files and spreadsheets with emission estimates for the Draft GCD that would enable its experts to perform a more detailed analysis of the assumptions used, in fleet mix and other variables, by FAA. In response, the FAA provided a CD containing construction emission spreadsheets for Alternatives A through D last updated November 11, 2003 and for the NA/NP Alternative last updated September 15, 1998. These files do not contain the construction emissions estimates for the Draft GCD, which differ considerably from the Supplement and the Draft EIR for which these spreadsheets were developed.

It is completely unreasonable to assume that an excess capacity of more than 8 MAP over the FAA's assumption of 78.9 MAP would not result in an increase of emissions. It can reasonably be expected that this increase would prevent a finding of conformity, for NOx emissions for aircraft and auxiliary power units for all years evaluated, where the Final GCD's emissions estimates were already very close to the emission allocations for LAX for aircraft and APUs in the SIP. See Exh. A at Comment II.A.1. In addition, reliance on the more realistic and well-documented future activity estimate of 87 MAP would prevent a finding of conformity for motor vehicle NOx emissions in all years (Exh. A at Comment II.A.2) and PM10 in 2013 (Exh. A at II.A.3).

Response:

The comment boils down to a fundamental difference of opinion regarding determination of future (2015) activity levels at LAX under Alternative D. The FAA and FAA's expert disagree with the commentor's assertion that El Segundo's estimate of future activity levels under Alternative D is "more realistic and well-documented" than that of the FAA, and that it is "conservative." The FAA has responded to each of the previous claims by the commentor regarding the capacity analysis. This includes the responses to comments on the Draft EIS/EIR (see the responses to comment letter AL00033 in Part II-Volume 3 of the Final EIS) and the Supplement to the Draft EIS/EIR (see the responses to comment letter SAL00015 in Part II-Volume 10 of the Final EIS) and the responses to comments on the Draft General Conformity Determination (GCD) see Appendix C of A-2a, Final Clean Air Act General Conformity Determination, of Volume A of the Final EIS. As indicated throughout those responses, and further articulated in the responses presented herein regarding comments on the Final EIS (see, in particular, Response to Comment FAL00003-2 above), El Segundo's activity level estimates are based on an arbitrary set of assumptions that does not reflect, or in any way account for, market-based factors that influence design day activity forecasts specific to LAX, as applied to all of the alternatives addressed in the Final EIS.

Changing the base assumptions used in the GCD analysis would change the analysis results, as would typically be the case in any quantitative model. Doing so as suggested by the commentor would not better serve the purpose of the Clean Air Act, but would simply provide a different set of data results based on future activity level assumptions that the FAA does not believe are appropriate. As described in the GCD, the FAA coordinated closely with air resource agencies regarding the methodology, assumptions, and modeling protocol used for the analysis.

FAL00003-14

Comment:

C. Mitigation in the FEIS Provides an Inadequate Basis For Demonstrating Conformity.

The Draft and Final GCD also make numerous unsupportable assumptions about the level and effectiveness of mitigation measures that are incorporated into Alternative D as part of the City of Los Angeles' compliance with CEQA. As described in the attached expert report, the FAA's emissions estimates are based on a Project design that assumes successful implementation of all the mitigation measures listed in the City's Mitigation Monitoring and Report Program ("MMRP"). See Exh. A at Comment III.A; Final GCD at 2-2, 6-1. The FAA's approach is problematic because, as discussed fully in El Segundo's comments on the Draft GCD, the Final EIR, and the Draft EIR and Supplements, the mitigation measures in the MMRP are wholly inadequate because they contain no enforceable performance standards or assurances that they will be successfully implemented. See Exh. A at Comment III.A. Therefore, the mitigation upon which the FAA relies cannot support the determination of conformity.

Response:

Section 2.1, LAX Master Plan LAWA-Staff Preferred Alternative (page 2-2) and the Response to El Segundo Comment III.B.1.c (Appendix C, Section 2.3, page C-12) in Appendix A-2a, Final Clean Air Act General Conformity Determination, of Volume A of the Final EIS) discuss the enforceability of the air quality mitigation measures. The mitigation measures are fully enforceable under Cal. Pub. Res. Code §21081.6. In addition, state regulations (§§ 15091(d) and 15097(c)(3)) and the LAX Specific Plan provide additional review and enforcement mechanisms. The Mitigation Plan for Air Quality (MPAQ), to be developed under Mitigation Measure MM-AQ-1 of the MMRP, will provide specific mechanisms to enforce the mitigation measures and ensure that all feasible mitigation measures are identified and implemented.

FAA is requiring, as a condition of its final approval in the Record of Decision, that LAWA and the City implement the air quality mitigation measures described in Appendix A of the ROD, which are also included in the adopted LAX Master Plan MMRP. By including this condition of approval in the ROD, the condition will be enforceable through special grant assurances in grant agreements entered into with the City for Alternative D. In addition, as noted in Section 2.1 of the Final General Conformity Determination (Appendix A-2a of Volume A of the Final EIS), all of the CEQA-related mitigation measures that FAA relied upon in the general conformity evaluation have been expressly adopted by LAWA and the City in approving Alternative D.

FAL00003-15

Comment:

D. Conclusion

In order to demonstrate Alternative D's conformity to the applicable SIP, the FAA relied on manifestly unreasonable assumptions. When the analysis is based on the proper foundation, it is clear that the Project as proposed does not, in fact, conform. The FAA has therefore abused its discretion and may not approve Alternative D until changes to the Master Plan Project, including appropriate mitigation rneasures, and measures assuring appropriate adjustment of airport facilities to effectively maintain the target capacity of 78.9 MAP, allow for a true demonstration of conformity.

Response:

Please see Response to Comment FAL00001-37 regarding the acceptability of the methods used in the general conformity evaluation. Please also see Response to Comment FAL00003-23 regarding the appropriateness of air quality mitigation measures.

Appendix A of the ROD identifies those mitigation measures that are required as a condition of approval of the project.

FAL00003-16

Comment:

IV. The Environmental Impact Analysis Remains Incomplete Without the Results of the Pending RAND Corporation Security Study.

Responding to public skepticism about whether Alternative D - the preferred "security enhancing" alternative - would actually improve security at the airport, the City of Los Angeles commissioned the RAND Corporation, a non-profit research organization that specializes in security analysis, to study the security implications of Alternative D. A report on the first part of this two-part study was released on September 24, 2004. September 24, 2004 RAND Corporation Study attached hereto as Exhibit H.9 Focusing on current operations, the study concluded that significant vulnerabilities exist that make LAX a tempting terrorist target.

LAWA stated that the second part of the RAND study would address the security implications of Alternative D. All agencies involved with the Master Plan process have pointed to the commissioning of this study as evidence of their commitment to improving the safety, rather than increasing the capacity, of LAX. However, the Master Plan Project approval process has proceeded without the results of this important study. This is Wholly inappropriate, as the pending RAND analysis will help to determine the merits of a primary justification for Alternative D: increased security.

9 The RAND Corporation previously prepared a report on the security implications of Alternative D, at the request of Congresswoman Jane Harman. This prior report is attached hereto as Exhibit I.

Response:

This comment does not pertain to the adequacy of the Final EIS or FAA's compliance with NEPA requirements. Nevertheless, it is important to note that LAWA, FAA, and the Transportation Security Administration (TSA) are engaged in an evolving and ongoing process of improving security at LAX. In addition to immediate action planning, an independent security analysis was completed by SAIC and is described in Appendix I, Comparative Security Analysis of Alternative D and the No Action/No Project Alternative, of the Final LAX Master Plan. Also, a study titled Near-Term Options for Improving Security at Los Angeles International Airport, prepared by the RAND Corporation and published in September 2004, reiterated the primary security threats facing LAX that were identified and incorporated into the planning of Alternative D. Since this study was published, LAWA has provided additional detailed analysis to the Los Angeles City Council regarding the addition of permanent check points at the existing LAX Central Terminal Area and regarding passenger movement and densities in the existing terminals. The next two steps in the ongoing security planning process consist of: 1) a continuing study by the RAND Corporation on the Long-Term Options for Improving Security at LAX, and 2) involving project-level security analysis as part of the LAX Specific Plan approval process.

The LAX Master Plan is a comprehensive airport modernization plan. As one point of study, it addresses the new environment of airport security following the events of September 11, 2001. However, this is only one issue that requires balance with other long-term facility planning issues. Improving ground transportation access reliability, reducing air quality impacts and reducing the risk of runway incursions are just some of the other critically important goals of the plan. The primary function of an airport is to provide safe, efficient and reliably facilities for the movement of people and goods. The commentor and others have tried to compare the security plan of Alternative D in the year 2015 to the existing state of airport security. This comparison is made as a way of attacking one element of the justification for a comprehensive set of airport-wide improvements. The level and quality of airport security can never be adequately judged in this type of comparison. Security functions must be maintained and, over time, improved as activity levels increase and as threats to aviation security change. Just meeting the current TSA passenger and baggage screening space needs at LAX has come at the price of increased passenger delay and discomfort from levels experienced prior to September 11, 2001.

The LAX Master Plan provides relief to this congestion while improving on the security plan. The LAX Specific Plan requires that security be studied further in conjunction with the plan's implementation. This is the appropriate course of action for implementing a long-term airport master plan and it meets, if not exceeds, any and all specified federal airport security requirements.

For additional information on security issues related to LAX, please see Topical Response TR-SEC-1 in Part II-Volume 1 of the Final EIS.

FAL00003-17

Comment:

V. Resources Have Been Prematurely Committed that Prejudice the Selection of an Alternative.

The NEPA regulations expressly forbid agencies from prematurely committing resources that prejudice the selection of an alternative before a final decision is made. 40 C.F.R. §§ 1506.1(a)(2), 1502.2(f). In other words, an agency cannot commit to elements of its proposed project, so as to effectively encourage the selection of that alternative.

Moreover, during the NEPA process, if the federal agency considering the non- federal entity's application is aware of the project proponent taking any actions that prematurely commit resources to the proposed project, the federal agency must promptly notify the project applicant that it will "take appropriate action to insure that the objectives and procedures of NEPA are achieved." 40 C.F.R. § 1506.1(b); Forty Most Asked Questions Concerning CEQ's NEPA Regulations ("Forty Questions") No. 11. Such action "could include seeking injunctive measures under NEPA, or the use of sanctions available under either the agency's permitting authority or statutes setting forth the agency's statutory mission. For example, the agency might advise an applicant that if it takes such action the agency will not process its application." Forty Questions No. 11.

El Segundo has repeatedly noted that LAWA has impermissibly segmented individual projects from the larger Master Plan Project, before the Project was approved. See e.g. Ex. C at 2; Ex. D at 1-2. For example, LAWA has consistently inappropriately portrayed improvements to the Tom Bradley International Terminal ("TBIT") as separate from the Master Plan Project. Yet the TBIT improvements appear to be an integral element of LAWA's larger plan to modify LAX facilities to accommodate both additional passengers and, more specifically, the so-called New Large Aircraft ("NLA"). The first NLA, the Airbus A-380, was unveiled on January 18, 2005 and is slated for delivery and operations beginning in spring 2006. See "A Plane as Big as the Globe," Los Angeles Times (Jan. 17, 2005) attached hereto as Exhibit J. Other elements of LAWA's plans to accommodate NLAs are described in the LAX Master Plan and the LAX Southside Airfield Improvement Program (which includes the following elements: Runway 25L Relocation, Center Taxiway, Airfield Intersection Improvements, Remote Boarding . Facilities Modifications). The TBIT project is an integral element of LAWA's overall effort to accommodate NLAs and should not be segmented from that program and the Master Plan generally.

In addition, El Segundo has repeatedly noted that the massive increase in TBIT's baggage handling capacity appears to be geared to accommodating baggage that would be produced by the planned West Satellite Concourse that Alternative D proposes to add west of and connected to the TBIT. See Final Mitigated Negative Declaration for the TBIT and Baggage Screening Facility (November 2004) at A-28. As such, the addition of baggage handling facilities as part of the proposed TBIT project would ultimately serve (and appears designed to serve) the new gates proposed as part of the Master Plan.

On January 25, 2005, the Board of Airport Commissioners of the City of Los Angeles ("BOAC") voted to approve the TBIT project and adopt the Final MND prepared for it. This is a major step towards project implementation, and represents a prejudicial commitment of resources in violation of NEPA. As explained above, LAWA's attempts to characterize the TBIT project as separate from the Master Plan Project constitute impermissible segmentation of the Master Plan Project. In reality, the TBIT Project is an element of the larger Master Plan Project.

Response:

This comment states, "The NEPA regulations expressly forbid agencies from prematurely committing resources that prejudice the selection of an alternative before a final decision is made. 40 C.F.R. §§ 1506.1(a)(2), 1502.2(f). In other words, an agency cannot commit to elements of its proposed project, so as to effectively encourage the selection of that alternative. Moreover, during the NEPA process, if the federal agency considering the non- federal entity's application is aware of the project proponent taking any actions that prematurely commit resources to the proposed project, the federal agency must promptly notify the project applicant that it will "take appropriate action to insure that the objectives and procedures of NEPA are achieved." 40 C.F.R. § 1506.1(b); Forty Most Asked Questions Concerning CEQ's NEPA Regulations ("Forty Questions") No. 11." The commentor is asserting that improvements to the Tom Bradley International Terminal ("TBIT") and the Baggage Screening Facilities Project are

actions that are integral to Alternative D, and designed for the purpose of serving the Alternative D improvements. To the contrary, these actions are independent of Alternative D, and have their own independent utility, as described in greater detail below. Furthermore, these projects do not prejudice in any way the selection among the alternatives presented in the Final EIS, as their implementation, or lack thereof, does not make any specific alternative evaluated in the Final EIS more desirable or more likely to be selected.

Please see Response to Comment AL00033-54 in Part II-Volume 3 of the Final EIS regarding improvements to TBIT under the No Action/No Project Alternative that are independent of the LAX Master Plan. Please see Topical Response TR-GEN-2 in Part II-Volume 1 of the Final EIS regarding No Action/No Project Alternative assumptions.

As noted by the commentor, LAWA has recently approved the TBIT Interior Improvements and Baggage Screening Facilities Project. The purpose of this project is to provide permanent state-of-the-art baggage screening facilities which comply with new federal security requirements, to modernize and enhance interim airport services at the terminal, and to accommodate, on a short-term basis in a more convenient location, a limited number of New Large Aircraft (NLA). LAWA prepared a Mitigated Negative Declaration (MND) for that project, including responses to comments similar to this one (see, for example, Tom Bradley International Terminal Final Mitigated Negative Declaration, November 2004, Section 2, Response A-2 and Response A-3). As indicated in the referenced responses, the capacity of LAX is constrained by the number of gates and aircraft and by the existing ground transportation systems, not the amount of floor area. The planned TBIT improvements would not increase existing passenger capacity or aircraft parking capacity at the airport, nor improve the ground transportation system. Increases in floor area would address overcrowded conditions and increase safety and security.

As further indicated in Response A-3 of the TBIT MND, the TBIT Project's improvements related to NLA are not integral to or inappropriately segmented from the LAX Master Plan or the South Airfield Improvement Program. The improvements are interim, short-term measures that will serve as a bridge to accommodate NLA operations until the Master Plan can be implemented. The short-term configuration of NLA gates is not necessary for, and would not facilitate, the long-range Master Plan.

With regard to the planned baggage handling area, the improvements are proposed to satisfy federal security mandates for baggage screening and to provide an in-line solution that will remove the screening devices from their temporary location within the lobby area. The baggage facility screening faculties being proposed are to handle TBIT's requirements, not future requirements of the West Satellite Concourse. As proposed under Alternative D, the West Satellite Concourse would have its own limited baggage handling system, with primary baggage handling and screening at the new terminal proposed with the Central Terminal Area in space currently occupied by existing parking garages.

It should be noted that, these improvements do not require NEPA review as there is no federal action or approval related to their implementation. They therefore cannot be improperly segmented from the existing NEPA analysis for the Master Plan improvements.

FAL00003-18

Comment:

VI. The FEIS Does Not Adequately Explain the Master Plan Project's Inconsistencies with Regional Land Use Plans or Attempt to Reconcile these Inconsistencies.

The NEPA regulations require an EIS to identify any "[p]ossible conflicts between the proposed action and the objectives of Federal, regional, State, and local ... land use plans, policies and controls for the area concerned." 40 C.F.R. § 1502.16(c)1506.2(d); see also 40 C.F.R. § 1506.2(d). In addition, where inconsistencies exist, the EIS "should describe the extent to which the agency would reconcile its proposed action with the plan or law." 40 C.F.R. § 1506.2(d). While a project can proceed despite determinations of inconsistency with federal, regional, state, or local plans, the EIS should discuss reasonable possibilities for resolving these inconsistencies. Forty Questions Nos. 23a, 23c. The FAA has failed to adequately discuss inconsistencies with various local and regional plans, and it has not satisfactorily attempted to resolve these inconsistencies.

In April 2001, the Southern California Association of Governments ("SCAG") adopted a Regional Transportation Plan ("RTP") that advocated a regional approach to meeting the area's projected airport demand. As part of the RTP, SCAG adopted an aviation strategy that called for a maximum capacity at LAX of 78 MAP in the year 2025. Additional demand would be satisfied by other regional airports.

As detailed above, despite claims by LAWA, the FAA and others, Alternative D does not limit capacity to 78.9 MAP, let alone 78 MAP as called for in the RTP. Rather, conservative estimates place its actual capacity at 87 MAP - far more than the level identified in the RTP. Adhering to the passenger levels advocated by SCAG would require a truly regional plan, rather than a capacity enhancing approach that the FAA chooses to label a "regional alternative."

Far from acknowledging the inconsistencies between Alternative D and the RTP as required by NEPA, the FAA attempts to circumvent this mandate by claiming that, of all the build alternatives, Alternative D is the most consistent with the RTP. FEIS at A.3-1. Yet it does not, nor can it, claim that Alternative D is entirely consistent with the RTP.10 To the extent that it claims consistency with the RTP, the FAA does so by maintaining that Alternative D fulfills the policy framework of the aviation strategy that calls for no increase in capacity at LAX. Id. However, as discussed, this claim is not supported by the evidence of Alternative D's capacity enhancing features, and is entirely rebutted by the expert analysis submitted by El Segundo. Thus, Alternative D is not consistent with the RTP; to comply with NEPA, the FAA must identify these existing inconsistencies, explain the extent to which LAWA proposes to resolve them, and discuss existing possibilities for resolving them. In this case, such possibilities include the adoption of a truly regional plan. This discussion is conspicuously absent throughout the FEIS.

10 Similarly, the FAA neglects its duty to discuss inconsistencies with the City of Los Angeles General Plan. Rather than acknowledging Alternative D's inconsistencies with the General Plan, it discusses how the NA/NP Alternative will not fulfill all of the elements of the General Plan, and emphasizes the limited features of Alternative D that are consistent with specific elements of the General Plan. FEIS at 3-1 to 3-2. This does not satisfy NEPA's mandate to discuss inconsistencies with local plans.

Response:

The Final EIS fully addresses Alternative D's consistency with applicable land use plans in compliance with NEPA. With respect to the City of Los Angeles General Plan, Part I of the Final EIS addressed both consistencies and inconsistencies of Alternative D with this Plan (including the Framework Element, Transportation Element and Bicycle Plan, Noise Element, Westchester-Playa del Rey Community Plan, and South Los Angeles Community Plan) in Section 4.2, Land Use. Supporting technical data and analysis were provided in Technical Reports 1 and S-1 of the Final EIS. With respect to other applicable land use plans, please see Response to Comment FAL00003-19 regarding local land use plans, and Topical Response TR-MP-2 in Part II-Volume 1 of the Final EIS regarding the SCAG Regional Transportation Plan (RTP).

In general, this comment represents a continuation of the commentor's debate with the FAA and its experts regarding the reasonableness of FAA's forecasts in the Final EIS. Please see Response to Comment FAL00003-2 regarding capacity and growth issues.

FAL00003-19

Comment:

In addition, the FEIS fails to include an analysis of the Los Angeles County Airport Land Use Plan ("CLUP") prepared by the Los Angeles County Airport Land Use Commission ("ALUC"), pursuant to the State Aeronautics Act, California Public Utilities Code section 21670 et seq. On August 26, 2004, the ALUC unanimously determined that the LAX Master Plan and related documents were inconsistent with the CLUP, a comprehensive land use plan to facilitate orderly airport growth and minimize noise and risk to public welfare. See Pub. Util. Code § 21675(a).11 See Resolution of the Airport Land Use Commission Aviation Case No. 04-162-(2,4) and accompanying staff reports, attached hereto as Exhibit K. The FEIS is silent on both the CLUP itself and the ALUC's determination of the Master Plan Project's inconsistency with it. This approach violates NEPA's mandate to discuss, and seek to resolve, inconsistencies with other federal, state, regional, and local land use plans and policies.

Having reached an impasse with the City of Los Angeles over the Master Plan process, El Segundo submitted an appeal to the ALUC regarding the Master Plan's inconsistency with the purposes of the State Aeronautics Act. See Appeal to the ALUC of the December 7, 2004 action by the Los Angeles City Council adopting the LAX Master Plan Improvements Project (Dec. 29, 2004), attached hereto as

Exhibit L. A hearing on this appeal, as well as a similar one filed by Los Angeles County, is tentatively scheduled for March 30, 2005. The FAA should recognize this ongoing local process and delay action on the LAX Master Plan until the local review process is complete.

11 This determination was overruled by the Los Angeles City Council in October 2004.

Response:

Consistency of Alternative D with the County Airport Land Use Plan (or CLUP) was analyzed on page 4-301, in Section 4.2, Land Use and Section 4.24.3 (subsection 4.24.3.6.5), Safety, in Part I of the Final EIS. Policies of the CLUP and the current status of the CLUP update were presented in Technical Reports 1 and S-1, respectively, of the Final EIS.

While it is understood that the Airport Land Use Commission (ALUC) found the LAX Master Plan inconsistent with the CLUP, the role of the ALUC is advisory. Pursuant to State law, the local agency (LAWA) can overrule the determination of the ALUC by holding a public hearing to propose to overrule the ALUC by a two-thirds majority vote, make specific findings that the proposed project is consistent with the purposes of the State Aeronautics Act, and provide the ALUC at least 45 days notice of these actions.

LAWA has complied with these requirements. In light of the ALUC's determination that the LAX Master Plan is inconsistent with the CLUP, pursuant to state law, on October 19, 2004, the Los Angeles City Council voted with a supermajority of 12 to 3 of the 15 council members to propose to overrule the ALUC determination. Following that initial vote the City followed state law to provide 45 days notice to the ALUC and other appropriate parties of the City's intent to overrule the ALUC. On December 7, 2004, the Los Angeles City Council overruled the ALUC determination by a vote of 12-3.

FAA understands that the noise and safety issues raised by the ALUC and attached in the commentor's letter as Exhibit K were addressed and responded to by LAWA in specific findings. A copy of the State Aeronautics Act Specific Findings to Overrule the Los Angeles County Airport Land Use Commission Determination Regarding the Los Angeles International Airport Master Plan Program Actions (adopted by City Council on December 7, 2004) and related documents that comprise the administrative record for LAWA, are available for review during normal business hours at the LAX Master Plan office, located at 1 World Way, Room 218.

Subsequent to the December 7, 2004 vote, the ALUC introduced a new "impasse appeal procedure" for airport master plans. That procedure was not included in the ALUC's comprehensive land use plan that was applicable at the time of the Los Angeles City Council decisions approving implementation of Alternative D. FAA has closely followed the local decision making process for the LAX Master Plan. After full consideration of the information available to the FAA, including a letter from Caltrans to the Airport Land Use Commission dated January 28, 2005, as well as Caltrans' comments on the Los Angeles City Council's proposal to override the Airport Land Use Commission, the Agency continues to be satisfied that a final decision to implement Alternative D has been made by the Los Angeles City Council. Therefore, FAA finds that the LAX Master Plan has been developed in coordination with appropriate public agencies and that appropriate action has been or will be taken to restrict, to the extent possible, the use of land in the vicinity of the airport to purposes compatible with airport operations. The City of Los Angeles, during the preparation of the EIS, expressed its intent to diligently pursue the compatibility of land uses around the airport. The City of Los Angeles has also provided the required written land use compatibility assurance letter to the FAA (See Appendix E to Part I of the Final EIS). Based on the above, the FAA does not find it necessary to delay action on the LAX Master Plan.

Regarding El Segundo's appeal to the ALUC regarding the Master Plan's inconsistency with the purposes of the State Aeronautics Act, the FAA considers this a local issue and beyond the scope of the EIS.

FAL00003-20

Comment:

VII. The First, Second and Third Addenda Do Not Remedy Failures in the Draft EIS/EIR and the Supplement to the Draft EIS/EIR and Instead Create New Problems.

Subsequent to LAWA's release of the Final EIR, but before the FAA's release of the FEIS, LAWA released four addenda to the Final EIR. The First Addendum was released in September 2004. The

Second, Third and Fourth Addenda were released in December 2004, and were not made available to the public until after the City of Los Angeles approved the Master Plan Project, and certified the EIR. Consequently, El Segundo had no opportunity to comment on these three Addenda before LA approved the Master Plan.

As noted, the FAA explicitly adopts the First, Second and Third Addenda to the Final EIR as components of the FEIS. It does not, however, adopt the Fourth Addendum. We, therefore, comment on the First, Second and Third Addenda in this letter, and note that the public still has had no opportunity for comment on the Fourth Addendum. As the discussion below demonstrates, these addenda represent "significant new information," such that a supplement to the EIS is required, and must be recirculated for public review and comment, under NEPA.

Response:

The information provided in the First (i.e., September 2004), Second and Third addenda does not present "significant new. . . information relevant to environmental concerns" that would warrant preparation of a supplement to the EIS. Each of the addenda, and the information contained therein, was assessed by FAA to determine the level of significance of the information. The First Addendum clarifies the differences in approach and methodology used to determine environmental justice impacts under CEQA and NEPA, updates information pertaining to acquisition and relocation, amplifies the discussion of alternatives, and clarifies various aspects of the previous environmental documentation, including air quality mitigation measures, refinements to entitlement documents, and refinements to the Environmental Action Plan. The Second Addendum focuses on updated information relative to actions of the California Coastal Commission and the U.S. Fish and Wildlife Service and the implications of such actions as they relate to coastal resources and endangered and threatened species. The Third Addendum provides updated traffic analysis and refinements to the off-airport transportation system improvements mitigation program. This information, as well as an expanded discussion for NEPA purposes, is also presented in Volume A of the Final EIS.

FAA concluded that the addenda, whether viewed individually or collectively, provide information that, although revised, does not substantially alter the environmental effects under NEPA previously disclosed in the Supplement to the Draft EIS. None of addenda identify significant impacts that were not previously disclosed. Thus, a supplement was not required. However, in order to provide the public an opportunity to review and comment, the Final EIS, which includes these addenda, was released to the public on January 13, 2005. The Notice of Availability of the Final EIS appeared in the Federal Register on January 21, 2005.

FAL00003-21

Comment:

A. First Addendum

The First Addendum to the Final EIR was released in September 2004. This Addendum includes additional discussion about the environmental consequences of the Master Plan Project, a description of changes made to the LAX Plan and the LAX Specific Plan, a brief overview of three additional alternatives offered by various commentors, and an explanation of alterations made to the Environmental Action Plan. In addition, the First Addendum includes an Errata to the Final EIR.

Unfortunately, the First Addendum not only fails to correct the inadequacies of the previous environmental review documents, but it also raises new problems. Amendments to the Master Plan Project are now proposed that add a bit more space here, and a few more job relocations there, which all add up to more additional capacity for LAX. In addition, the First Addendum follows the pattern of prior environmental documents of deferring decision making regarding mitigation and other important aspects of plan implementation, for a later date. This approach of non-analysis violates NEPA. The discussion that follows walks through the First Addendum, including the Errata to the Final EIR, and explains its deficiencies.

Response:

Comment noted. Please see Responses to Comments FAL00003-22 through FAL00003-35 below. In particular, please see Response to Comment FAL00003-23, as well as Response to Comment FPC00004-11, which addresses the commentor's assertion related to "deferring decision making regarding mitigation", and Responses to Comments FAL00003-22 and FAL00003-28 regarding the

commentor's incorrect statement that the First Addendum discloses "a bit more space here, and a few more job relocations there, which all add up to more additional capacity for LAX."

FAL00003-22

Comment:

1. Additional Discussion of Environmental Consequences

a. Relocation Plan/Property Acquisition

The First Addendum acknowledges that, in its present form, Alternative D as amended calls for the acquisition of 20,026 square feet of air freight space and 4,874 square feet of office space in addition to the extensive property acquisition previously disclosed in the Final EIR. First Addendum at 2-1. It goes on to claim, without any justification, that these substantial additions of acquired property will have no associated business relocation impacts. These figures represent significant additional acquisition of air freight and office space from what was originally presented in the Draft EIS/EIR and Supplement to the Draft EIS/EIR. That they will not have significant associated relocation impacts is far from obvious. Such unlikely claims cannot be believed without evidence provided to support them.

Similarly, the First Addendum admits that nearly 100,000 square feet of office space, which was not identified in the Master Plan and not previously analyzed, must be relocated off site, yet it asserts that this will not result in any significant relocation impacts. First Addendum at 2-5. Not only are these relocation claims unconvincing, but such an addition has likely capacity-enhancing implications for LAX. The relocation of this significant amount of office space off site will open it up for additional on-site operations, resulting in a likely increase in service at the airport.

The impacts of these additional acquisitions - both regarding relocation and capacity enhancement - must be analyzed and discussed. The First Addendum does not do so.

Response:

As indicated on page 4-540 in Section 4.4.2, Relocation of Residences or Businesses, of Part I of the Final EIS, there are no federal standards that define significance thresholds for impacts due to the relocation of residents or businesses. However, Section 47(e)(3) of FAA Order 5050.4A, of the Airport Environmental Handbook, requires that if there is potential for business relocation to create a severe economic hardship on the community, analysis is required. The Order further states, in paragraph 85c(5), that a detailed explanation of effects associated with business relocation, and why they cannot be avoided should be provided if the relocation would cause appreciable economic hardship on the community, direct significant changes in employment, or substantial community disruption.

As further described on pages 2-1 and 2-2, in subsection 2.1.1 of the September 2004 Addendum to the Final EIR (i.e., First Addendum), the acquisition of an additional 20,026 sq. ft. of air freight and 4,874 sq. ft. of office uses are based on updated property statistics on parcels proposed for acquisition under Alternative D. No additional parcels are proposed for acquisition. The additional office space represents a 2 percent increase of the 240,607 sq. ft. of office space to be acquired, as identified in Section 4.4.2, Relocation of Residences or Businesses, of Part I of the Final EIS. This 2 percent increase (4,874 sq. ft.) does not represent a significant increase in office acquisition and could easily be absorbed into the nearly 3 million sq. ft. of office space that is available in the surrounding areas. In addition, due to changes in conditions within affected parcels, nine fewer office businesses would require relocation compared to the earlier analysis. Therefore, relocation associated with this acquisition is not expected to cause an appreciable economic hardship, a significant loss of employment, or substantial community disruption. Furthermore, as indicated in the Final EIR, businesses would be relocated in compliance with the Uniform Relocation and Assistance and Real Property Acquisition Policies Act of 1970, as amended (Uniform Act).

The additional acquisition of air freight use represents a 14 percent increase of the 146,867 sq. ft. of air freight space to be acquired, as identified in Section 4.4.2, Relocation of Residences or Businesses, of Part I of the Final EIS, with one additional business requiring relocation. These changes do not represent a substantial increase in the severity of air freight related relocation effects. As indicated on page 4-556 in Section 4.4.2, Relocation of Residences or Businesses, of Part I of the Final EIS, as of the first quarter of 2000, vacancy rates showed 500,000 square feet of industrial building space available in the LAX/El Segundo/Hawthorne area. This is approximately three times the amount of air freight space proposed for acquisition under Alternative D. Given compliance with the provisions of the

Uniform Act, and advisory and financial assistance under LAWA's relocation assistance project, the relocation of five air freight businesses under federal standards is not expected to cause an appreciable economic hardship, a significant loss of employment, or substantial community disruption.

As indicated in the First Addendum, the nearly 100,000 sq. ft. of office space that would be relocated under Alternative D, represents tenancies in property currently owned by LAWA and therefore would not require acquisition. The potential relocation of these tenants does not represent a substantial change in the nature of impacts previously disclosed because the tenants could be absorbed in the nearly 3 million square feet of vacant office space in the vicinity of the airport. These office tenancies are located within the LAX Master Plan boundaries, and would be developed with the uses proposed under Alternative D. Even though this leased office space was not previously identified in Section 4.4.2, Relocation of Residences or Businesses, of Part I of the Final EIS, this information does not change the uses proposed under Alternative D or influence its capacity. This leased office space was not quantified in the April 2004 Final EIS because it was anticipated at the time that all of the tenants could be relocated on airport property (see footnote on page 4-556). Subsequent to publication of the 2004 Final EIR further consideration was given to the possibility that the feasibility of relocating all tenants on airport property may not coincide with the phasing of the Master Plan improvements occurring on the airport. As such, the potential for associated relocation effects was evaluated in the First Addendum. As indicated above, however, such relocation, should it be necessary, would not cause an appreciable economic hardship, a significant loss of employment, or substantial community disruption.

FAL00003-23

Comment:

b. Air Quality

The First Addendum suggests that important changes were made to mitigation measure MM-AQ-1, which provides for the development of an LAX Master Plan-Mitigation Plan for Air Quality. It claims that these revisions clarify the measure's intent. First Addendum at 2-11. Such clarification would be desirable, as the mitigation measure is nebulous and noncommittal. However, MM-AQ-1 does little more than change word choices of the original mitigation measure. It still avoids making binding commitments to air quality improvement, and does not clarify the intent of the mitigation strategy.

In its discussion of the Master Plan Project's air quality mitigation measures, the First Addendum defers the development of concrete commitments until a later date. It refers to future consultations with other agencies to develop an air quality mitigation plan, rather than identifying specific measures to mitigate the extensive air quality impacts that the project will create. NEPA requires the identification of actual mitigation measures. An abstract commitment to mitigation in the future does not satisfy the Act's mandates and removes the program from public review.

Response:

The intent of the mitigation program at LAX for the Master Plan has always been to implement all feasible measures to reduce air quality impacts. The list of potential measures reflects input received from regulatory agencies and the public. Attachment X in Technical Report 4, Air Quality Technical Report, presented the initial set of mitigation options under consideration. Additional options were added from comments received on the Draft EIS/EIR and Supplement to the Draft EIS/EIR. The comment suggests that specific mitigation measures with quantifiable benefits have not been developed for Alternative D. To the contrary, mitigation measures are identified in the Mitigation Monitoring and Reporting Program (MMRP), including measures for which air quality benefits have been quantified (airport remote flyaway facilities, GSE conversions to zero or near-zero emission technologies, and various construction related measures) as well as measures for which air quality benefits have not yet been quantified (promotion of transit and ridesharing transportation options for employees, tenants, and passengers; highway and roadway improvements, parking improvements, assistance in developing clean vehicle fleets, and energy conservation measures). Some of these measures are required to be implemented as conditions of FAA approval and are identified in Appendix A of the ROD. Although some elements of the mitigation program have yet to be fully designed, a sufficiently detailed mitigation program has been disclosed in the Final EIS, with the potential for additional measures to be added in the future.

The listing of all potential measures considered for the Final EIS is included in a memorandum from Anthony Skidmore, CDM, to Herb Glasgow, LAWA, entitled "Inventory of Air Quality Mitigation Measures Considered in Conjunction with the LAX Master Plan EIS/EIR" and dated December 6, 2004.

Over 50 individual mitigation components are included in or have the same intent as Mitigation Measure MM-AQ-2 (Construction-Related Measure), Mitigation Measure MM-AQ-3 (Transportation-Related Measure), and/or Mitigation Measure MM-AQ-4 (Operations-Related Measure). Of these, 19 were obtained from City of El Segundo comments (comment letter AL00033 in Part II-Volume 3 of the Final EIS), 18 were obtained from the South Coast Air Quality Management District comments (comment letter AR00004 in Part II-Volume 2 of the Final EIS), and 7 were obtained from the other public comments. Further, over 100 suggested measures were either part of the Master Plan design, part of an ongoing LAWA program, or required by existing regulations and could not be categorized as mitigation.

In addition to the mitigation measures that LAWA has committed to implement, LAWA has also committed to limit airport emissions in 2015 to the values presented in the MMRP. Therefore, if it is determined through the mitigation monitoring program that airport inventories will not meet the specified limits by 2015, LAWA will be required to develop additional reductions to meet the limits. This may be done by quantifying air quality benefits from measures implemented but not previously quantified and/or by identifying and implementing new measures.

Finally, the enforceability of the mitigation measures is discussed in Section 2.2, LAX Master Plan LAWA-Staff Preferred Alternative of Appendix A-2a, Final Clean Air Act General Conformity Determination, of Volume A of the Final EIS, and Response to El Segundo Comment III.B.1.c in Appendix C of Appendix A-2a. The FAA has required, as a condition of its final approval in the Record of Decision, that LAWA and the City implement the mitigation measures as contemplated in the adopted LAX Master Plan MMRP. In addition, the mitigation measures are fully enforceable under Cal. Pub. Res. Code §21081.6. California regulations also require compliance with mitigation requirements as stated in a mitigation and monitoring reporting program (MMRP); see 14 C.C.R. §§15091(d) and 15097(c)(3).

FAL00003-24

Comment:

In addition, the First Addendum claims that the elements of mitigation measures MM-AQ-2, MM-AQ-3 and MM-AQ-4 were selected from the universe of suggested mitigation approaches because they "are considered to be the most feasible and effective methods to mitigate the air quality impacts of the LAX Master Plan." First Addendum at 2-12. Yet no evidence is provided to support this assertion. As an attachment to both our September 18, 2001 comment letter following the release of the Draft EIS/EIR, and our November 4, 2003 comment letter on the Supplement to the Draft EIS/EIR, we included numerous mitigation measures suggested by air quality experts, Dr. J. Phyllis Fox and Dr. Petra Pless, that are feasible and have been utilized elsewhere, yet have not been included in the proposed mitigation measures. Thus, the First Addendum clearly did not include all feasible and effective mitigation measures.

Response:

Please see Response to Comment FAL00003-23 regarding the selection of air quality mitigation measures. The commentor correctly cites the First Addendum to the Final EIR which notes that mitigation measures MM-AQ-2, MM-AQ-3, and MM-AQ-4 are considered to be the "most feasible and effective methods" to mitigate the air quality impacts of the LAX Master Plan, where "most" is taken in the sense of "to the greatest extent." While FAA expresses no opinion on the feasibility and effectiveness of the mitigation measures proposed by Drs. Fox and Pless, LAWA and FAA have identified the mitigation measures that they consider to best combine air quality benefits and implementation feasibility. Neither LAWA nor FAA claim to have adopted every conceivable measure or every measure that has been utilized elsewhere. Please also see Response to Comment FAF00001-07 regarding the development of the LAX Master Plan Mitigation Plan for Air Quality (LAX MP-MPAQ) and the process for including all feasible mitigation measures in developing detailed mitigation measures MM-AQ-1, MM-AQ-2, MM-AQ-3, and MM-AQ-4. As indicated in that response, LAWA is currently following a process to develop the components of the LAX MP-MPAQ (i.e., MM-AQ-2, Construction-Related Measure, MM-AQ-3, Transportation-Related Measure, and MM-AQ-4, Operations-Related Measure). The identification of certain required components as part of mitigation measures MM-AQ-2, MM-AQ-3, and MM-AQ-4 as the most feasible and effective methods in no way precludes the identification, during this implementation process, of additional measures which may also be feasible and effective. FAA encourages LAWA to take into consideration those mitigation measures referenced in the comment that are found to be feasible and appropriate but are not currently included as specific elements of MM-AQ-1, MM-AQ-2, MM-AQ-3 or MM-AQ-4.

FAL00003-25

Comment:

Similarly, the Fourth Addendum to the EIR identifies additional mitigation measures that would help to offset the air quality impacts of the Master Plan Project. The Fourth Addendum includes measures, such as implementation of an air quality study, electrification of various airport operations, diesel fuel reduction programs, and formulation of PM 2.5 compliance programs. Fourth Addendum at 2-4 to 2-7. As the Fourth Addendum itself recognizes, implementation of these measures "could provide a greater level of mitigation for significant air quality and noise impacts than anticipated in the Final EIR." Fourth Addendum at 2-2. Yet, as previously noted, the FEIS does not include the Fourth Addendum, and these mitigation measures are not proposed for adoption by the FAA. The FAA's mitigation plan, then, fails to include even all of the mitigation measures specifically identified as feasible during the Master Plan process.

Response:

The measures to which the commentor refers are part of the Community Benefits Agreement (CBA) negotiated between LAWA and a coalition of organizations (LAX Coalition). The CBA is separate from the NEPA process. FAA has not been a party to the CBA and furthermore has expressed no opinion about the contents of the CBA.

Part I of the Final EIS provides a comprehensive set of Master Plan commitments and mitigation measures identified by LAWA and/or FAA to address air quality effects identified under the CEQA analysis, the NEPA analysis, or both. Specifically, these are presented in Chapter 5 of the September 2004 Addendum to the Final EIR. Master Plan commitments and mitigation measures that are conditions of approval of this ROD to address significant air quality impacts identified by the NEPA analysis are identified in Appendix A of this ROD.

FAL00003-26

Comment:

Not only does the First Addendum fail to justify its selection of mitigation measures, but it makes unsupported claims about post-mitigation air quality effects. The FEIS quantifies ranges of potential emissions reductions for construction-related mitigation measures, the construction of eight new fly-away terminals, and conversion of ground support equipment. FEIS at Tables F4.6-18, F4.6-19 and F4.6-20. Emission reductions for all other mitigation measures are absent from both the FEIS and the First Addendum. While it acknowledges that some mitigation measures might be found to be infeasible once the Master Plan process begins, the First Addendum asserts that these determinations will not affect the projected post-mitigation emission levels. First Addendum at 2-12. Yet the FAA does not, nor can it, guarantee that the only mitigation measures that will be found to be infeasible are those for which emissions reductions were not previously quantified. Determining that proposed mitigation measures are infeasible, which the FAA apparently expects will occur, could greatly impact the level of post-mitigation emissions.

Response:

Please see Response to Comment FAL00003-23 regarding the selection of air quality mitigation measures and Response to Comment FAL00003-14 regarding enforceability of air quality mitigation measures.

While FAA acknowledges that the feasibility of any given mitigation measure may not be proven until implementation is achieved, it in no way expects or anticipates that measures already considered feasible will, in the future, be determined to be infeasible. Regardless of whether an air quality mitigation measure is determined at some subsequent point in time to be infeasible, the standard of performance to which LAWA will be held is expressed in Section 2.3.1.1 of the Addendum to the Final EIR, which states in pertinent part, "The goal of the LAX MP-MPAQ shall be to reduce potential air pollutant emissions associated with implementation of the LAX Master Plan to levels equal to, or less than, the thresholds of significance identified in the Final EIS/EIR for the project. At a minimum, air pollutant emissions associated with implementation of the LAX Master Plan will be reduced to levels equal to those identified in Table AD5-8, Total Operational and Construction Emissions - Mitigated, of

the Final EIS/EIR." If, at some future date, it is determined that achieving the emission levels in Table AD5-8 may not occur, LAWA will be required to develop and implement mitigation measures that have not been accounted for in the airport emission inventory contained in the MMRP and in MM-AQ-1. This will be achieved in response to the enforcement mechanisms that backstop the MMRP and will be detailed in MM-AQ-1. Thus, while FAA cannot guarantee what the totality of air quality mitigation measures will be, LAWA and FAA are assuring, through the application of all feasible methods, that a specified level of emissions will be achieved in the future.

As noted in the LAX Master Plan MMRP, LAWA shall expand and revise the existing air quality mitigation programs at LAX through the development of an LAX Master Plan Mitigation Plan for Air Quality (LAX MP-MPAQ). Of import, the LAX MP-MPAQ shall be developed in consultation with the FAA, USEPA, CARB, and SCAQMD, as appropriate, and shall include technologically/legally feasible and economically reasonable methods to reduce air pollutant emissions from aircraft, GSE, traffic, and construction equipment both on and off the airport. This is currently underway. As LAWA develops the details of the LAX MP-MPAQ, it will seek additional review and comments from FAA, USEPA, CARB, and SCAQMD on these new documents. The intended purpose of the LAX MP-MPAQ is to ensure that all the feasible mitigation measures are identified and implemented to reduce the air quality impacts of Alternative D at least to the levels noted in the Final EIS for the LAX Master Plan and are maintained during and following project implementation. The LAX MP-MPAQ, currently under development, is subdivided into four sections. The section addressing Mitigation Measure MM-AQ-1 (Framework), provides the basic organizational structure for the full program. It is also intended provide a clear, consistent and convenient foundation for its implementation. With the Framework's "overarching configuration," the individual components of the LAX MP-MPAQ (i.e. MM-AQ-2, Construction-Related Measure, MM-AQ-3, Transportation-Related Measure, and MM-AQ-4, Operations-Related Measure) are more effectively coordinated and completed. Importantly, additional information that is specific or unique to the other three will be contained in their respective volumes, to be published separately.

FAL00003-27

Comment:

2. "Refinements" to Alternative D

a. Amendments to the LAX Plan

The First Addendum notes that many changes have been made to the LAX Plan, but claims that these changes "do not alter the characteristics of Alternative D, but rather are intended to make the LAX Plan more concise and to clarify existing goals and policies." First Addendum at 3-1. Yet, as previously noted, the First Addendum itself makes unsubstantiated claims that, for example, the addition of tens of thousands of square feet of dislocated activities will not result in relocation or other impacts.

Response:

Please see Response to Comment FAL00003-22 regarding relocation impacts described in the September 2004 Addendum to the Final EIR.

FAL00003-28

Comment:

Statistical summaries from LAWA indicate that significant growth in both passenger and cargo volume has occurred in recent years. For example, in 1993 the passenger level at LAX was less than 48 million; its 2004 levels approached 61 million passengers. See passenger statistics and January 27, 2005 Press Release attached hereto as Exhibit M. LAX's historical peak year (2000) was 67 million passengers. Similarly, cargo volume rose nearly 50 percent between 1993 and 2003. See air freight statistics attached hereto as Exhibit N. The history provides strong evidence that apparently small additions and improvements at LAX translate into significant capacity increases; The FEIS should recognize that fact.

Response:

Comment noted. The commentor incorrectly asserts that, "apparently small additions and improvements at LAX translate into significant capacity increases." As indicated by the commentor's

quoted figures, the "capacity" of LAX would have been both increasing and decreasing during the time periods identified if the assertion were in fact correct. Specifically, between the years 2000 and 2003, LAX total annual passenger activity decreased from approximately 67 million passengers to approximately 55 million passengers. Likewise, annual air cargo volumes at LAX decreased between the years 2000 and 2002 from 2.25 million tons to 1.97 million tons. During these time periods, there were no reductions in the facilities available to serve passengers and cargo. Instead, major market forces combined to greatly reduce air transportation demand in all world regions including the United States and Southern California.

By comparison the LAX Master Plan and the Final EIS provides a definition of the No Action/No Project Alternative and the associated constrained activity forecast for this alternative in 2015. This constrained activity is based on the limitations of the existing LAX facilities and the assumptions about how air carriers will react to these constraints by 2015. When viewed as a whole system without major facility improvements, the practical capacity of LAX in 2015 is estimated at 78.7 million passengers and 3.12 million tons of cargo.

FAL00003-29

Comment:

The First Addendum alleges that the LAX Plan has been revised to ensure consistency with regional plans, including the CLUP, discussed above. First Addendum at 3-1. Yet on August 25, 2004, the ALUC determined that the April 2004 LAX Master Plan is inconsistent with the CLUP. See Ex. K. This inconsistency, and others, must be disclosed to the public and decision makers.

Response:

The referenced revisions in the September 2004 Addendum to the Final EIS relate to the LAX Plan, LAX Specific Plan, and the land use and zoning documents for the project. These revisions provide for greater oversight, public participation, and reporting but do not alter the conclusions of the Final EIS. Please see Response to Comment FAL00003-19 regarding consistency of the LAX Master Plan with the CLUP. As indicated therein, it is understood that the Airport Land Use Commission (ALUC) found the LAX Master Plan inconsistent with the CLUP; however, the role of the ALUC is advisory only, and the local agency can overrule the determination of the ALUC, as allowed by state law. LAWA complied with the applicable state requirements. In light of the ALUC's determination that the LAX Master Plan is inconsistent with the CLUP, pursuant to state law, on October 19, 2004, the Los Angeles City Council voted with a supermajority of 12 to 3 of the 15 council members to propose to overrule the ALUC determination. Following that initial vote the City followed state law to provide 45 days notice to the ALUC and other appropriate parties of the City's intent to overrule the ALUC. On December 7, 2004, the Los Angeles City Council overruled the ALUC determination by a vote of 12-3. Part I of the Final EIS addressed both consistencies and inconsistencies of Alternative D with relevant regional and local plans. Supporting technical data and analysis were provided in Technical Reports 1 and S-1. The Final EIS provides the appropriate analysis relative to consistency with regional plans, and FAA has considered the facts associated with the local processing of the ALUC consistency evaluation.

FAL00003-30

Comment:

b. Refinements to the LAX Specific Plan

The First Addendum fails satisfy NEPA's requirements by ignoring the significant environmental implications of the proposed LAX Master Plan changes inherent in the Specific Plan. The so-called "Consensus Plan" amendments to the Specific Plan call for approving Master Plan Alternative D, but only proceeding with certain elements of Alternative D. Other Master Plan elements will not proceed unless they receive subsequent approvals required by the Specific Plan. Eliminating certain project elements from the Master Plan in the eleventh hour "Consensus Plan" will result in significant environmental impacts not analyzed in the EIS prepared by the FAA.

For example, the Specific Plan approved by the City of Los Angeles excises the Ground Transportation Center ("GTC") from the Master Plan. This project is included in the current EIS analysis and was credited with reducing air quality and traffic impacts at the airport to a level of less-than-significant. Similarly, the Specific Plan removes the north runway reconfiguration from the Master Plan. The First

Addendum itself claims that improvements to the north runway are anticipated to yield environmental benefits. First Addendum at 4-2. Elimination of the GTC, the north runway, and other project elements has important environmental implications and requires environmental review as mandated by NEPA. Yet the First Addendum ignores the environmental consequences of the revised Specific Plan.

The City of Los Angeles admits that removal of these project elements, which are widely regarded as unlikely ever to be approved, requires preparation of additional environmental reviews. See newspaper articles attached hereto as Exhibit O. The NEPA regulations require preparation of a supplement to the EIS when "[t]he agency makes substantial changes in the proposed action that are relevant to environmental concerns." 40 C.F.R. § 1502.9(c)(1)(i). The modifications to the proposed plan represent "substantial changes" that require preparation of a supplement to the EIS.

Response:

Contrary to the statements made by the commentor, the LAX Specific Plan does not eliminate or excise any project elements from Alternative D. The City Council's approval of Alternative D includes all elements of the proposal as described and analyzed in the Final EIS, some of which require additional local review prior to implementation. Thus, the relevant Specific Plan provisions do not have the effect suggested by the commentor. Furthermore, LAWA intends to construct all components of Alternative D, including the GTC and the north runway improvements, as permitted by the City Council's decision of December 7, 2004. The FAA's approval of Alternative D is a project level approval, permitting LAWA to move forward with implementation of the project as of the date of the Record of Decision. The City Council has chosen to take a different approach, giving approval at a programmatic level, with additional environmental review at the local level to be accomplished under the framework of the LAX Specific Plan, consistent with State CEQA Guidelines on tiering (14 CCR Section 15152). Because the LAX Specific Plan does not constitute a "substantial change in the proposed action," a supplement to the EIS is not required as defined by NEPA Regulations (40 CFR 15029[c][1]).

FAL00003-31

Comment:

3. Feasibility Analysis of the Three "Alternative E" Proposals

As El Segundo has repeatedly pointed out, the FAA has ignored NEPA's mandate to evaluate all reasonable alternatives. 40 C.F.R. § 1502.14(a). In addition, under NEPA, an agency should evaluate reasonable alternatives that are offered by the public during the public comment period. Forty Questions No. 29(b); see also 40 C.F.R. § 1503.4(a)(2).

In an apparent attempt to respond to this failure, the First Addendum includes a discussion of three new project alternatives: 1) ARSAC E, which was submitted by the Alliance for Regional Solution to Airport Congestion as part of its comments on the Supplement to the Draft EIS/EIR; 2) ARSAC E-l, which is a revised version of ARSAC E; and 3) Parks E-l, which was submitted by Los Angeles City Councilmember Bernard Parks at the joint hearing of the Los Angeles Citywide Planning Commission and the Los Angeles Board of Airport Commissioners on June 14, 2004. Unfortunately, like the alternatives discussion in previous environmental documents, the "feasibility analysis" contained in the First Addendum does not satisfy NEPA's requirements.

NEPA requires a meaningful analysis of the environmental impacts of the project alternatives. 40 C.F.R. §§ 1502.14, 1502.16. The First Addendum provides no analysis of environmental impacts of the three Alternative E proposals. In the limited instances where it addresses the environmental implications of these alternatives, the First Addendum makes broad and highly speculative predictions about what might happen under these scenarios. See, e.g., First Addendum at 4-2 (potential consequences of not improving the north airfield due to aircraft idling and taxiing), 4-14 (consequences of hypothetical convention center), 4-17 (consequences of shuttle system that would be necessary because smaller parking facility than under Alternative D). These predictions defy common sense, and they are not supported by any information that facilitates a meaningful evaluation and comparison of alternatives, as required by NEPA. It is the responsibility of the public agency preparing the EIS - not the public - to supply the level of detail required for this comparison. The FAA must provide considerable additional analysis to satisfy NEPA's mandate.

The determination of all three alternatives' infeasibility appears to be based entirely on their distinctions from Alternative D. Rather than treating Alternative D as one of several options for LAX, the First Addendum faults the three Alternative E proposals for not containing the exact same elements. For

example, the First Addendum summarily dismisses the alternative Rent-A-Car facilities proposed by the three alternatives, simply asserting that Alternative D's approach is preferable. First Addendum at 4-16 to 4-17. This approach enables the FAA to attempt to claim Alternative D's merits without justifying its proposal to accommodate more than twice the projected 2015 demand for rental car space. It fails to satisfy the requirements of NEPA.

Response:

The Final EIS includes a reasonable range of alternatives. Please see Topical Response TR-ALT-1 in Part II-Volume 1 of the Final EIS regarding the development of alternatives considered in detail in the Final EIS. In addition to the detailed evaluation of a reasonable range of alternatives, the Final EIS included consideration of several other alternatives, include the variations of Alternative E. Specifically, Chapter 4 of the September 2004 Addendum to the Final EIR, which is a part of the Final EIS, focuses exclusively on the evaluation of Alternative E. The three variations of Alternative E that were introduced and offered by their originators as alternatives to Alternative D, were considered accordingly within the Final EIS.

As indicated in Question 1a. of the Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations, not all alternatives are required to be carried through the NEPA process for detailed environmental review in an EIS. Question 1a. distinguishes between the "reasonable alternatives" addressed in an EIS that must be rigorously explored and objectively evaluated, and "other alternatives, which are eliminated from detailed study with a brief discussion of the reasons for eliminating them." The FAA complied with the NEPA regulations regarding the range of alternatives, providing detailed review of the No Action/No Project Alternative and Alternatives A, B, C, and D. In accordance with Question 1a., the Final EIS addressed the three variation of Alternative E, and determined that they should be eliminated from detailed study for a number of reasons, including their inferior ability to meet the purpose and need requirements of the proposed project.

FAL00003-32

Comment:

4. Refinements to the Environmental Action Plan

The title of this section of the First Addendum suggests that it discusses changes made to the Final EIR's environmental action plan, which the First Addendum defines as the Master Plan's project design features, commitments, and proposed mitigation measures. Yet this title is misleading. Far from a "refinement," this chapter is almost exclusively a restatement of Chapter 4 of the Final EIR." With the exception of new commitments regarding environmental justice, the "refined" environmental action plan offers few, if any, actual changes. In addition, this section is poorly annotated and does not make clear where actual changes are made. Thus, it fails to accomplish NEPA's fundamental purpose of public disclosure.

12 We refer here to "Final EIR," as opposed to "FEIS," to indicate the time frame being discussed. The First Addendum, issued after LAWA released the Final EIR but before the FAA released the FEIS, purports to modify the Environmental Action Plan contained in the Final EIR. Similarly, the next section of this letter discusses the "Errata to the Final EIR," as it was referred to in the First Addendum.

Response:

The refinements to the Environmental Action Plan of the Final EIR included in Chapter 5 of the September 2004 Addendum to the Final EIR are described in the first paragraph on page 5-1 of the September 2004 Addendum to the Final EIR and more specifically shown in strikeouts and italics in Appendix AD-B, Errata to the Final EIR, of the September 2004 Addendum to the Final EIR. These refinements are also described in Section 2.2, Environmental Justice (pages 2-7 through and 2-10), and Section 2.3, Air Quality (page 2-11), of the September 2004 Addendum to the Final EIR.

Part I of the Final EIS identifies adverse impacts associated with implementation of the LAX Master Plan and provides a comprehensive set of Master Plan commitments and mitigation measures identified by LAWA and/or FAA to address such effects as identified under the CEQA analysis, the NEPA analysis, or both. (Specifically, these are presented in Chapter 5 of the September 2004 Addendum to the Final EIR and further refined by the Second and Third Addenda to the Final EIR.) A subset of the Master Plan Commitments and Mitigation Measures have been identified in this ROD to address

significant impacts identified by the NEPA analysis. These measures are conditions of approval of this ROD and are located in Appendix A of this ROD.

FAL00003-33

Comment:

Moreover, some of the assertions made in the "Project Design Features" section are suspect. For example, the First Addendum implies that the purpose of the airfield improvements proposed under Alternative D is environmental sensitivity. First Addendum at 5-2. This is misleading. The stated purpose of these modifications is to increase the safety and efficiency of those facilities, which will have the direct result of increasing the airport's capacity.

Response:

The comment states that the First Addendum implies that the purpose of the airfield improvements proposed under Alternative D is environmental sensitivity. That is not what the First Addendum states. The language cited on page 5-2 of the First Addendum states that, "the formulation and design of the Master Plan project included attention to environmental issues, with the objective being to avoid or reduce potential environmental impacts where possible." This statement does not purport to discuss the purpose or needs identified for proposed airfield improvements at LAX. Rather, as stated, this text indicates that the project was formulated to address, among others, needs related to the airfield, and that when undertaking design, the sponsor kept eye toward options that would be less environmentally damaging, where possible. Please see Response to Comment FAL00003-2 regarding capacity and other Master Plan issues raised in this comment, such as how improvements at LAX, or lack thereof, relate to capacity.

FAL00003-34

Comment:

Similarly, the First Addendum suggests that, by consolidating the rental car companies in one location, the Rent-A-Car facility will result in environmental benefits due to the reduced use of shuttles. First Addendum at 5-3. This, too, is implausible. The First Addendum makes no attempt to explain the need for a rental car facility that is more than twice the size - 7.87 million square feet - of the projected year 2015 need. The logical implication of such a large facility is that many more cars will be housed there and more shuttles will be needed to serve it. Not only does this provide further evidence of an increased capacity, but the traffic and air quality implications of this facility will be significant. These implications, however, are ignored in the First Addendum and, ultimately, the FEIS.

Response:

Alternative D is the only build alternative which provides space for the entire on-airport rental car operation. Alternatives A, B and C each assumed that a substantial portion of their space requirement for automobile storage would be met off airport property due to limited available space near the planned rent-a-car locations. Alternative D would provide space for the Automated People Mover station and tenant space for storage/overflow parking, car-wash bays, fueling/vacuuming stations, queuing lanes for car wash and fueling/vacuuming and maintenance buildings. As a result of this comprehensive approach to the consolidated rent-a-car facility, Alternative D provides a much larger space dedicated to the RAC than do the other alternatives.

By combining all the operational requirements of the car rental companies at one location, there would be no need to shuttle employees and cars back and forth on surface streets between the consolidated rental car facility and privately operated maintenance, storage or car-wash/fueling facilities. Since the Automated People Mover would transfer passengers between the RAC and the CTA, there would be a substantial reduction in the need for privately operated courtesy vehicle shuttles.

The provision of rental car operations either on and/or off-airport would not affect, and does not indicate an increase of, the overall capacity and aircraft activity levels at LAX.

FAL00003-35

Comment:

5. Errata to the Final EIR

Like the "Refinement to the Environmental Action Plan" chapter just discussed, the Errata to the Final EIR is ambiguously arranged and does not support NEPA's fundamental goal of public disclosure. It does not explain why changes are made, and makes no distinction between seemingly meaningless changes and changes with substantial implications. Thus, significant changes are buried in an effort to hide the Master Plan Project's environmental implications from the public.

A close reading of the Errata reveals some significant revisions that are not adequately discussed. For example, Tables F.4.4.2-18, F.4.4.2-20 and F.4.4.2-21 indicate that Alternative D envisions acquisition of an additional 5,000 square feet of office space (plus the 20,000 square feet of air freight space previously discussed), as well as a need to relocate more than 50 jobs that are currently housed in LAX. These are significant changes from the Final EIR and require additional analysis. Yet the Errata simply slips them into revised tables, and provides no further discussion about their implications.

Response:

Comment noted. As indicated in the Introduction to Errata on page 1 of Appendix AD-B of the September 2004 Addendum to the Final EIR, the Errata to the Final EIR provides revisions to the text, figures, appendices, and technical reports associated with the Final EIR as a result of clarifications to, and comments received on, the LAX Master Plan Draft EIS/EIR, Supplement to the Draft EIS/EIR, and Final EIR. Changes in text are signified by strikeouts where text is removed and by italics where text is added. Depending on the nature of the changes, explanations for the changes are also provided. Thus, revisions are readily apparent to provide full disclosure of such revisions to the public.

Errata in Appendix AD-B is provided under three separate headings: Revisions to Final EIR Text, Revisions to Appendices, and Revisions to Technical Report Text. The Revisions to Final EIR Text are provided by Chapter and then Section, in the order that they are presented in the Final EIR.

The potential impacts associated with the acquisition of an additional 4,874 square feet of office uses were addressed in Section 2.1, Relocation Plan/Property Acquisition, of the September 2004 Addendum to the Final EIR. As indicated in Section 2.1, the additional 4,874 square feet of office uses that would be acquired under Alternative D could easily be absorbed into the nearly 3 million square feet of office space that is available in the surrounding areas; therefore, no significant impacts related to acquisition of office uses would occur. See also Response to Comment FAL00003-22 above.

As indicated on pages 14 and 15 in Appendix AD-B of the September 2004 Addendum to the Final EIR, there are an estimated 60 additional jobs in the businesses to be acquired under Alternative D compared to information provided in Section 4.4.2, Relocation of Residences or Businesses, in Part I of the Final EIS. As indicated on page 14 of Appendix AD-B, as compared to the No Action/No Project Alternative, the potential loss of these additional 60 jobs out of a total of 424,968 jobs created in the Los Angeles region in the first phase of the project does not represent a material change in the overall impacts disclosed in Section 4.4.2 of Part I of the Final EIS.

FAL00003-36

Comment:

B. Second Addendum

Pursuant to FAA Order 5050.4A and National Oceanic and Atmospheric Administration regulations, the FAA must make a determination as to "whether improvements in the coastal zone would be consistent to the maximum extent practicable with the approved coastal zone management program before it can issue its Record of Decision. FEIS at 4-1016 (internal citations omitted). In August 2004, the FAA determined that Alternative D is consistent with the California Coastal Management Program and the California Coastal Act ("CCA"). This Coastal Consistency Determination ("Consistency Determination") addresses "impacts associated with the proposed relocation and improvement of existing navigational

aids associated with Alternative D that would be located within the coastal zone." Second Addendum at 2-1.

Also in August 2004, and in conjunction with the FAA's release of the Consistency Determination, LAWA completed a Coastal Consistency Certification ("Consistency Certification") that addresses "potential impacts to coastal resources that may occur from Alternative D project-related improvements other than those associated with the navigational aids, including improvements situated outside of the coastal zone." Third Addendum at 2-1.

Both the FAA's Consistency Determination and LAWA's Consistency Certification were submitted to the California Coastal Commission ("Commission") for review and a determination of whether it concurred with the agencies' findings. On November 17, 2004, the Commission voted in concurrence with the FAA's Consistency Determination and LAWA's Consistency Certification, subject to a requirement that LAWA provide details to the Commission in the future on the hydrology and water quality management plan it proposed in conjunction with implementation of Alternative D.

The Second Addendum addresses the Commission's concurrence with the Consistency Determination and Consistency Certification. It also discusses the implications of a rule proposed by the United States Fish and Wildlife Services ("USFWS") on April 27, 2004 regarding designation of critical habitat for the Riverside fairy shrimp.

1. California Coastal Commission Action

Notwithstanding the Commission's ultimate concurrence with both the FAA's and LAWA's consistency findings, the Second Addendum suggests many flaws in the analysis conducted by both agencies. As noted above, the Commission conditioned its concurrence of the Consistency Certification upon LAWA providing more details on the hydrology and water quality management plan proposed for development in conjunction with Alternative D. Regarding the FAA's Consistency Determination, the Commission required further analysis on the potential impacts to the coastal zone from the proposed improvement and relocation of navigation aids, and the adequacy of mitigation of these impacts. These analytical supplements required by the Commission demonstrate the inadequacy of the analysis performed by both the FAA and LAWA, and suggest the likely presence of additional flaws and inadequacies.

Response:

On November 17, 2004, the California Coastal Commission concurred with the FAA's Consistency Determination and conditionally concurred with LAWA's Consistency Certification. Contrary to the commentor's assertion, the Commission did not require or request any additional information relative to the Consistency Determination by the FAA. The Commission is requiring LAWA to submit additional consistency certification analysis and documentation in the future when project-specific designs have been completed. Currently, the information available is at the programmatic level. When the required project-specific design is completed, the additional certification material will provide appropriate assurances that each of the proposed Alternative D projects identified in the Consistency Certification conditional concurrence will be consistent with the enforceable policies of the state's management program. These conditions imposed by the Commission do not reflect or suggest any flaws or inadequacies in the existing analysis. On the contrary, such conditional concurrences are permitted under the National Oceanic and Atmospheric Administration (NOAA) regulations governing CZMA. These proper safeguards to ensure compliance with the imposed conditions, including the FAA's approval of this project being contingent upon LAWA's compliance with the Commission's condition, further negate any purported inadequacies in the analysis.

FAL00003-37

Comment:

Similarly, the Commission required the strengthening of several of the mitigation measures originally proposed and analyzed in both the FAA's Consistency Determination and LAWA's Consistency Certification. See Second Addendum at 2-2, 2-3, 2-7, 2-8. This suggests that the Commission was not satisfied with the original mitigation measures proposed by LAWA and the FAA.

Response:

There were limited refinements made to the mitigation program originally proposed in the Consistency Determination and Consistency Certification. The primary change requires that the FAA, not LAWA, be

responsible for ensuring the implementation of these measures. A new mitigation measure related to archaeological resources was requested by the Commission and accepted by the FAA, ensuring that no significant impacts to archaeological resources would occur due to the improvement/relocation of the navigational aids. Additional refinements pertained to habitat restoration plans, however, these refinements did not materially change the basic nature, approach, and location of the mitigation previously proposed. It should be noted that the mitigation measure refinements were formulated well in advance of the Commission hearing as a cooperative effort between the FAA, LAWA, and Coastal Commission staff, and were included in the Commission staff report prior to the hearing. The Commission never indicated any dissatisfaction with the original mitigation measures, but rather concurred with the refined mitigation program that was proposed by FAA, LAWA, and Commission staff at the November 17, 2004 hearing. The Commission is satisfied with the mitigation measures now in place.

FAL00003-38

Comment:

In addition to the analytical flaws both resulting from and admitted to in the Second Addendum, the Commission's consistency determination is itself in violation of the CCA. According to the CCA, "[e]nvironmentally sensitive habitats shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within these areas." Pub. Res. Code § 30240(a). While the Commission acknowledges that the new navigational devices and access road would significantly impact the sensitive habitats, it determined that this was necessary to permit runway realignment. However, the realignment itself is a discretionary act that is not required by the FAA or any federal law. Thus, approval of these actions constitutes a violation of section 30240 of the CCA.

Response:

The Coastal Zone Management Act, 16 U.S.C. § 1456, requires that Federal activities within or outside the coastal zone that affect any land or water use or natural resource of the coastal zone shall be carried out in a manner which is consistent to the maximum extent practicable with the enforceable policies of approved State management programs. As is clear from the language of the statute, the CZMA does not outright require federal actions to be fully consistent with every element of a coastal management program. Rather, it requires those actions to be consistent to the maximum extent practicable. Nor does the statutory language limit practicability to actions that are non-discretionary. The phrase "consistent to the maximum extent practicable" cannot reasonably be read as a requirement that consistency be found only in those situations where a federal agency proposes taking an action that it is mandated by law to take. Rather, the statute is addressing both discretionary and non-discretionary actions, and requires that both types of action be consistent to the maximum extent practicable with the enforceable policies of an approved state management program. Implicit in this language is the acknowledgement that protection of this resource is not the only public interest that may be considered when determining consistency of federal actions.

Here, the proposed improvements under Alternative D themselves serve a public interest. The design and location of certain airside improvements under Alternative D, which occur outside of the coastal zone, mandate improvements to the navigational aids within the coastal zone for safe operation of the airport. Under Alternative D, the safety of certain airport operations will quite literally depend upon the navigational aid improvements occurring within the coastal zone. Additionally, it should also be noted that the proposed navigational aid improvements occurring within the coastal zone involve the relocation and upgrading of existing navigational aids situated in a diverse setting that includes barren areas that have been, and currently remain, highly disturbed from the former residential community that once occupied the subject coastal area, as well as areas where a combination of native and non-native species have become established. The siting of the proposed navigational aids improvements has, to the extent practical while also meeting the FAA safety requirements, included use of the existing disturbed areas, and minimization of any new disturbance followed by revegetation of disturbed areas. For more information on the basis and requirements for the navigational aid improvements, please refer to pages 6 through 14 of the FAA's Consistency Determination (see Appendix A-3a in Volume A of the Final EIS), as reiterated on pages 10 through 20 of the Coastal Commission staff report for the November 17, 2004 hearing (see Appendix A-3d in Volume A of the Final EIS). The factors presented in those discussions were specifically taken into account in the findings relative to the navigational aids improvements and relocation being, with mitigation, consistent to the maximum extent practicable with the California Coastal Act (including Section 30240). This conclusion was concurred with by the California Coastal Commission.

FAL00003-39

Comment:

2. U.S. Fish and Wildlife Service

As explained above, the Second Addendum also discusses the potential impacts of the Master Plan Project on Riverside fairy shrimp critical habitat, proposed for designation by the USFWS on April 27, 2004, after its previous designation was nullified by the U.S. District Court for the District of Columbia in 2002. Unfortunately, this section of the Second Addendum follows the pattern established by previous environmental review documents of misstating the applicable requirements, downplaying likely impacts and inaccurately portraying the adequacy of mitigation measures.

The FAA maintains that the analysis in the Second Addendum of impacts on designated habitat for the Riverside fairy shrimp was conducted in accordance with FAA Order 5050.4A, which provides guidelines for the FAA's environmental impact analysis. Second Addendum at 2-9. Claiming to have complied with these guidelines, the FAA concludes that "Alternative D as considered, would not result in significant adverse impacts to Riverside fairy shrimp and proposed designated critical habitat that are not adequately addressed by the mitigation measures that are already proposed." Second Addendum at 2-23. Yet the basis for this conclusion is a biological opinion that itself violates FAA Order 5050.4A.

Paragraph 47e(10) of FAA Order 5050.4A describes the process that the FAA must follow for a project that requires preparation of an EIS. The FAA must request information from the USFWS or the National Marine Fisheries Service ("NMFS"), whichever has jurisdiction, on whether any species listed or proposed to be listed as endangered or threatened may be present in the area that will be affected by the project. If USFWS or NMFS determines that there are no species present, the FAA can assume that the project will not result in significant impacts to endangered or threatened species. If, however, the USFWS or NMFS determines that such species may be present in the affected area, the appropriate agency must prepare a biological assessment to determine whether the species, or its critical habitat, are likely to be impacted by the project and what those impacts would be.

If the biological assessment determines that the project will not adversely affect the species or its habitat, the FAA can assume that the project will not result in significant impacts to endangered or threatened species. However, if the biological assessment indicates that the project will result in adverse effects on the species or its critical habitat, the project "is considered to be one with potential significant impacts." This determination triggers additional requirements including consultation pursuant to section 7(a) of the Endangered Species Act, and consideration of other alternatives that would not jeopardize the impacted species or its designated critical habitat or an individual determination that the impacts are not significant. FAA Order 5050.4A at Paragraph 85(j).

Thus, this process depends upon the biological assessment (or biological opinion) issued by USFWS or NMFS as the starting point for the FAA to determine if and/or how to proceed. However, here, the FAA depends on a flawed biological opinion - issued before the USFWS released its updated proposal for designated habitat - as its basis for all of its conclusions. As the FAA itself acknowledges, "[w]hile the April 20, 2004 Biological Opinion determined only 23 acres of the [Airfield Operations Area] were critical to the remaining cysts [i.e. Riverside fairy shrimp eggs], one week later, on April 27, 2004, the USFWS issued a proposed designation of critical habitat that included approximately 108 acres proposed for critical habitat for Riverside fairy shrimp." Second Addendum at 2-19.

Rather than requesting an updated biological opinion from the USFWS, the FAA relied on the outdated April 20, 2004 Biological Opinion, which analyzed only one-quarter of the habitat ultimately proposed for designation. The analysis is, therefore, incomplete. By limiting its consideration to a small fraction of the currently proposed designated habitat, the FAA conveniently avoids considering 85 acres of potentially impacted critical habitat, as required by the Endangered Species Act and FAA Order 5050.4A.

Even if the area considered by the FAA was sufficient, its limited analysis would still fall short of its mandate to consider impacts to critical habitat. Despite the FAA's mandate to consider all designated critical habitat when reviewing a proposed project, its analysis focused almost exclusively on the 1.3 acres on which the USFWS determined that Riverside fairy shrimp cysts were present. The remaining 21.7 acres identified in the outdated Biological Opinion upon which the FAA relies, are essentially ignored. The FAA Order 5050.4A procedure described above explicitly requires the FAA to consider impacts to both endangered or threatened species and their habitat; it does not allow the agency to

consider only the species and ignore critical habitat on which it may not have been sited. By focusing on just the 1.3 acres on which cysts are present, and ignoring the remaining 21.7 acres - by far the majority - of the designated critical habitat that the USFWS originally identified, the FAA ignores its mandate to consider a project's impacts on all designated critical habitat.

Finally, the Second Addendum frames the entire discussion by suggesting that preservation of Riverside fairy shrimp habitat comes at the cost of increased danger to other wildlife. Second Addendum at 2-13 to 2-14. This characterization is an apparent attempt to deflect attention from the real tension: between development and habitat preservation. Similarly, the Second Addendum's suggestion that Riverside fairy shrimp would be better served by implementation of Alternative D, than by the NA/NP alternative is unconvincing. While it is true, as the FAA's claims, that the mitigation measures that would be implemented under Alternative D would not occur if the Master Plan Project were not carried out, such mitigation would not be necessary at all if the Project did not occur, as this habitat would not be disrupted.

Response:

The commentor concludes that the FAA has failed to comply with the Endangered Species Act. The comment is based on the following reasoning. First, the comment suggests that the area that was proposed for designation as critical habitat should be treated as though it were already determined in a final rule to be so designated. Second, the comment suggests that at the time of the biological opinion, both FAA and the U. S. Fish and Wildlife Service (USFWS) should have addressed not only impacts on the designated species (the Riverside fairy shrimp) but also impacts to designated critical habitat, which critical habitat did not at the time and does not now exist. Third, the comment alleges that the biological opinion issued by USFWS is flawed as a result. (See the commentor's statement that, "[t]he FAA Order 5050.4A procedure described above explicitly requires the FAA to consider impacts to both endangered or threatened species and their habitat; it does not allow the agency to consider only the species and ignore critical habitat on which it may not have been sited. By focusing on just the 1.3 acres on which cysts are present, and ignoring the remaining 21.7 acres - by far the majority - of the designated critical habitat that the USFWS originally identified, the FAA ignores its mandate to consider a project's impacts on all designated critical habitat").

As an initial matter, the FAA has fully complied with the Section 7 consultation requirements of the Endangered Species Act, as evidenced by the formal consultation undertaken by FAA and USFWS, which resulted in a Biological Opinion on April 20, 2004, which concluded that Alternative D will not jeopardize the continued existence of the Riverside fairy shrimp. Twelve conservation measures were described in the April 20, 2004, Non-Jeopardy Biological Opinion issued by the USFWS for Alternative D and provided in Appendix F-E, Biological Opinion From United States Fish and Wildlife Service (USFWS), of the Final EIS. Conservation Measure No. 5 stipulates the creation of habitat suitable to support the Riverside fairy shrimp within Federal Aviation Administration (FAA)-owned property designated as a Habitat Preserve at the former Marine Corps Air Station at El Toro (El Toro) or other site as approved by the Carlsbad Fish and Wildlife Office (CFWO). The El Toro site is managed by the USFWS, which has concurred with the FAA that this site constitutes a viable mitigation location. LAWA and FAA are currently moving forward with implementation of habitat restoration efforts pursuant to this conservation measure. As described in Conservation Measure No. 5 of the April 20, 2004, Non-Jeopardy Biological Opinion issued by the USFWS, the creation-to-impact ratio is 3:1. The biological opinion does not address designated critical habitat because there was no designated critical habitat at LAX at the time the Biological Opinion was issued, nor is there now. Contrary to the commentor's assertion, this does not implicate a deficiency in the biological opinion, nor does the subsequent proposal to designate critical habitat change this fact.

As documented in extensive comments submitted by FAA and LAWA on the proposed designation of critical habitat, a designation of critical habitat on LAX property is not appropriate for a number of reasons, including safety concerns. Nevertheless, the FAA satisfied the requirement to confer with the USFWS regarding actions affecting areas proposed for designation as critical habitat. See 50 C.F.R. § 402.10(a). Consistent with 50 C.F.R. § 402.10(c), USFWS made advisory recommendations about actions to minimize or avoid effects to the proposed critical habitat area. FAA has fully adopted those recommendations.

Thus, through formal consultation and issuance by USFWS of a Biological Opinion, the FAA has addressed 23 acres of LAX property that represent habitat that is actually occupied by Riverside fairy shrimp or composing the watershed areas directly associated with land actually occupied by Riverside fairy shrimp. As such, the formal consultation process addressed not only impacts directly to the species, but also habitat of the species. Additionally, through the conference procedures of 50 C.F.R. § 402.10, the FAA has further addressed proposed critical habitat areas not included in the approximately

23 acres of land addressed in the April 20, 2004 Biological Opinion. As a result of that conference, USFWS concurred with FAA's determination that, based on certain precautionary measures, continued construction associated with implementation of Alternative D projects at LAX would not result in adverse modification of the proposed critical habitat areas. For these reasons, the biological opinion issued by USFWS and relied upon by FAA is fully compliant with the law, and FAA has satisfied both the intent and the letter of the regulations regarding federal action within areas proposed to be designated as critical habitat.

Subsequent to the close of the comment period and the completion of FAA's conference with USFWS pursuant to 50 C.F.R. § 402.10(a), the USFWS published a final rule designating critical habitat for the Riverside fairy shrimp. See Designation of Critical Habitat for the Riverside Fairy Shrimp, 70 Fed. Reg. 19,154-01 (April 12, 2005) (to be codified at 50 C.F.R. pt. 17). The final rule excluded from the final designation all areas initially proposed for designation as critical habitat at LAX. The USFWS concluded that the area proposed for designation at LAX failed to satisfy the primary constituent elements necessary for the species to complete its life cycle, and that the area was therefore not essential for the conservation of the Riverside fairy shrimp. Consequently, they did not designate any portion of LAX as critical habitat for the species. Therefore, notwithstanding the facts and discussion presented above, the concerns expressed in the subject comment are now moot.

The FAA has, therefore, duly considered within the Final EIS all aspects related to the Section 7 consultation with the USFWS pursuant to their obligation under the Federal Endangered Species Act.

FAL00003-40

Comment:

C. Third Addendum

In September 2004, the Los Angeles City Council approved a development project for Playa Vista. This project is to occur in two phases. The project approved in September reflects a lesser level of development for Phase II of the Playa Vista project than was originally analyzed in the environmental review documents for the LAX Master Plan. The Third Addendum contains a revised analysis of transportation impacts of Alternative D, based on the reduced development approved for Phase II of the Playa Vista project.

The Third Addendum repeatedly claims that, because the development plan for Phase II of the Playa Vista project is reduced, the revised analysis reflects improved environmental background conditions. However, the Third Addendum includes figures that stand in direct opposition to these claims. For example, according to Table AD(3)2-4, the volume to capacity ratios at three intersections - El Segundo/Sepulveda in the PM Peak, Imperial/Main in the AM Peak, and Mariposa/Sepulveda in the AM Peak - actually increase after accounting for the reduced level of development in the approved Phase II. This increase in traffic impacts, which for one of the intersections is "significant" according to the threshold identified on Page 4-424 of the FEIS, is contrary to the claims of reduced impacts made throughout the Third Addendum. Not only does it call into question these claims, but it also undermines the analytic integrity of the entire document.

Response:

In general, as would be expected, the largest reductions in traffic volumes due to the reduced Playa Vista Phase II development occur near Playa Vista itself. Traffic reductions decrease as the distance from Playa Vista increases. However, increases in traffic volumes do occur at various locations as a result of drivers adjusting their travel paths to access streets that would be less congested due to the reduction of Playa Vista Phase II trips.

The table below shows the volume over capacity (V/C) ratios for the peak hours and intersections referenced by the commentor. The first two rows show the V/C ratios using the reduced Playa Vista Phase II trip generation estimates. This shows that for all three cases, the mitigated V/C ratio is smaller than (i.e., an improvement to) the Adjusted Environmental Baseline condition.

Volume/Capacity

Scenario	El Segundo Blvd. & Sepulveda Blvd. (PM)	Imperial Highway & Main Street (AM)	Mariposa Avenue & Sepulveda Blvd (AM)
2015 Adjusted Environmental Baseline using Reduced Playa Vista Phase II Trip Generation Estimates (from Appendix AD(3)-A2 of Third Addendum to the Final EIR, published 2004).	1.131	0.662	0.895
2015 With Alternative D Traffic Mitigations using Reduced Playa Vista Phase II Trip Generation Estimates (from Table AD(3)2-4 of Third Addendum of the Final EIR, published 2004. This is the same as Table A2.1-4 of Volume A of the Final EIS.	1.127	0.603	0.845
2015 With Alternative D Traffic Mitigations using Original Playa Vista Phase II Trip Generation Estimates (from Table F4.3.2-15, Chapter 4.3.2 of Part I of the Final EIS).	1.125	0.532	0.836
Difference between the Final V/C ratio with the Reduced Playa Vista Trip Generation Estimates and the Final V/C ratio with the Original Playa Vista Trip Generation Estimates.	+0.002	+0.071	+0.009

The third row of the table shows the V/C ratio using the original Playa Vista Phase II trip generation estimates, after Alternative D project mitigations. The fourth row indicates the differences between the two mitigated V/C ratios. While this shows that the V/C ratios increased to a small degree at these intersections during these peak hours under the reduced Playa Vista Phase II analysis, it does not mean that there is a contradiction to the traffic results. The traffic impacts for the traffic analyses completed as part of this Final EIS (using the original Playa Vista Phase II trip generation estimates and the reduced Playa Vista Phase II trip generation estimates) have followed the thresholds of significance presented on page 4-424 in Part I of the Final EIS to determine project impacts. This table shows no contradiction for the three locations and time periods presented by the commentor.

FAL00003-41

Comment:

In addition, the Third Addendum analyzes only the effects of the Phase II changes on Alternative D and the NA/NP Alternative rather than its impacts to all four of the build alternatives. This analysis does not satisfy the requirements of NEPA, which states that the discussion of alternatives constitutes "the heart of the environmental impact statement." 40 C.F.R. § 1502.14. 13

13 While the FEIS itself does add some discussion about the impact of the Phase II changes on Alternatives A, B and C, this cursory discussion does not satisfy NEPA's mandate of meaningful discussion of and comparison between alternatives to the proposed action. Rather, it follows the pattern of previous environmental review documents of skewing the discussion in favor of Alternative D by inadequately addressing the alternatives, in particular the NA/NP Alternative.

Response:

Section A.2.1, Off-Airport Surface Transportation, in Volume A of the Final EIS provides the NEPA discussion related to the revised transportation impacts analysis based on the reduced Playa Vista project. While the subject section of the Final EIS relies on the data provided in the Third Addendum, which focuses primarily on the No Action/No Project Alternative and Alternative D, it includes additional information and analysis related to the other alternatives. Specifically, subsection A.2.1.4, Relationship to Alternatives A, B, and C, describes how the results of the revised transportation impacts analysis relate to those other alternatives.

FAL00003-42

Comment:

D. NEPA Requires Preparation and Recirculation of a Supplement to the EIS Given the "Significant New Information" Presented in these Three Addenda.

According to the NEPA regulations, a supplement to the EIS must be prepared when there is "significant new ... information relevant to environmental concerns and bearing on the proposed action or its impacts." 40 C.F.R. § 1502.9(c)(1)(ii). As detailed above, each one of these Addenda presents significant new information and raises more questions about environmental impacts than they answer. Arguably, each one rises to the level of requiring a supplement to the EIS envisioned by NEPA; collectively, they certainly present the necessary significant new information. Thus, pursuant to NEPA, the FAA "[s]hall prepare, circulate, and file" a supplement to the EIS addressing and adequately analyzing the information contained in the First, Second and Third Addenda "in the same fashion ... as a draft and final statement." 40 C.F.R. § 1502.9.(c)(4).

Response:

Please see Response to Comment FAL00003-20. As indicated in that response, the information provided in the First (i.e., September 2004), Second and Third addenda does not present "significant new. . . information relevant to environmental concerns" that would warrant preparation of a supplement to the EIS. Each of the addenda, and the information contained therein, was assessed by FAA to determine the level of significance of the information. FAA concluded that the addenda, whether viewed individually or collectively, provide information that, although revised, does not substantially alter the environmental effects under NEPA previously disclosed in the Supplement to the Draft EIS. None of addenda disclose significant impacts that were not previously disclosed. Thus, a supplement was not required. However, in order to provide the public an opportunity to review and comment, the Final EIS, which included these addenda, was released to the public on January 13, 2005. The Notice of Availability of the Final EIS appeared in the Federal Register on January 21, 2005.

FAL00003-43

Comment:

CONCLUSION

As set forth above, the analysis and documentation by the FAA regarding the LAX Master Plan is patently deficient. El Segundo is requesting, first, that the FAA prepare a supplement to the EIS to address new information contained in the Addenda. In addition, El Segundo urges the FAA to take the time necessary to review these comments and the comments that other interested parties are submitting, and to take appropriate remedial actions to address the deficiencies in its environmental analysis, before rendering its decision on this project.

We further request that you decline to file a Record of Decision until after the conclusion of the local processes that are currently underway. In particular, as stated above, the County Airport Land Use Commission is set to hear appeals by El Segundo and Los Angeles County on March 30. We, and numerous other petitioners, have brought a legal challenge against Los Angeles for its failure to comply with environmental review requirements in approving the Master Plan; we are hopeful that the need for additional litigation in the federal courts can be obviated by the FAA's careful consideration of our comments and by its deference to the completion of the local processes.

Response:

The FAA has carefully reviewed and responded to each of the concerns expressed in the commentor's letter (see Responses to Comments FAL00003-1 through FAL00003-42 above). In addition, the FAA has carefully reviewed and responded to the related concerns expressed in the exhibits attached to the commentor's letter (see Responses to Comments FAL00003-44 through FAL00003-160 below). The FAA has also reviewed and responded to all other comments received during the review period for the Final EIS. The FAA will take into consideration the entirety of the Final EIS, including the recent comments and responses, in developing a Record of Decision for the proposed Project, along with other related information in accordance with federal law.

With respect to the Los Angeles County Airport Land Use Commission's review of the proposed action relative to the FAA's completion of the NEPA review of the action, please see Response to Comment FAL00003-19.

FAL00003-44

Comment:

COMMENTS

The Federal Aviation Administration ("FAA") has prepared a Final General Conformity Determination1 ("Final GCD") pursuant to the requirements of 40 CFR Part 93, Subpart B, to document the conformity of Los Angeles International Airport ("LAX") Proposed Master Plan Improvements, Alternative D, ("Project"), with the applicable (i.e. approved) State Implementation Plan ("SIP"), which is based on the 1997/1999 Air Quality Management Plan ("1997/1999 AQMP") and the proposed modifications thereto, the 2003 Air Quality Management Plan ("2003 AQMP").

We previously commented on the Draft General Conformity Determination ("Draft GCD") as well as on the underlying Draft Environmental Impact Report/Environmental Impact Statement ("Draft EIS/EIR") and its Supplement. (Fox & Pless 02/04 2; Fox 07/01 3; Fox & Pless 11/034.) Based on our careful review of the /Final GCD, we conclude that even though the FAA has addressed some of our concerns, it has not resolved the main problems regarding conformity with the applicable SIP or the 2003 AQMP. Specifically, the FAA I.) relies on artificially inflated baseline emissions, i.e. emissions from the No Action/No Project ("NA/NP") Alternative by inappropriately including projects that will not be built as approved, II.) considerably underestimates potential emissions resulting from construction and operation of Alternative D, and III.) relies on inadequate mitigation of Alternative D emissions. As a result, the FAA severely underestimates incremental emissions attributable to Alternative D compared to the baseline. This leads the FAA to erroneously conclude that Alternative D conforms to the applicable SIP, which, as demonstrated in detail below, it does not.

1 Federal Aviation Administration, Clean Air Act Final General Conformity Determination, Los Angeles International Airport Proposed Master Plan Improvements, Alternative D, January 2005.

2 J. Phyllis Fox and Petra Pless, Comments on Clean Air Act Draft General Conformity Determination, Los Angeles International Airport Proposed Master Plan Improvements, Alternative D, February 6, 2004; attached as Exhibit A to February 6, 2004 Comments submitted by Shute, Mihaly & Weinberger on behalf of the City of El Segundo.

3 J. Phyllis Fox, Comments on Air Quality and Human Health and Safety, LAX Master Plan Draft EIR/EIS, July 13, 2001.

4 J. Phyllis Fox and Petra Pless, Comments on Air Quality and Human Health and Safety, LAX Master Plan Supplement to the Draft Environmental Impact Statement/Draft Environmental Impact Report; Attachment 3 to November 3, 2003 Comments submitted by Shute, Mihaly & Weinberger on behalf of the City of El Segundo; attached as Exhibit C to February 6, 2004 Comments on the Draft General Conformity Determination submitted by Shute, Mihaly & Weinberger on behalf of the City of El Segundo.

Response:

Please see Topical Response TR-GEN-2 in Part II-Volume 1 of the Final EIS regarding No Action/No Project Alternative assumptions.

Please see the SCAQMD letter dated August 12, 2004, (Appendix C, Section 1 of Appendix A-2a, Final Clean Air Act General Conformity Determination, of Volume A of the Final EIS) regarding the acceptability of the methods and emissions estimates for the general conformity evaluation. The general conformity evaluation followed acceptable protocols, used appropriate data and evaluation methods, and demonstrated that the LAX Master Plan Alternative D conforms with the currently applicable SIP. Please see Response to Comment FAL00001-29 regarding SCAQMD's review of the protocols.

Please see Responses to Comments AL00033-140, AL00033-141 and AL00033-311 through AL00033-350 in Part II-Volume 3 of the Final EIS which address comments raised by Dr. Phyllis Fox on the Draft EIS/EIR air quality impact analysis and health risk assessment; and Responses to Comments SAL00015-55 through SAL00015-65 and SAL00015-235 through SAL00015-289 in Part II-Volume 10 of the Final EIS which address comments raised by Dr. Phyllis Fox and Dr. Petra Pless on the Supplement to the Draft EIS/EIR air quality and human health and safety impact analysis. Please refer to the Section 2.3 in Appendix C of Final Clean Air Act General Conformity Determination in Appendix A-2a of Volume A of the Final EIS as well as Responses to Comments FAL00001-5 and FAL00001-37 regarding general conformity with the Clean Air Act.

FAL00003-45

Comment:

I. NA/NP ALTERNATIVE BASELINE EMISSIONS ARE INFLATED

The NA/NP alternative represents the no-build scenario, i.e., the configuration and activity levels expected for LAX in the absence of approval of Alternative D. For the conformity determination, projected emissions for the NA/NP alternative are used as a baseline against which emissions from Alternative D are compared. Therefore, it is crucial to accurately define the no-build scenario.

I.A Northside and Continental City Emissions Are Inappropriately Included

The Final GCD's emissions estimates for the NA/NP alternative include construction and operational emissions from the Northside Development and Continental City projects. Both projects were authorized in the early to mid 1980s but have not been realized to date. As we write these comments in mid-February of 2005, the same year the Final GCD assumes as the start of construction for Alternative D, we are not aware of any activity, such as permitting and budget authorization, required to build these projects.

We previously commented on the inappropriate inclusion of the Northside and Continental City projects in the NA/NP alternative. (Fox & Pless 02/04, Comment I.A.) The FAA does not deny that no work has been undertaken on these projects since they were authorized but nevertheless claims that "if the Master Plan were not approved, it is reasonably expected that LAWA would pursue its original plan for the development of [the projects]." (Final GCD, p. C-15.) The FAA's mere assertion that these projects would suddenly be dusted off does not constitute sufficient evidence that they would, in fact, be realized under the NA/NP alternative as laid out in the respective 1980s EIRs. We therefore maintain that the NA/NP alternative as presented in the Final GCD presents an artificially inflated baseline against which Alternative D is compared.

Response:

Subsection 3.2.5, No Action/No Project Alternative, in Part I of the Final EIS, along with Topical Response TR-GEN-2 in Part II-Volume 1 of the Final EIS, describe how and why the development of LAX Northside and Continental City is included in the No Action/No Project Alternative. As indicated therein, both of these development projects totaling approximately 7.5 million square feet have been reviewed pursuant to the California Environmental Quality Act and approved by the City Council. Inasmuch as the existing entitlements for the two subject areas provide, at a tract map level of approval, for a mix of industrial and commercial uses that would be consistent with existing development in the vicinity of LAX, and such land use designations are compatible with operations at LAX, it is reasonably foreseeable that the existing land use entitlements would be developed, as planned, under the No Action/No Project Alternative. If anything, the existing level of entitlement, that being approved subdivision maps for the two areas, would be an incentive to develop the land "as-is" in order to take advantage of the current demand for industrial/commercial building space in the airport area (i.e., relatively few additional approvals, such as grading and building permits, would be needed in order to begin construction right away). It should be noted that even if the City Council had not approved Alternative D, there would be no requirement for LAWA to update the 1980s EIRs, because LAWA does not anticipate making any substantial changes in these projects as laid out under the No Action/No Project Alternative. Inclusion of these projects in the No Action/No Project Alternative is consistent with the provisions of NEPA as interpreted in guidance issued by the Council on Environmental Quality. In particular, "where a choice of 'no action' by the agency would result in predictable actions by others, this consequence of the 'no action' alternative should be included in the analysis." (Question 3, Forty Most Asked Questions Concerning CEQ's NEPA Regulations). Development of LAX Northside and Continental City has not yet begun because the landowner, LAWA, has been planning and evaluating

proposed changes to those development plans in conjunction with each of the four build alternatives (Alternatives A, B, C, and D) considered for the LAX Master Plan. In accordance with CEQ regulations implementing NEPA (40 C.F.R. § 1506.1), LAWA properly refrained from proceeding with any actions that could prejudge the consideration of alternatives during the EIS process. Should final action on the LAX Master Plan by the FAA be to not approve any of the four build alternatives (i.e., no action), the FAA properly concluded that it is very unlikely that LAWA would abandon the previously-approved projects and leave the land vacant.

The decision to develop an airport is the responsibility of the airport sponsor. LAWA has indicated its present intent to develop Continental City and LAX Northside should the No Action alternative be selected. The City Council for Los Angeles has already approved these proposals. Having received consistent affirmations of the sponsor's intent to develop these areas in the foreseeable future in the event that the No Action alternative is selected, FAA is not in a position to substitute its judgment for LAWA's and the Los Angeles City Council. The commentor cites the passage of time since the initial approval of Continental City and LAX Northside as evidence that FAA should not consider these projects to be the sort of "predictable actions by others" to be included in the No Action alternative as indicated in the Council on Environmental Quality's 40 Most Asked Questions. FAA disagrees. Projects which have been environmentally reviewed and approved by the City Council, the airport's governing body, are a reasonable basis for evaluating what "predictable actions by others" might be taken in the absence of Federal approval of any of the Master Plan action alternatives. In light of LAWA's current and ongoing express intent to develop these locally approved projects, FAA believes it is appropriate to include these actions in the No Action alternative. As a result, it is not reasonable or appropriate to assume that environmental effects, including air pollutant emissions, associated with development of new uses at the LAX Northside site and at the Continental City site would only occur if the LAX Master Plan is approved. By including LAX Northside and Continental City in the No Action/No Project Alternative, both the Final EIS and the Final General Conformity Determination have properly accounted for the consequences of others (i.e., LAWA), should the LAX Master Plan not be approved (i.e., proceed with development under the previously-approved entitlements).

FAL00003-46

Comment:

I.B Emissions Estimates Are Not Sufficiently Documented

The FAA indicates that "under Alternative D, LAX Northside would be implemented, but at a lower intensity than under the No Action/No Project Alternative." (Final GCD, p. C-15.) Yet a description or numerical breakdown of emissions attributable to these projects is nowhere to be found in the Draft or Final GCD or in their Appendices. This leaves the reviewer in the dark regarding the difference between the buildout scenarios under Alternative D and the NA/NP alternative or the magnitude of mitigated emissions resulting from the construction and operation of these projects.

Response:

The comment suggests that the FAA has failed to provide sufficient information for the commentor to be able to verify the disclosure of environmental impacts associated with construction and operation of LAX Northside under Alternative D. The Draft EIS/EIR, the Supplement to the Draft EIS/EIR, and the Final EIS, address the overall development of Westchester Southside under Alternatives A, B, and C and LAX Northside under Alternative D at a programmatic level of analysis. The impacts analyses account for overall operation of the total development anticipated for Westchester Southside and LAX Northside but do not delineate the impacts specific to each building or individual use occurring therein.

Although the analysis in the Final EIS regarding LAX Northside may be sufficient for purposes of analysis of this collateral development in a programmatic fashion, the FAA has determined that the disclosure of impacts related specifically to LAX Northside under Alternative D is too speculative to be a basis on which FAA can unconditionally approve LAX Northside in the Record of Decision (ROD), as the ROD represents an approval at the project, rather than programmatic, level. Because LAWA has provided a very general description of what LAX Northside would be under Alternative D, and because this resulted in use of inconsistent assumptions in evaluating LAX Northside's environmental effects (see Response to Comment FAL00003-125), FAA has decided that it cannot take action regarding LAX Northside at this time.

As more fully described in Section VII of the ROD, FAA is requiring LAWA to submit a consistent set of planning assumptions regarding the size and nature of the development proposals for LAX Northside

and the basis for those assumptions before a decision regarding LAX Northside will be made or an airspace determination can be issued. LAWA must provide consistent and reasonable planning assumptions regarding the collateral development proposal so that FAA can undertake a review of the environmental consequences and airspace impacts associated with LAX Northside. Based on that review, FAA will determine whether the project continues to meet the general conformity requirements of the Clean Air Act and whether the Final EIS continues to be sufficient.

FAL00003-47

Comment:

I.C Emissions from Northside and Continental City Are Substantial

Considering the sheer scale of the Northside and Continental City projects, it is obvious that their buildout would result in considerable construction and operational emissions. Under the NA/NP alternative, the Northside project encompasses "approximately 4.5 million square feet ... of office space, hotel space, retail space, and a golf course in an area of approximately 340 acres of land..." and the Continental City project consists of "approximately 3 million square feet ... of office space, hotel space, and retail space ... in an area of approximately 28.5 acres of land..." (Final GCD, p. 4-4.) The EIRs for the Northside and Continental City projects indeed reveal that emissions estimates for these projects are massive.

As approved, the anticipated buildout period for both projects is on the order of eight to ten years. The Continental City project would require the removal of 680,000 cubic yards of material from the site, which would result in considerable exhaust emissions from heavy-duty construction equipment (wheeled dozers) and haul trucks as well as fugitive dust emissions during grading. (Continental City Final EIR5 p. III-4.) The Northside project also requires massive earthmoving and results in about 330 tons per year ("ton/year") of unmitigated fugitive dust particulate matter ("PM") emissions. (Northside Final EIR6, p. IV-85.) Neither EIR contains sufficient information to summarize all emissions attributable to construction or operation of these projects. Nor does the Final GCD state whether it used the emissions estimates from these environmental review documents or revised them.

Due to the absence of a detailed breakdown of emissions for these projects in the Final GCD for either the NA/NP alternative or Alternative D in addition to a lack of mitigation efficiency percentages, we were unable to verify emission estimates provided in the Final GCD, let alone estimate by how much the baseline is inflated. Considering the scale of these projects, it is, however, obvious, that their inappropriate inclusion in the baseline will result in artificially low incremental emissions for Alternative D.

5 City of Los Angeles, Continental City Draft Environmental Impact Report, SCH No. 83022407, August 1984; Notice of Determination for Final Environmental Impact Report signed August 12, 1985.

6 City of Los Angeles, Final Environmental Impact Report, LAX North Side Development Project, certified March 29, 1983.

Response:

The Final GCD used the emissions estimates from the Final EIS for Continental City and LAX Northside. Please see Attachment 1 (Tables 1-6 and 1-7) of Appendix F-B, Air Quality Appendix, and Attachment N-1 (page 2) of Technical Report S-4, of the Final EIS regarding the construction and operational emissions, respectively, associated with Continental City and LAX Northside as analyzed under the No Action/No Project scenario. Please see Response to Comment FAL00003-46 regarding the emissions estimates related to LAX Northside under Alternative D. Please see Response to Comment FAL00003-45 regarding the appropriateness of including Continental City and LAX Northside in the No Action/No Project scenario.

FAL00003-48

Comment:

II. EMISSIONS ESTIMATES FOR ALTERNATIVE D ARE FLAWED AND DO NOT CONFORM TO THE SIP

We previously commented on the fact that emissions from Alternative D are consistently underestimated for a variety of reasons, including flawed assumptions, flawed input parameters, and flawed modeling. (See Fox & Pless 11/04 7, Comments IV and V; Fox & Pless 02/04, Comment II; Fox & Pless 11/03, Comments III and IV; Fox 07/01, Comments I-III.) Rather than reiterating all those reasons, most of which still have not been adequately addressed by LAWA or the FAA, we herewith incorporate these comments by reference. Below, we discuss the effect the underestimation of airport capacity has on conformity to the SIP in more detail.

7 J. Phyllis Fox and Petra Pless, Air Quality and Public Health, Los Angeles International Airport Proposed Master Plan Improvements, Final Environmental Impact Report, November 29, 2004; attached as Exhibit A to November 2004 Comments submitted by Shute, Mihaly & Weinberger on behalf of the City of El Segundo.

Response:

Please refer to Appendix C, Section 2.3, Response to City of El Segundo Comment Letter Dated February 6, 2004, of Appendix A-2a, Final Clean Air Act General Conformity Determination, of Volume A of the Final EIS for responses to comments on the general conformity determination. Please see Responses to Comments FAL00001-5 and FAL00001-37 regarding General Conformity. Please refer to Response to Comment FAL00003-2 regarding the capacity of Alternative D. Please see Response to Comment FAL00001-29 regarding background concentrations and SCAQMD's review of the modeling protocol. Please see Section 4 of Appendix A-2a of Volume A of the Final EIS for a discussion of how the protocol for the general conformity evaluation was reviewed by USEPA, CARB, SCAQMD, and SCAG and how those comments were incorporated into the evaluation.

FAL00003-49

Comment:

II.A Underestimated Airport Capacity Results In Underestimate of Alternative D Emissions

The Alternative D planning assumptions reflected in the Final GCD assume that airside gate access for aircraft will restrict the activity level at LAX in 2015 to 78.9 million annual passengers ("MAP") and 3.1 million tons of cargo ("MAT"). (Final GCD, p. 3-1.) However, it appears that these assumptions considerably underestimate the actual capacity under the Alternative D gate configuration. An independent evaluation by the airport design and capacity expert Professor Adib Kanafani, UC Berkeley, revealed that LAWA never conducted a proper capacity analysis of the proposed terminal and gate configuration but instead based its estimates on a number of market assumptions.8 Based on the proposed gate configuration, Professor Kanafani established a conservative capacity estimate for Alternative D at 87 MAP.

The FAA argues that Professor Kanafani's capacity analysis "arbitrarily continues to highlight the upper limit of potential passenger activity," and points out that his analysis comprises a wide range of possible outcomes, including the FAA's considerably lower capacity estimate of 78.9 MAP. (Final GCD, p. C-21.) This is incorrect. As Professor Kanafani in his rebuttal clarifies, "[t]he FEIR refers to the estimate of 87 MAP as the upper limit of capacity. In fact the upper limit is much higher than that. A figure of 93 MAP is possible ..." (Kanafani 10/04 9, Response to RTC SAL00015-333.) In other words, Professor Kanafani's estimate of 87 MAP figure is a more realistic, but still conservative figure, which could very well be considerably exceeded.

8 Adib Kanafani, Comments on 2003 LAX Master Plan Addendum & Supplement to the DEIS/DEIR, November 2003, attached as Exhibit B to February 6, 2004 Comments on the Draft General Conformity Determination submitted by Shute, Mihaly & Weinberger on behalf of the City of El Segundo.

9 Adib Kanafani, Comments on LAX Master Plan Final EIS/EIR Responses to Comments, October 2004; attached as Exhibit A to December 1, 2004 Comments on the FEIR submitted by Shute, Mihaly & Weinberger on behalf of the City of El Segundo.

Response:

As indicated in Response to Comment FAL00003-2, and as documented in detail in the Final LAX Master Plan, the capacity analysis disclosed in the Final EIS and relied upon in preparing the General Conformity Determination was based upon reasonable assumptions. Please see Response to Comment FAL00003-2 regarding capacity and other Master Plan issues raised in this comment.

FAL00003-50

Comment:

The Clean Air Act mandates that the agency "assure" that its actions conform to the applicable SIP. (42 U.S.C. §7506(c)(1).) This mandate can only be fulfilled, if the agency, here the FAA, determines a project's maximum potential impacts, which is then evaluated regarding its conformity with the applicable SIP. Consequently, the FAA must base its assessment on the maximum potential airport capacity of 87 MAP, if not 93 MAP, and not on a capacity that falls within a range of possible future outcomes.

Response:

The Clean Air Act defines conformity to the SIP as meaning conformity to a SIP's purpose of eliminating or reducing the severity and number of violations of the national ambient air quality standards and achieving expeditious attainment of such standards. The commentor contends that, for the FAA to assure that its actions conform to the SIP, it must determine the project's "maximum potential impacts." The general conformity regulations do not establish any such requirement. The criteria and procedures to be used in conducting a general conformity evaluation are stipulated in 40 CFR 93 Subpart B. In particular, 40 CFR 93.159(d) identifies that the evaluation must be based on the total of direct and indirect emissions from the proposed project and must reflect emission scenarios that are expected to occur under each of the following cases: (1) the mandated attainment year, or the farthest year for which emissions are projected in the maintenance plan; (2) the year during which the total of direct and indirect emissions from the action is expected to be the greatest on an annual basis; and (3) any year for which the applicable SIP specifies an emissions budget. FAA completed its evaluation consistent with these regulatory requirements. The commentor's contention that the FAA must base its conformity determination on the "maximum potential airport capacity" appears to be a continuation of the commentor's disagreement with the FAA and its experts regarding the reasonableness of FAA's forecasts in the Final EIS. Please see Response to Comment FAL00003-2 regarding airport capacity.

FAL00003-51

Comment:

We previously commented on the emissions estimates presented in the Draft GCD, demonstrating that because the FAA based its emission estimates for Alternative D on an airport capacity of only 78.9 MAP as opposed to a more realistic passenger capacity of 87 MAP, it substantially underestimated operational emissions from LAX. Absent availability of detailed information10, we approximated emissions for maximum capacity based on passenger capacity estimates. (Fox & Pless 02/04, Comment II.A.2.) The FAA criticized our approach because it did not account for potential fleet changes, which may result in a decreased number of operations due to the use of larger aircraft while at the same time increasing passenger activity levels. However, as Professor Kanafani pointed out, a fleet change towards larger aircraft would automatically also accommodate a higher level of passenger activity, which would increase the MAP even further. (Kanafani 10/04, Response to RTC SAL00015-11.) Further, it is unlikely that an increase of more than 8 MAP over the Final GCD's estimate, i.e. an increase in passenger activity of about 10 percent,11 may be accommodated by fleet changes.

10 See Freedom of Information Act requests from Christy H. Taylor to David Kessler dated October 16, 2003, January 13, 2004, and March 16, 2004, requesting modeling files and spreadsheets with emission estimates. None of the responses provided updated and complete information, necessary to adequately review the FAA's emissions calculations and dispersion modeling results.

11 (87 MAP) / (78.9 MAP) = 1.103

Response:

This comment, like many others, raises questions about the accuracy of Alternative D's capacity as disclosed in the Final EIS. Please see Response to Comment FAL00003-2 regarding airport capacity. Based on the false premise that the Final EIS understates Alternative D's capacity, the comment sets forth a new hypothetical alternative which results in 87 MAP and purports to analyze the air quality impacts flowing from that scenario. This scenario is hypothetical and speculative and does not require a response under NEPA.

The commentor ignores the fact that the Alternative D fleet mix is larger, as analyzed, to arrive at the passenger and operations activity levels used in the General Conformity Determination (GCD). The additional 8 MAP to which the commentor refers is part of the hypothetical and speculative case that is not part of Alternative D. Further, the commentor incorrectly asserts that a larger fleet mix will "automatically" accommodate more passengers in Alternative D. The alternative limits the gate space available to park aircraft wing tip to wing tip and not on the basis of gate count as the commentor and others have incorrectly asserted here and elsewhere in comments on the Final EIS. With this gate space limitation, increasing the fleet size reduces the total number of simultaneously available gates. Also, the time necessary and common to turn around a large, wide body aircraft is longer than that of smaller narrow body aircraft. All of these assumptions are part of the Alternative D description as analyzed in the LAX Master Plan, the Final EIS and the GCD.

The Final EIS contains a detailed and thorough air quality impact analysis related to the operation of the airport under Alternative D. Air pollutant emissions and concentrations were developed for all aspects of the project, as presented in Volume A; Section 4.6 (Air Quality); Appendices G, S-E, and F-B; and Technical Reports 4 and S-4 of the Final EIS, as well as in the Final General Conformity Determination. Data specifically identified in the Freedom of Information Act requested from the commentor were provided by the FAA.

FAL00003-52

Comment:

As discussed above, the Clean Air Act mandates the evaluation of maximum potential impact, i.e. the use of 93 MAP, which is equivalent to an increase of almost 18 percent over the FAA's assumption of 78.9 MAP.12 Therefore an increase in passenger activity will undoubtedly require an increase of aircraft operations and traffic and, consequently, result in increased emissions.

12 (93 MAP) / (78.9 MAP) = 1.179

Response:

The FAA does not accept the commentor's assertion regarding aircraft activity and passenger levels. Please see Response to Comment FAL00003-2 regarding airport capacity.

Please see the SCAQMD letter dated August 12, 2004, (Appendix C, Section 1 of Appendix A-2a, Final Clean Air Act General Conformity Determination, of Volume A of the Final EIS) regarding the acceptability of the methods and emissions estimates for the general conformity evaluation. The general conformity evaluation followed acceptable protocols, used appropriate data and evaluation methods, and demonstrated that the LAX Master Plan Alternative D conforms with the currently applicable SIP.

FAL00003-53

Comment:

II.A.1 Aircraft and APU NOx Emissions

Considering how close the Final GCD's Alternative D NOx emissions estimates for aircraft and auxiliary power units ("APU") are to the approved SIP allocations, such increase in aircraft operations and associated emissions will result in exceedance of the applicable SIP for all evaluated years and therefore result in non-conformity for this criteria pollutant. Table 1 compares the Alternative D aircraft and APU NOx emissions a) as presented in the Final GCD, b) based on a more realistic capacity of 87 MAP, and c) based on an upper limit of 93 MAP to the emissions allocated to aircraft and APUs for LAX in the 1997/1999 AQMP, the basis for the applicable SIP.

Table 1: Please see original letter for table.

Table 1 clearly illustrates that an increase to 87 MAP or 93 MAP would result in considerable exceedance of the SIP allocations for aircraft and APUs. As discussed above, while emissions may not be directly proportional to passenger activity level due to potential fleet changes, any shift towards larger aircraft would automatically increase the potential passenger increase. We therefore conclude that the above estimates serve as a reasonable approximation of aircraft and APU NOx emissions for increased passenger activity levels and are adequate to demonstrate that Alternative D does not conform to the SIP in the milestone years 2005, 2008, and 2010 for NOx.

Response:

The FAA does not accept the commentor's assertion regarding aircraft activity and passenger levels and therefore does not concur with the commentor's interpretation of general conformity with the SIP.

This comment, like many others, raises questions about the accuracy of the Alternative D's capacity as disclosed in the Final EIS. Please see Response to Comment FAL00003-2 regarding airport capacity. Based on the false premise that the Final EIS understates Alternative D's capacity, the comment sets forth a new hypothetical alternative and purports to analyze the air quality impacts flowing from that scenario. FAA has not reviewed the results indicated in the hypothetical analysis for accuracy nor the methodology used to reach the conclusions in the comment. This scenario is hypothetical and speculative, and does not require a response under NEPA.

Please see the SCAQMD letter dated August 12, 2004, (Appendix C, Section 1 of Appendix A-2a, Final Clean Air Act General Conformity Determination, of Volume A of the Final EIS) regarding the acceptability of the methods and emissions estimates for the general conformity evaluation. The general conformity evaluation followed acceptable protocols, used appropriate data and evaluation methods, and demonstrated that the LAX Master Plan Alternative D conforms with the currently applicable SIP.

FAL00003-54

Comment:

II.A.2 Motor Vehicle NOx Emissions

The Final GCD provides the following line of reasoning to demonstrate that motor vehicle NOx emissions under Alternative D conform to the applicable SIP:

"As demonstrated ... operational emissions estimated for aviation sources (aircraft, APUs, GSE) and for stationary sources at LAX under Alternative D are within the respective emissions budgets of the applicable SIP. By making the reasonable assumption that motor vehicle activity which has LAX as a source or destination is directly related to the level of aircraft operations at LAX, together with the knowledge that aircraft activity levels under Alternative D are generally consistent with those in the RTP [Regional Transportation Plan], it is reasonable to assume that SCAG [South Coast Association of Governments] has modeled the associated motor vehicle emissions to support the activity levels represented by the emissions estimates for aviation sources at LAX in both the approved SIP and the 2003 AQMP. Therefore it can be inferred that the motor vehicle NOx emissions for Alternative D, taken

together with NOx emissions for all other motor vehicle sources in the SCAB [South Coast Air Basin], would not exceed the NOx emissions budgets for motor vehicle sources in the applicable SIP or alternatively in the 2003 AQMP." (Final GCD, p. 5-5.)

The applicable SIP as well as the proposed 2003 AQMP are based on the Regional Transportation Plan ("RTP") published by the South Coast Association of Governments ("SCAG"). As demonstrated above, the aircraft activity levels under Alternative D are not consistent with the applicable SIP and, consequently, its underlying RTP. Following the Final GCD's line of logic, we therefore infer that the motor vehicle NOx emissions for Alternative D, taken together with NOx emissions for all other motor vehicle sources in the South Coast Air Basin ("SoCAB") will exceed the NOx emissions budgets for motor vehicle sources in the applicable SIP. In other words, motor vehicle NOx emissions under Alternative D do not conform to the applicable SIP.

Response:

Please see SCAG's letter dated February 4, 2004 (Appendix C, Section 1 of Appendix A-2a, Final Clean Air Act General Conformity Determination, of Volume A of the Final EIS) regarding the consistency of the LAX forecasted activity with the 2001 Regional Transportation Plan (RTP) and 2004 RTP. Please also see Response to El Segundo Comment I.A on the Draft General Conformity Determination (Appendix C, Section 2.3, page C-9 in Appendix A-2a) regarding the airport activity levels used to develop emission budgets in the currently approved SIP.

SCAG has found the forecast activity levels of Alternative D are generally consistent, but not specifically consistent, with the adopted forecast for LAX in the 2001 RTP. The activity levels in the currently approved SIP (which is taken from the 1997/1999 Air Quality Management Plan) for LAX are in the range of 83 to 92 million annual passengers (MAP). Therefore, the emissions from airport activity for Alternative D are accounted for in, and conform with, the currently approved SIP.

FAL00003-55

Comment:

II.A.3 PM10 Emissions

The Final GCD admits that Alternative D PM10 emissions from aircraft exceed the applicable SIP budgets for this pollutant. The Final GCD then proceeds to demonstrate conformity for this pollutant via air dispersion modeling, showing that the resulting ambient air concentrations will not exceed the federal ambient air quality standards ("AAQS"). (Final GCD, pp. 5-7/5-8.)

Previously in the Draft GCD, the resulting annual ambient air quality concentrations (Alternative D plus background) for PM10 in 2006, 48 µg/m3, were close enough to the federal AAQS (50 µg/m3) as to cause concerns with the South Coast Air Quality Management District ("SCAQMD"), the agency responsible for implementing the SIP. (Draft GCD, p. 5-7; SCAQMD 02/04 13.) Of these 48 µg/m3, which represent the total of Alternative D plus the ambient background concentration, Alternative D is responsible for 20 µg/m3. The Final GCD now presents a revised annual PM10 ambient air concentration for 2006 of 43 µg/m3, of which 15 µg/m3 are attributable to Alternative D. Table 2 summarizes the PM10 emissions estimates for Alternative D and the resulting ambient air concentrations as presented in the Draft and Final GCD.

Table 2: Please see original letter for table.

Neither the Draft nor the Final GCD provided a breakdown for Alternative D emissions that would allow evaluating the considerable emission reduction of 175 ton/year in the interim year 2006 and the resulting decrease in ambient air PM10 concentrations. The Final GCD does not explain the substantial reduction of predicted ambient air PM10 concentrations attributable to Alternative D of 5 µg/m3, or 25 percent. The Final GCD also does not provide an explanation why, paradoxically, Alternative D emissions in interim year 2013 slightly decreased, yet ambient air PM10 concentrations attributable to Alternative D increased by 2 µg/m3.

Any increase in emissions will bring the PM10 ambient air concentrations closer to the federal annual AAQS of 50 µg/m3. As discussed above, the actual passenger capacity at LAX under Alternative D is 10 percent higher than assumed in the Final GCD. While emissions cannot be directly scaled, a 10 percent increase in PM10 emissions will obviously result in higher ambient PM10 concentrations and might result in a violation of the federal annual AAQS in interim year 2013. If the maximum potential

passenger level activity is assumed, the federal annual AAQS will most certainly be violated in 2013. Furthermore, as discussed elsewhere, the underestimate of airport capacity is not the only contributor to the considerably underestimated emissions from Alternative D. (See Fox & Pless 11/04, Comments IV and V; Fox & Pless 02/04, Comment II; Fox & Pless 11/03, Comments III and IV; Fox 07/01, Comments I-III.)

These potential violations of the federal annual AAQS are not restricted to the interim years analyzed in the Final GCD, i.e. 2006 and 2013, but may also be found in other interim years as well as in and after the final buildout year. A lack of documentation on years other than 2006 and 2013 prevents meaningful comments on such potential violations.

13 Barry Wallerstein, South Coast Air Quality Management District, Letter to David Kessler, Federal Aviation Administration, Re: Draft General Conformity Determination - Los Angeles International Airport, Proposed Master Plan Improvements Alternative D, dated February 9, 2004.

Response:

This comment, like many others, raises questions about the accuracy of the Alternative D's capacity as disclosed in the Final EIS. Please see Response to Comment FAL00003-2 regarding airport capacity. Based on the false premise that the Final EIS understates Alternative D's capacity, the comment sets forth a new hypothetical alternative which results in 87 MAP and purports to analyze the air quality impacts flowing from that scenario. This scenario is hypothetical and speculative, and does not require a response under NEPA.

It should be noted that the PM10 emissions are considered to exceed the SIP budgets because the current, applicable SIP budget does not include PM10 emissions from commercial aircraft. The PM10 budget in the SIP does not account for aircraft PM10 emissions because the analysis conducted by the regulatory agencies did not include PM10 aircraft emissions for most commercial and general aviation operations. They assumed that aircraft PM emissions were zero except for a few specific older aircraft. Therefore, another approach was used to demonstrate conformity in which all aircraft were assumed to emit PM10. If the method used by the regulatory agencies was applied to the LAX Master Plan, then Alternative D aircraft PM emissions would be essentially zero and would fall within the aircraft PM budgets in the SIP.

As noted in Appendix C, Attachment C-5F.1, of Appendix A-2a, Final Clean Air Act General Conformity Determination, of Volume A of the Final EIS, the PM10 annual concentrations were determined from three separate model runs in the Draft General Conformity Determination. A conservative estimate of 48 ug/m3 was estimated from runs for construction, on-airport non-aircraft, and aircraft sources. As noted in Attachment C-5F.1, the PM10 concentrations presented in the Final General Conformity Determination were developed from a single model run that included all of the sources. The inclusion of all sources in one run avoided some of the assumptions made when combining source impacts in the Draft General Conformity Determination. The single run allows the simultaneous analysis of all sources and avoided the need to make assumptions such as the peak impact from sources occurring at the same time and the same location. Therefore, the results presented in the Final General Conformity Determination are more accurate than those in the draft.

In addition, the commentor fails to note that for purposes of conformity, FAA is only concerned with the emissions "caused by" the project (not the background). Thus the relevant emission numbers are not the combined (i.e., Alternative D plus background), but rather only the emission caused by Alternative D. As the commentor notes, the Draft General Conformity Determination predicted 20 micrograms of PM10 and the Final General Conformity Determination predicted 15 micrograms, both of these numbers is well below the 50 micrograms standard.

FAL00003-56

Comment:

III. MITIGATION PROGRAM IS INADEQUATE TO ENSURE CONFORMITY TO THE SIP

The Final GCD relies upon the CEQA-related mitigation measures specified in the LAX Master Plan Mitigation Monitoring and Reporting Program ("MMRP"), which describes LAWA's lead responsibility for administering the program, the timing of implementation, monitoring frequency, and actions indicating

compliance. (Final GCD, p. 2-2.) This MMRP is based on a series of mitigation measures developed during the NEPA/CEQA process.

Response:

Comment noted. Please see Responses to Comments FAL00003-57 through FAL00003-61 below.

In accordance with 40 CFR 1505.3, the FAA will take appropriate steps, through Federal funding grant assurances and conditions, airport layout plan approvals, and contract plans and specifications, to ensure that the mitigation actions are implemented during project development, and will monitor the implementation of these mitigation actions as necessary to assure that representations made in the Final EIS with respect to mitigation are carried out. The approvals contained in this Record of Decision are specifically conditioned upon full implementation of these mitigation measures. These mitigation actions will be made the subject of special conditions included in future Federal airport grants to the City of Los Angeles.

FAL00003-57

Comment:

III.A MMRP Is Inadequate and Not Enforceable

The FAA relied in its Final GCD upon "CEQA-related mitigation measures that have been expressly adopted by LAWA and the City in approving Alternative D" and states that it "will require, as a condition of its final approval in the Record of Decision, that LAWA and the City implement the mitigation measures as contemplated in the adopted LAX Master Plan MMRP." (Final GCD, p. 2-2.) However, as discussed below, the MMRP, as adopted, does not provide adequate enforcement mechanisms nor does it require all feasible mitigation.

Commenting on the Draft GCD, the SCAQMD requested that the "FAA must include enforceable mechanisms in its final general conformity determination (e.g., Record of Decision) to ensure that all necessary reductions assumed in the conformity determination are achieved. Specifically, such provisions must entail performance monitoring requirements for quantifying the emission reductions at various construction and operational phases of the project and binding enforcement mechanisms as well as safeguards (i.e. contingency measures) to offset any shortfalls in emission reductions." (SCAQMD 08/04 14.)

As discussed below and in our previous comments on the Draft GCD, the Final EIR, and the Draft EIR and its Supplement, the measures contained in the MMRP are inadequate and not enforceable. (Fox & Pless 02/04, Comment II.E; Fox & Pless 11/04, Comment VI; Fox 07/01, Comment IV; Fox & Pless 11/03, Comment V.) We incorporate these comments herewith by reference.

14 Barry Wallerstein, South Coast Air Quality Management District, Letter to David Kessler, Federal Aviation Administration, Re: Follow-up Comments on Draft General Conformity Determination - Los Angeles International Airport, Proposed Master Plan Improvements Alternative D, dated August 12, 2004.

Response:

The enforceability of the air quality mitigation measures is explained in Response to Comment FAL00003-14 and Response to Comment FAF00001-07, as well as in Section 2.1, LAX Master Plan LAWA-Staff Preferred Alternative (page 2-2) and the Response to El Segundo Comment III.B.1.c (Appendix C, Section 2.3, page C-12) in Appendix A-2a, Final Clean Air Act General Conformity Determination, of Volume A of the Final EIS. The mitigation measures are fully enforceable under Cal. Pub. Res. Code §21081.6. In addition, State regulations (§§ 15091(d) and 15097(c)(3)) and the LAX Specific Plan provide additional review and enforcement mechanisms. The Mitigation Plan for Air Quality (MPAQ), to be developed under Mitigation Measure MM-AQ-1 of the MMRP, will provide specific mechanisms to enforce the mitigation measures and ensure that all feasible mitigation measures are identified and implemented.

The intended purpose of the MPAQ is to ensure that all the feasible mitigation measures are identified and implemented to reduce the air quality impacts of Alternative D at least to the levels noted in the MMRP and are maintained during and following project implementation. Therefore, the MPAQ is

specifically designed to accomplish the following: clearly identify the air quality mitigation requirements; define the process to be used to execute, monitor, report and confirm the implementation and completion of the mitigation measures; establish roles and responsibilities for carrying out the MMRP for air quality. The MPAQ will be developed in consultation with USEPA, CARB, SCAQMD, and SCAG.

In accordance with 40 CFR 1505.3, the FAA will take appropriate steps, through Federal funding grant assurances and conditions, airport layout plan approvals, and contract plans and specifications, to ensure that the mitigation actions are implemented during project development, and will monitor the implementation of these mitigation actions as necessary to assure that representations made in the Final EIS with respect to mitigation are carried out. The approvals contained in this Record of Decision are specifically conditioned upon full implementation of these mitigation measures. These mitigation actions will be made the subject of special conditions included in future Federal airport grants to the city of Los Angeles.

FAL00003-58

Comment:

III.A.1 Incentives Are Insufficient To Ensure Compliance

Several of the mitigation measures contained in the MMRP are incentive- based and would only "encourage" participation, which is insufficient to guarantee compliance. For example, in Appendix A, Protocol for General Conformity Determination, the FAA states that "for purposes the general conformity evaluation, it is assumed that ... under Alternative D, emissions from GSE will be eliminated at LAX by 2015." (Final GCD, Appx. A., p. A-18.) Here, the FAA relies on LAWA's proposal to "virtually" eliminate GSE emissions under Alternative D. However, the mitigation measure is based on nothing more than vaguely identified "incentives and tenant lease requirements." (MMRP, MM-AQ-4, p. 48.) There is no enforcement or monitoring required and it remains doubtful that LAWA will, in effect, be successful in eliminating GSE emissions. What's more, the required element of this mitigation measure is "[t]he successful conversion of all GSE at LAX to extremely low or zero emission equipment by 2015." (MMRP 09/04, MM-AQ-4, p. 49, emphasis added.)

Response:

The commentor is correct that, in the MMRP, LAWA anticipates using incentives and tenant lease requirements to facilitate the negotiation of binding agreements for GSE emissions reductions. LAWA also intends to provide appropriate and sufficient fueling infrastructure as part of this component of mitigation measure MM-AQ-4 (see subsection 2.3.2.2 of Appendix S-E of the Final EIS). However, these mechanisms are not mutually exhaustive of all means under LAWA's control to reduce GSE emissions at LAX. LAWA is currently following a process to develop the specific implementation details of MM-AQ-4. That plan, which will be issued by LAWA as a stand-alone document, will provide the enforcement and monitoring methods to achieve the GSE-related emission reductions quantified for this component of MM-AQ-4. In addition to MM-AQ-4, the commercial airlines operating at LAX have entered into an agreement (GSE MOU) with the CARB in which the airlines have committed to substantially reduce (by approximately 80 percent) the GSE NOx+HC emissions by 2010. Implementation of the GSE MOU will produce the majority of the reductions necessary to create a nominally zero-emission GSE fleet by 2015. Please see Response to Comment FAL00003-23 regarding the selection of air quality mitigation measures, Response to Comment FAL00003-14 regarding the enforceability of mitigation measures and Response to Comment FAL00003-026 for a discussion of how LAWA will achieve the mitigated emission levels identified in the MMRP. Please also see Response to Comment FAL00001-32 regarding the elimination of emissions from GSE as part of the mitigation plan for Alternative D.

Please see Section 6, Mitigation, in Appendix A-2a, Final Clean Air Act General Conformity Determination, of Volume A of the Final EIS for a discussion of why it is appropriate to consider all CEQA-related mitigation measures in the general conformity evaluation.

FAL00003-59

Comment:

III.A.2 All Feasible Mitigation Is Not Required

On the one hand, the MMRP requires that LAWA expand and revise the LAX Master Plan Mitigation Plan for Air Quality including "all feasible methods to reduce air pollutant emissions from aircraft, Ground Support Equipment (GSE), traffic and construction equipment both on and of the airport." (MMRP 09/04, MM-AQ-1, p. 36.) On the other hand the MMRP contains three pages full of, definitely feasible mitigation measures that "may be developed." (MMRP, MM-AQ- 3, pp. 45-48.) No specific requirement exists to implement these entirely feasible mitigation measures, which have been required for many other projects.

Response:

The enforceability of the air quality mitigation measures is explained in Response to Comment FAL00003-14, Section 2.1, LAX Master Plan LAWA-Staff Preferred Alternative (page 2-2), and the Response to El Segundo Comment III.B.1.c (Appendix C, Section 2.3, page C-12) in Appendix A-2a, Final Clean Air Act General Conformity Determination, of Volume A of the Final EIS. The mitigation measures are fully enforceable under Cal. Pub. Res. Code §21081.6. In addition, State regulations (§§ 15091(d) and 15097(c)(3)) and the LAX Specific Plan provide additional review and enforcement mechanisms. The Mitigation Plan for Air Quality (MPAQ), to be developed under Mitigation Measure MM-AQ-1 of the MMRP, will provide specific mechanisms to enforce the mitigation measures and ensure that all feasible mitigation measures are identified and implemented.

In addition, these measures are conditions of approval of this ROD and are located in Appendix A of this ROD. In accordance with 40 CFR 1505.3, the FAA will take appropriate steps, through Federal funding grant assurances and conditions, airport layout plan approvals, and contract plans and specifications, to ensure that the mitigation actions are implemented during project development, and will monitor the implementation of these mitigation actions as necessary to assure that representations made in the Final EIS with respect to mitigation are carried out. The approvals contained in this ROD are specifically conditioned upon full implementation of these mitigation measures. These mitigation actions will be made the subject of special conditions included in future Federal airport grants to the City of Los Angeles.

With specific reference to MM-AQ-3, Transportation-Related Mitigation Measure, the information provided in the MMRP is simply a precis of this measure, which identifies two required elements of the measure and notes that additional elements may be developed in the final measure. This process affords LAWA the needed flexibility to achieve the performance standard articulated in Section 2.3 of the September 2004 Addendum to the Final EIR. As noted in the MMRP, each of the four air quality mitigation measures, including MM-AQ-3, will be more fully developed prior to implementation to define the specific elements to be included in this component and the process to implement and monitor those elements. An implementation plan is being developed that will provide details as to how each element of this transportation-related mitigation measure will be implemented and monitored; this information is to be reported in a stand-alone MM-AQ-3 document prepared by LAWA.

FAL00003-60

Comment:

III.A.3 Ranges for Construction Emission Reductions

For the construction-related measure, the MMRP only provides ranges of emission reductions and volunteers that "[r]eliable emissions reductions were not able to be quantified for all of the [listed mitigation measure] components." (MMRP, MM-AQ-2, p. 39.) The Final GCD fails to disclose whether it assumed the lower end of this range of mitigation efficiency for construction mitigation, which is essential to demonstrate compliance with the MMRP. Because the Final GCD also fails to specify unmitigated emissions for Alternative D, we can not review the consistency of mitigated Alternative D emissions presented in the Final GCD with the range of emission reductions proposed by the MMRP.

Response:

The unmitigated and mitigated construction emissions are summarized in Tables F4.6-11 and F4.6-23 in Section 4.6, Air Quality, of Part I of the Final EIS. Unmitigated and mitigated construction emission calculations for Alternative D, by year, as well as mitigation assumptions, can be found in Attachment 1, Appendix F-B of Part I of the Final EIS. This includes assumptions made concerning the mitigation efficiency used for construction emissions. The emission reduction ranges in the MMRP were presented for information purposes. LAWA has committed to limiting emissions from the airport under Alternative D to the values presented in Table AD5.8 of the MMRP. The Final General Conformity Determination used the mitigated construction emissions for Alternative D from Attachment 1 of Appendix F-B of the Final EIS, which for the peak construction year (2005), are identical to the interim year construction emissions in Table AD5.8 of the MMRP. Use of mitigated construction emissions is appropriate, since the CEQA mitigation is considered part of the proposed action to be evaluated under the general conformity regulations. The construction emission reductions for each pollutant and year assumed in the Final General Conformity Determination can be calculated from the mitigated and unmitigated emissions presented in Appendix F-B, Attachment 1, Table 1-5 of the Final EIS.

Please see Response to Comment FAL00003-112 regarding detailed construction emission calculations, both mitigated and unmitigated, for all alternatives. The specific emission reductions associated with the components of the construction mitigation measure (MM-AQ-2) are included in the detailed spreadsheets referenced in that response. As indicated in that response, heavy construction equipment emission reductions for combined PuriNOx fuel, particulate traps, and injection timing retarding were estimated to be 24 percent for NOx and 85 percent for PM10. The on-site internal combustion engine generator emission reductions for combined PuriNOx fuel, particulate traps, and use of grid power for one-third of the construction power requirement were estimated to be 33 percent for CO, 33 percent for VOC, 46 percent for NOx, 33 percent for SO2, and 83 percent for PM10. The emission reductions for fugitive dust stabilization included in the spreadsheets was 63 percent. These reduction estimates were based on information provided by CARB, interviews with Port of Los Angeles staff (the Port uses PuriNOx fuel and particulate traps on certain engines), and potential fugitive dust control efficiencies presented in Table 11-4 of the 1993 SCAQMD CEQA Handbook.

It should be noted that the range of emission reduction in terms of tons per year is dependent on both the emission reduction percentage and the unmitigated emissions. For example, since unmitigated construction emissions from Alternative D are smaller than those from Alternatives A, B, or C, when the percent reduction is applied to unmitigated Alternative D emissions, the mitigated Alternative D emissions will be at the lower end of the emission reductions range. Since unmitigated emissions vary for each alternative, the resulting mitigated emission reduction in terms of tons per year reduced will also vary for each alternative.

FAL00003-61

Comment:

III.B Final GCD Alternative D Emissions Are Inconsistent With MMRP

The MMRP states that "[a]t a minimum, air pollutant emissions associated with implementation of the LAX Master Plan will be reduced to levels equal to those identified in Table AD5-8." Table 3 summarizes the criteria pollutant emissions levels presented in MMRP for the interim year 2013 and the horizon year 2015 for Alternative D and the corresponding emission levels presented in the Final GCD.

Table 3: Please see original letter for table.

Table 3 demonstrates that in two cases, i.e. NOx and PM10 emissions in the interim year 2013, implementation of the MMRP will not assure the mitigated emission levels assumed by the Final GCD. In other words, the Final GCD assumes emission levels that are lower than accounted for by mitigation in the MMRP.

Finally, as we pointed out in our comments on the Final EIR, the MMRP is based on considerably underestimated emissions for Alternative D and fails to include secondary emissions from electricity generation and, and, consequently, will not be able to achieve its own proposed emission limits. (See Fox & Pless 11/04, Comment VI.B.)

Response:

The mitigation measures, whether enforced by LAWA or the FAA, are part of the whole of the action evaluated in the Conformity document and are therefore appropriate to consider in the conformity analyses.

Please see subsection A.2.3.3, Comparison of NEPA and General Conformity Evaluations, in Volume A of the Final EIS for a discussion of the sources of the differences between the mitigated emissions for Alternative D from the Final EIS as presented in the MMRP and the emissions in the Final General Conformity Determination. Essentially, the general conformity evaluation used a higher mixing height to calculate aircraft emissions, and a lower activity level in 2005 (and 2013) to calculate all emissions than the NEPA evaluation. These changes were made during the conformity evaluation by the South Coast Air Quality Management District and Southern California Association of Governments. Furthermore, in developing the interim year emissions inventories for Alternative D, the Final EIS uses the operations (on-airport and off-airport) in 2013 and construction in 2005 to produce conservative emissions estimates for the interim year. The general conformity evaluation differs in that emissions were explicitly calculated for the years 2005, 2006, 2008, 2010, 2013, and 2015 (i.e., each of the emission budget years, attainment date years, and years of greatest emissions, as required by the general conformity regulations). Therefore, the Final EIS emissions for the interim year for Alternative D are not the same as those for any of the years analyzed in the general conformity determination. Also, because the general conformity evaluation relied on the dispersion modeling results for PM10 obtained from the NEPA analysis, the findings of the two assessments for this parameter compared to the applicable NAAQS are identical (i.e., Alternative D is not significant since the PM10 NAAQS are not expected to be exceeded as a result of the implementation of Alternative D).

To summarize the above the discussion, the differences in interim year PM10 and NOx emissions noted by the commentor are due solely to the use of the peak construction year (2005) emissions for the interim year in the MMRP instead of construction emissions for 2013 (the interim year noted in the MMRP). For all other sources of PM10 and NOx emissions, as well as all sources of VOC and CO in the interim year, the limits included in the MMRP will ensure that the emissions assumed in the Final GCD are attained. Note that the MMRP limits will also ensure that all emissions from all sources assumed in the Final GCD for 2015 will be attained. The project-level CEQA documents now required by the City for each of the projects implementing the Master Plan will be used to determine if the construction emissions indicated for a given year in the Final GCD are or are not being exceeded. If these analyses indicate that construction emissions in a given year may exceed the value previously analyzed for that year in the Final GCD, the GCD would need to be re-evaluated by FAA.

Secondary emissions from electricity generation are specifically quantified in subsection 4.6.10, Secondary Air Emissions - Electricity Production, in Part I of the Final EIS. Also, please see Response to Comment FAL00003-135 regarding the authority of LAWA and FAA to control emissions from off-airport emission sources, such as those that produce secondary emissions from electricity generation.

FAL00003-62

Comment:

IV. CONCLUSION

As detailed above, the Final GCD relied on an artificially inflated baseline, substantially underestimates potential emissions resulting from construction and operation of Alternative D, and relies on inadequate and unenforceable mitigation of Alternative D emissions. As a result, the FAA erroneously concludes that Alternative D will conform to the SIP. We demonstrated that Alternative D does not conform to the SIP for a number of reasons, including, but not limited to, exceeding the NOx SIP allocation for LAX for aircraft, APUs, and vehicle traffic as well as presenting emissions estimates lower than those guaranteed by the MMRP.

Response:

Please see Responses to Comments FAL00003-44 through FAL00003-61 regarding the General Conformity Determination and related issues in this and previous comments.

FAL00003-63

Comment:

Comments on the LAX Master Plan Final EIS/EIR Responses to Comments
By Professor Adib Kanafani
October 2004

General Comments

The following comments on the LAX Master Plan Final EIS/EIR deal with the question of airport capacity and with whether the gate positions system proposed in Alternative D can limit traffic at the airport to 78.9 MAP. In this regard the Final EIS/EIR does not differ substantively from the Master Plan Addendum dated June 2003. Comments in the FEIR continue to confuse market analysis and capacity analysis. The FEIR does not provide any additional evidence as to why its traffic assumptions should be accepted. The forecast in the FEIR continues to represent heroic assumptions about airline and market behavior in response to a capacity constraint. Yet, the Master Plan and the FEIR in their phasing do not show any gate capacity constraint for most of the life of the Master Plan. 163, not 153 gates are shown to continue to be operational until the very last phase, presumably in 2015. By then, with current traffic growth trends continuing, no gate capacity constraints would have had an effect on traffic and none of the market adjustments postulated in the Master Plan would have occurred. Traffic could very well have reached or exceeded 78.9 MAP before any gate reductions are implemented at LAX.

There is nothing in the FEIR that supports the Master Plan's claim that one of its goals is to limit traffic to 78.9 MAP. Furthermore, there is no new evidence in the FEIR to support the critical assumptions made in the Master Plan regarding, and that affect, the capacity of the system. The comments in the FEIR do not give any rationale for changing any of the conclusions present in our original comments. If anything, there is ample reason to adjust our original capacity estimate upwards, as is shown in some of our responses below.

Therefore, we conclude that the FEIR does not convincingly make the case that the capacity of LAX is limited to 78.9 MAP. We believe that the plan called Alternative D has a capacity that exceeds that number significantly.

Response:

Please see Response to Comment FAL00003-2 regarding capacity and other Master Plan issues raised in this comment. While the Final EIS does not directly address the issue of the number of gates available at all points through the implementation of Alternative D, the plan does suggest a substantial airside and terminal construction program necessary to complete the improvements. This construction program would be taking place simultaneously with on-going airport operations that are already at high levels of activity. To say the least, these construction activities would be disruptive to the on-going operations. LAWA makes no commitments to take existing gates out of service (other than those demolished to make way for new construction) until adequate replacements are available. Despite this accommodation, airfield congestion and disruption of airlines operations are anticipated during this time.

NEPA requires Federal agencies to take a hard look at reasonably foreseeable environmental impacts. Here, the forecast activity levels generated for each of the alternatives was based on widely accepted principles and methodology considered appropriate by FAA. These forecasted activity levels provide a reasonable basis upon which to analyze the reasonably foreseeable environmental impacts of the alternatives. NEPA does not require more. If LAX were to reach 78.9 MAP before 2015, LAWA has made specified commitments through the LAX Specific Plan to monitor and make necessary adjustments to the plan and/or mitigation measures as a result.

FAL00003-64

Comment:

Comments on Specific Sections

SAL00015-2

Final EIR:

"As stated in Section E1.3 Aircraft Gate Assignments, in Appendix E Alternative D Airside Analysis of the Draft LAX Master Plan Addendum detailed gate capacity analysis has been conducted. All flights in the 2015 design day schedule for Alternative D were assigned to a gate to determine future terminal loadings and to simulate airside operations. Aircraft gate assignments were made based on the user allocation and maximum gate size assumptions. Ranges of minimum integrate [sic] times, dependent on airline group, were assumed between gate uses. The minimum integrate [sic] times used in the other alternatives were also applied in this alternative. The results of an Alternative D gate assignments and the utilization of each gate throughout the day are shown on Figures E-5 and E-6. "

Response:

Assigning the forecasted operations and a forecasted fleet mix to the available gates does not constitute a gate capacity analysis. Such an assignment shows that the gates can handle the projected traffic, but does not demonstrate that the gates cannot handle more traffic, and is therefore not sufficient to prove that the gates will limit traffic to 78.9 MAP.

Table V-A.5 of Draft LAX Master Plan shows the inter-gate times by airline groups, which range from 15 to 60 minutes and states. "Ranges of minimum inter-gate times, dependent on airline group, were assumed between gate uses... Occasionally, it was necessary to violate these minimum inter-gate times in order to accommodate all the flights in available gates." [quoted from Draft LAX Master Plan] With the Master Plan's own acknowledgment that it is possible to violate these numbers, it can be concluded that the inter-gate times of one hour which are seen in Tables E-5 and E-6 of the Master Plan Addendum, can be shrunk to increase gate throughout, especially for regionals and commuters, which the Master Plan expects will become a growing proportion of the traffic. The Addendum and the Final EIR do not therefore convincingly show that gate utilization is maximized and that the throughput of gates cannot be increased. These documents do not show a capacity analysis.

In our original comments on the Addendum we did not even question the Master Plan's assumptions regarding gate utilization and we illustrated that it is possible to exceed the 78.9 MAP even with the gate utilization assumed in the Addendum and defended in the Final EIR. In our original comments we focused on the ability of the gates positions, with the utilization assumed in the Master Plan, to handle traffic higher than 78.9 MAP. With increased gate utilization, which is clearly possible with some inter-gate times of 60 minutes, the gate capacity is even higher than is shown in our original comments.

Response:

Please see Response to Comment FAL00003-2 regarding capacity and other Master Plan issues raised in this comment.

Also see Section 2 in Chapter IV Facility Requirements (Section 2) of the Draft LAX Master Plan in which the purpose, approach and methodology for determining and utilizing a "design day" activity forecast is presented. In particular, please note that the design day is defined as the average of week-day activity in the peak month of operations (Peak Month Average Week Day or PMAWD). In the case of LAX, this day represents a day of operational activity that approximates the 86th percentile of busy days (i.e., it is busier than about 314 days of the year). This leaves 51 days each year that will be busier than the day to which facilities have been designed.

The reference noted by the commentor regarding the general approach taken for first adjusting minimum inter-gate times is in the context of the constrained design day schedules of operations. The original minimum inter-gate times were established based on observation and logistical minimums anecdotally supported by various airlines operating at LAX. These generalizations were first established in the LAX Master Plan as part of the unconstrained airside analysis. As part of the constrained alternatives development process, these times were adjusted to test if the scheduled

operations could be accommodated on limited facilities. As stated above, these minimum inter-gate time adjustments were made within the context of the defined design day and within the time limitations of the particular market being served by a particular carrier. In the end, all results associated with these analyses have been provided (See Appendix E of the Final LAX Master Plan).

FAL00003-65

Comment:

SAL00015-11

Final EIR:

"... Alternative D is designed to serve approximately 78.9 MAP, the level of passenger activity identified by SCAG... "

Response:

In our original comments we did not question the forecast. We questioned the capacity.

Final EIR:

"Alternative D would encourage the development and use of regional airports to serve local demand by constraining the facility capacity at LAX.... "

Response:

The Master Plan fails to explain how LAX will encourage the development of regional airports. Indeed, in the FEIR the Plan states: "...Airlines rather than government decide which airports will be served...", the Plan goes on to talk about LAX's: "...need to compete for international gateway service...". [quoted from FEIR pages ES4, ES6] Furthermore, the Plan's stipulation that limiting the number of gates at LAX will encourage airlines to shift operations to other airports in the region is without merit since the Plan's phasing shows that no gate reduction from the current 163 gates will occur until the very last stage, i.e. 2015. As mentioned above, all the factors that would result from gate constraints and that would encourage airlines to shift operations will not have taken effect until well into the life of the master plan.

Response:

Please see Response to Comment FAL00003-2 regarding capacity and other Master Plan issues raised in this comment. Also, please see Response to Comment FAL00003-63 regarding the phasing of gates associated with Alternative D over the course of its implementation.

FAL00003-66

Comment:

Final EIR:

"If the commentor doesn't accept that market conditions and factors affect the volume of passengers served at LAX why does their proposed capacity analysis ignore the available gate capacity between 12:00AM and 6:00 AM daily? If market factors don't have an affect on the volume of air traffic served, then 25 percent more capacity is immediately available at LAX."

Response:

This is surely a rhetorical statement! As mentioned before, in our original comments we did not question the Master Plan's forecast, schedule, or gate utilization, although we believe those to be faulty and unrealistic. If the Master Plan is willing to adjust its traffic forecast to include substantial operations between 12 and 6 am, in face of all noise abatement procedures, then we would adjust the capacity accordingly, i.e. upwards! The issue is not whether market factors affect traffic or not. That much is understood. The issue is the ability of the gates to handle traffic that is much higher than the Master Plan stipulates. The Master Plan is based on market analysis and not on capacity analysis. This not the

same as doing a capacity analysis that reflects market factors such as load factors, and aircraft fleet development.

Response:

Please see Response to Comment FAL00003-2 regarding capacity and other Master Plan issues raised in this comment.

FAL00003-67

Comment:

Final EIR:

"... The commentor focuses only on the number of operations in the market segment while ignoring the corresponding fleet changes and associated passenger levels.... This change resulted from the abandonment of the LAX market by 19 seat aircraft. "

Response:

As we state in numerous places in our original comments, ours is a conservative capacity analysis in which we retained many of the forecast assumptions of the Master Plan assumptions, even though we believe some of them to be wrong. For example, we did not question the Master Plan's fleet mix assumptions, which show a continued use of 19 seater commuter aircraft, even though as the FEIR now says, these aircraft have already ceased operating at LAX. Airlines that abandoned 19 seaters replaced them with larger regional jets with higher seating configurations. To make that correction to the Master Plan will only increase the number of passengers per flight in that category and will push the MAP capacity of LAX even higher than our original estimates.

Response:

Comment noted. The focus of this comment is on the facts about 19-seat aircraft in the LAX Master Plan fleet forecast and how these facts are used in association with Alternative D. Nineteen-seat aircraft were a significant segment of the total aircraft fleet in 1994 (the base year of the fleet forecast for the LAX Master Plan). At that time they represented nearly 28 percent of the commercial passenger, design-day operations. The fleet mix forecast shows this segment of the fleet declining to about 8.6 percent of the unconstrained commercial passenger, design-day operations in 2015 (See Table IV-2.3 (3 of 3) in the Draft LAX Master Plan, Chapter IV, Page IV-2.14). While it is true that regularly scheduled commuter operations using 19-seat aircraft have ceased for the time being at LAX, for consistency with the previous design day schedules for the No Action/No Project Alternative and Alternatives A, B and C, this size of aircraft remains represented in the Alternative D design day schedule. However, the commentor is incorrect in its assumption that 19-seat aircraft are a one-for-one trade with regional jets with more seats. The wingspan of a typical 19-seat aircraft is approximately 55 feet. The typical wingspan of a 50-seat regional jet is approximately 70 feet. Normally, the 19-seat commuter aircraft are double-parked at the same gate to make the best use of the aircraft parking space, an accommodation that is not common with the larger wing span of the typical regional jet. As a result, the seat capacity of this operation and its higher frequency of operations as compared to regional jets, the practical use of the two aircraft types yield nearly the same number of commuter seats on an hourly basis.

If one were to assume that these 19-seat aircraft were replaced with 50-seat regional jets operating as both are assumed in the Master Plan, the difference in passengers would be approximately 0.39 percent of the total passengers served at LAX in the 2015 forecast for Alternative D. Thus, even accounting for the type of change in analysis the commentor suggests, there would not be a change in conditions sufficient to affect the conclusions of the analysis.

FAL00003-68

Comment:

Final EIR:

"The constrained activity level of 78.9 MAP forecast for Alternative D in 2015 remains within the range in each table and chart presented in Professor Kanafani's report referred to by the commentor. "

Response:

Not true. The activity level of 78.9 MAP is within a range of only Tables 10, 13, 15, 17 and 19, where the variables used (load factor, seating configuration assumptions and annual conversion factor) are the ones we think are wrong to assume. In fact, the load factor used in those tables is usually lower than even the forecasted one assumed by the Master Plan's analysis. And in all the cases that produce an activity level of 78.9 MAP, a lower seating configuration is used. We do not agree that such a low seating configuration number should be used and likewise do not agree with the use of annual conversion factors lower than 310.

Response:

Only one table (Table 11, which is one of 14 various related tables) does not include the activity level of 78.9 MAP forecast for Alternative D in 2015 within the range in each table and chart presented in commentor's consultant report. Tables 10, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 26 and 27 (Table 12 is unrelated) each include the 78.9 MAP forecast for Alternative D in 2015. The load factors used with the LAX Master Plan are acknowledged as valid and used in the commentor's consultant report. On page 2 of the commentor's consultant's report the following statement is made regarding load factor, "The load factor assumptions and calculations found in the Addendum are not questioned and are used in this capacity analysis. A sensitivity analysis is made to show the range of capacities that result from the range of load factors used in the Addendum." Despite this statement, the commentor's consultant makes no analysis of the peak hour load factor forecast provided in the Draft LAX Master Plan as was used for the capacity analysis of the Master Plan alternatives and is typical of such capacity analyses in the industry. The design day and peak hour load factor forecast used in the LAX Master Plan are established on pages IV-2.31 - IV-2.32 in Chapter IV, Facility Requirements, of the Draft LAX Master Plan. Please also see Response to Comment FAL00003-2 regarding capacity and other Master Plan issues raised in this comment.

FAL00003-69

Comment:

SAL00015-14

Final EIR:

"The remaining pavement would be used for Remain Over Night (RON) parking positions, temporary aircraft maintenance parking, departure holding and arrival gate clearance holding. Several airlines that operate commercial service to LAX from Asia schedule extended time between the arrival and departure of their aircraft. Those aircraft that would remain at LAX for extended periods of time would be stored on the west remote pad in order to free contact gates for use by other airlines that have an immediate need for a contact gate. "

Response:

Retaining this pavement would increase both the airport and gate capacity. Even LAWA in this comment says "...to free contact gates for use by other airlines that have an immediate need for a contact gate." If this is not an increase in contact gate capacity, then what is?

Response:

The commentor is correct that remain over night (RON) use of available pavement space can increase the utility of the available gates at any airport including LAX. This assumption in gate and pavement

use has been included in the capacity analysis for all alternatives in the Final EIS, including Alternative D. Without the use of this space as RON parking positions and if aircraft were required to stay on gates for the entire time that they are on the ground at LAX, then the activity forecast for aircraft operations and passengers associated with Alternative D would be much lower than those reported in the Final EIS. However, this is not a practical assumption in the reasonably foreseeable way in which this available space would be used and was therefore not assumed in the Final EIS.

FAL00003-70

Comment:

Final EIR:

"Maintaining the west pad would allow the aircraft maintenance operator's additional locations to position aircraft awaiting maintenance procedures in addition to each maintenance operator's ramp area. "

Response:

This form of use will increase capacity since without it aircraft needing maintenance would be parked in the maintenance operator's area. Parking aircraft in the west pad pavement would create more space in the operator's ramp.

Response:

The commentor is correct that this type of reasonably foreseeable operation would make efficient use of available aircraft parking and maintenance space at LAX as modified by the implementation of Alternative D. The only relationship between this use of available space and the operational and passenger capacity of LAX would be in the loss of the remaining west pad area as remain over night (RON) parking. Without the availability of the remaining west pad area as RON parking the effective use of the available aircraft parking gates will be reduced and thereby reduce the total aircraft operations and passengers served by Alternative D as analyzed in the Final EIS. In any event, this operational scenario was included in the forecasts for Alternative D and thus the foreseeable impacts of this scenario have been appropriately considered in the Final EIS. Please see FAL00003-69 for more information on the RON assumptions used for Alternative D capacity analysis.

FAL00003-71

Comment:

Final EIR:

"The maintenance of the west pad after the implementation of Alternative D for aircraft parking for departure holds, arrival holds, maintenance operations and RON positions would not constitute additional gate capacity. As described in the Supplement to the Draft EIS/EIR, all aircraft passenger loading and unloading would occur at the contact gates that exist or would be constructed as a part of Alternative D. "

Response:

Using the west pad in such a way would actually be an increase in the gate capacity even though aircraft would not be loaded/unloaded at the west pad. Gate capacity would be increased because the aircraft that would otherwise have to wait at the gate will be able to move away from the gate and enable other aircraft to use it.

Response:

The Final EIS assumed that available contact gates at LAX as modified by the implementation of Alternative D would be freed up through the use of remote parking positions. The use of the remaining west pad area, as described in the response to the commentor's original comment, is one such area. Without the availability of this area to use in the way described and analyzed in the Final EIS, the operational and passenger capacity would be lower than that reported in the Final EIS. In any event,

this operational scenario was included in the forecasts for Alternative D and thus the foreseeable impacts of this scenario have been appropriately considered in the Final EIS.

FAL00003-72

Comment:

SAL00015-312
Final EIR:

"Alternative D does not increase runway capacity."

Response:

In our comments on Alternative D we did not address the question of runway capacity. But there is no question but that the improvements to the airfield will have a non-negative effect on capacity, by reducing delay and reducing wave-offs. With any de-peaking as might be expected with traffic growth the Alternative D airfield will be able to handle more than the 2058 design day operations used in the Master Plan analysis.

Response:

The de-peaking of the LAX daily operational schedule was already evident in the 1996 and 2000 design day schedule analysis (See Appendix A, Final LAX Master Plan, Figures A-5, A-6 and A-7). This effect has already been accounted for in the Alternative D, design-day forecast (See page 3-65 and Figures 3-16, 3-17 and 3-18 in Chapter 3 of Part I of the Final EIS). As such, the delays associated with this level of activity and the projected flight cancellations have been reported on page ES-8 in the Executive Summary in Part I of the Final EIS. Without additional available gate space to serve additional operations, delays and cancellations associated with Alternative D would increase above the practical capacity of the airfield. Please see Response to Comment FAL00003-2 regarding capacity and other Master Plan issues raised in this comment.

FAL00003-73

Comment:

SAL00015-314

Final EIR:

"Between the hours of midnight an 6:00 a.m. the airport sees fewer than 25 hourly operation. This lack of activity is not due to constrained airport capacity but due to market conditions that make it difficult for airlines to sell seats on flights that depart at this time of the day. "

Response:

We have already addressed this in our reply to the responses SAL00015-11. If the Master Plan forecasts traffic during this period, then we can adjust the capacity upwards to reflect that.

Response:

Comment noted. Please see Response to Comment FAL00003-2 regarding capacity and other Master Plan issues raised in this comment.

FAL00003-74

Comment:

Final EIR:

"The commentor suggests adjustments to several variables in the Draft LAX Master Plan Addendum activity scenario for Alternative D, but fails to address the changes that would occur to other interconnected variables. "

Response:

We have taken a fairly conservative approach to estimate the capacity of the gate positions proposed in the Master Plan. As such we decided not to question many of the assumption especially those related to forecast, schedule, gate utilization, and fleet mix. What we questioned are three factors, the annualization factor, the load factors and the seating configurations of airplanes. Selecting what we believe are the correct values for these does not necessitate changing any of what the FEIR calls "interconnected variables." Any further adjustments to the forecast assumptions made in the Master Plan can only result in higher capacity figures, as we mention in the introduction to this document.

Response:

Comment noted. Please see Response to Comment FAL00003-2 regarding capacity and other Master Plan issues raised in this comment.

FAL00003-75

Comment:

Final EIR:

"While it acknowledges a high of 87 MAP it fails to acknowledge its corresponding low capacity figure of 73 MAP. "

Response:

The sensitivity analysis shown in our capacity analysis is there to illustrate the implication of Master Plan assumptions that we question. For example, the 73 MAP figure corresponds to the annualization factor of 300, which we believe to be patently wrong, and to a load factor of 70%, which we also think is wrong, and not consistent with the values assumed in the Master Plan itself either. Recall that the Master Plan uses a load factor in the range of 72%-73.4% in its forecast, and a load factor of 80% in the design of terminal building square footage! We do not think an annual conversion factor of 300 and load factor of 70% are reasonable, especially considering that both values are already higher today. We do not focus on the 73 MAP capacity figure that results from an annual conversion factor of 300 and load factor of 70% because we do not believe they reflect reasonable assumptions.

Response:

Please see Response to Comment FAL00003-2 regarding capacity and other Master Plan issues raised in this comment.

As fully described in Response to Comment FAL00003-2 and reiterated here, the commentor's consultant has gone about his analysis from a less comprehensive approach than that which is included in the LAX Master Plan. In so doing, and in varying figures like the design day to annual passenger ratio and load factor in a series of multiplication tables, one would definitely get different answers than those reasonably forecasted in the LAX Master Plan. The problem with the approach taken by the commentor's consultant is two-fold. First, it improperly links unrelated figures for load factor and design day to annual passenger ratio that are not substantiated by the analysis of these factors at LAX. See Chapter IV, Facility Requirements, of the Draft LAX Master Plan for a complete and appropriate treatment of these issues as is commonly done in the industry. The second (and much larger) problem with the approach taken by the commentor's consultant is that the delay implications of his analyses, whether they are correct or not to begin with, have not been tested to establish their practicality and

degrading effects on capacity. This is a quintessential step in the process of establishing the practical capacity of an airport system that is not only missing from the commentor's consultant's report, there is no mention of the issue. Without a detailed simulation analysis of the operations suggested using SIMMOD or a similar model, there is no way to accurately estimate the delay implications associated with the commentor's consultant's assertions. In short, the two analyses are not comparable without it.

The use of peak hour load factors in the design day are the industry accepted standard for properly sizing the passenger terminal facilities. Please see Section 2, page IV-2.32, in Chapter IV, Facility Requirements, of the Draft LAX Master Plan, for a full discussion of this planning factor and its proper use.

FAL00003-76

Comment:

SAL00015-315

Final EIR:

"Correspondingly, Alternative D assumes that other airports in the Los Angeles region would accommodate some of the traffic LAX would no longer be able to comfortably serve. "

Response:

The Master Plan cannot simply assume such a shift in traffic, especially when there is not instrument in place to induce it, much less force it. As addressed above, the Master Plan recognizes that airlines decide where to serve, not master plans. Also, as mentioned earlier, the absence of any gate reduction until the last stages of the plan, presumably in 2015, means that none of the pressures that might induce airline shifts will be in place for basically all the Master Plan period. Furthermore, as calculated by the LAWA in LAX Master Plan, delays in Alternative D are lower than in Alternative C. Given the Master Plan's own association of capacity with delay, this means that LAX will be able to serve the forecasted traffic with tolerable delays, thus not creating any inducements for airlines to move their service to other regional airports.

Response:

Please see Response to Comment FAL00003-2 regarding capacity and other Master Plan issues raised in this comment. Also, please see Response to Comment FAL00003-65 regarding issues associated with the phasing of gates and construction-related congestion associated with the implementation of Alternative D improvements at LAX.

The "tolerable" delays mentioned by the commentor here is in the context of average all-weather delays summarized in the Final EIS. Whereas Alternative D has average all weather delays of 11.56 minutes per operation in 2015 (with cancelled flights to moderate peak delays), in poor weather conditions these delays are nearly 50 minutes per operation including taxi time. Please see Appendix E of the Final LAX Master Plan for the complete capacity and delay analysis associated with Alternative D. As described in Response to Comment FAL00003-2, lesser delays and congestion lead Southwest Airlines to abandon operations at San Francisco International Airport and begin serving Oakland and San Jose regional airports instead.

FAL00003-77

Comment:

Final EIR:

"In order to achieve these goals Alternative D must be designed to reflect that the most likely air carrier service to be accommodated at other regional airports is domestic narrow body jet service. "

Response:

Again, LAWA has no clear plan for how to achieve the stated goal of shifting air carrier traffic to other regional airports.

Response:

FAA need not have a "plan for how to achieve the stated goal of shifting air carrier traffic to other regional airports" because other airports in the region are currently equipped to handle the type of aircraft and service expected. In the cases of Ontario and Palmdale Airports, LAWA is already planning further improvements to these facilities to ready them for service above and beyond current levels. Based on FAA's and LAWA's considerable experience in the aviation industry, it is a reasonable assumption that airlines will make those decisions in any event without direction from FAA or LAWA on how or when to do so. Please see Response to Comment FAL00003-2 regarding capacity and other Master Plan issues raised in this comment.

FAL00003-78

Comment:

Final EIR:

"Secondly, commuter operations are more likely to remain prevalent at LAX because LAX operates as a hub airport for American Airlines and United Airlines. The commuter operations into LAX feed the American and United hubs and their international alliance and marketing partner flights. Little or no airline hubbing occurs at any other airport in Southern California. "

Response:

Domestic air carrier operations also feed international flights, as well as other traffic. It is actually preposterous that the Master Plan forecasts a drop in domestic air carrier operations at LAX between the base year and the year 2015.

Response:

As described on page 3-65 in Chapter 3 of Part I of the Final EIS, the number of domestic air carrier passengers is forecast to increase slightly over 2000 levels, but is forecast to be lower than the 2015 unconstrained forecast levels. A number of the passengers in the "air carrier" category would be transported on regional jet type aircraft that are counted in the "commuter" category. The operations number associated with these passengers decreases as compared to 2000 due to the increasing seats per departure growing from about 154 in 2000 to 198 seats per departure in 2015 Alternative D.

It is also reasonable to assume that the growth in service between other Los Angeles region airports and domestic destinations will continue in the future at a higher rate than that of similar service to LAX. For example, in 1995 all air service from the Los Angeles region to Oakland was through LAX. In the year 2000, only 47 percent of the service to Oakland from the Los Angeles region was through LAX and the remaining service was split between Ontario, John Wayne, and Burbank Airports. For more information on these market shifts to regional airports, see Appendix C of the Final Master Plan.

FAL00003-79

Comment:

SAL00015-316

Final EIR:

"Additionally, though the 737-300, 400 and 500 are older derivatives, they have Stage 3 engines and are anticipated to continue operating well into the future... With production of the 757 ending in the near future after a 20 year run, it is probable that some of the 757 operations expected with implementation of Alternative D would be replaced with Boeing 737-800, 737-900 or Airbus 321. "

Response:

There is no basis for the assumption that older aircraft types will remain, and newer ones will go out. Instead, is it more likely that the Boeing 757's will be replaced by newer models such as the Boeing 7e7 with higher capacity. Furthermore the 757 was identified as a separate category with its own presence

in the fleet mix and its own seating, for many design purposes it is not mixed with the 737 category of aircraft.

Response:

The response to comment SAL00015-316 refers to the seat capacity range associated with the Boeing 757 airframe as compared to the seating capacities of the Boeing 737-800, 737-900 or the Airbus A321 airframes. The Boeing 787 (referred to here by the commentor as the 7e7, its original working designation) is a specialized next generation aircraft intended to compete with the Airbus A330 aircraft and to replace the long haul (230 seat version) and high seat capacity (300 seats) versions of the Boeing 767. The two launch customers for the 787 are All Nippon Airways and Air New Zealand, both of which intend to use the aircraft on Trans-Pacific routes. Neither carrier is purchasing the 787 as a replacement for existing 757-sized aircraft. The wingspan on the 787 is to be 194 feet. The wingspan of the Boeing 757 is only 125 feet and, as such, is neither interchangeable with the 787 nor is it intended by Boeing as a replacement for the Boeing 757.

FAL00003-80

Comment:

Final EIR:

"As acknowledged by the commentor, the Master Plan analysis is based on the actual way aircraft are configured and used in revenue service in the LAX market. "

Response:

Indeed, the numbers we used are based on the real seating plans of airlines that fly to LAX, confirmed from the airline websites, Aviation Week and Space Technology, 2003 Aerospace Source Book, as well as the Master Plan's own source, the OAG.

Response:

While the sources referenced by the commentor provide general ranges of aircraft seating configurations by aircraft type, only the Official Airline Guide (OAG) information specifically for LAX markets and carriers (as used in the Master Plan) is accurate for this analysis. Many aircraft types have a wide variety of potential configurations in specialized use.

For example, the commentor uses the figure of 220 seats for the "high" range in a Boeing 757. In the Master Plan, the reference to the Boeing 757 specifically refers to the -200 model. Boeing's marketing department reports the "typical" configuration of this aircraft type as having 200 seats. The Master Plan uses the OAG figures of 185 to 188 seats based on the actual configuration of the actual airlines flying this aircraft type to and from LAX. Given that this one aircraft type has 386 operations scheduled in the design day, the commentor's high range adds 12,352 more seats to the equation for just one aircraft type.

The foregoing example is repeated by the commentor for multiple aircraft types in both the "high" and "low" seating ranges provided in its report. Ultimately, these inaccuracies skew both ranges higher than the actual seats reported by OAG. The OAG has been deemed by FAA to be an appropriate and highly reliable source of information regarding seating configurations of aircraft anticipated to serve LAX in the future. This source is deemed the best source for such information because it provides information specific to the airlines and aircraft serving LAX. This approach results in a reasonable capacity analysis and provides an appropriate basis upon which the reasonably foreseeable environmental impacts of Alternative D could be determined.

FAL00003-81

Comment:

Final EIR:

"Similarly the ATR-42 and F100 may be replaced by more modern aircraft but with similar seating capacity. This would not change the passenger volume assumptions contained in the Draft Master Plan Addendum or Supplement to the Draft EIS/EIR. "

Response:

More modern aircraft in that category are Regional Jets, and any one of them has higher seating configuration than the ATR-42. Furthermore, there is a fair number of 19-seaters used in the LAX Master Plan calculations. In the response to SAL00015-2 LAWA says that 19-seaters already abandoned LAX and larger aircraft are being used. However, in the Master Plan there are 43 operations forecasted by J-31, 58 operations by SWM, 38 operations by BE1 and 43 operations by CAN. Replacing these mentioned aircraft types with the appropriate commuter aircraft type would at least double the offered seats, and possibly double the number of passengers actually flown. It will certainly double the capacity of that component of the system!

Response:

The Embraer 135 Regional Jet flown currently by American Eagle has 39 seats to the 46 in the ATR-42. Please see Response to Comment FAL00003-67 in which the issue of 19-seat commuter aircraft is addressed as well as the commentor's overstatement of the capacity effects of these aircraft types on the system.

FAL00003-82

Comment:

SAL00015-317
Final EIR:

"... This change resulted from the abandonment of the LAX market by 19 seat aircraft."

Response:

As mentioned above, we believe this to be an inconsistency of assumptions in the Master Plan and in the FEIR. The Master Plan continues to use 19 seaters in the analysis.

Response:

Please see Response to Comment FAL00003-67 which addresses 19-seat aircraft.

FAL00003-83

Comment:

Final EIR:

4. "... The domestic air carrier profile would be de-peaked and service would be reduced from the 2015 unconstrained forecast levels in the Central, Eastern and Asia-Pacific regions to reflect... "

Response:

All this represents assumptions about market behavior. Apart from being rather daring to make such detailed assumptions about what the airlines might or might not do, this ignores the fact that the constraints of gate reduction will not be in place for a long time, and that the runway capacity of

Alternative D is not any less than, say Alternative C. Furthermore, this market analysis has very little to do with the capacity analysis that is the subject of our original comments.

Response:

Please see Response to Comment FAL00003-2 regarding capacity and other Master Plan issues raised in this comment. Please also see Response to Comment FAL00003-65 regarding the timing of gate construction and gate constraints during implementation of Alternative D.

FAL00003-84

Comment:

Final EIR:

5. "... The percentage of domestic and international air carrier and O&D passengers would increase as the airlines attempt to serve the unconstrained forecast O&D demand with fewer operations."

Response:

See the response just above. Furthermore, this is inconsistent with statements elsewhere the Master Plan that these categories of traffic are to be diverted to other regional airport.

Response:

The quoted statement is not inconsistent with the other Air Service Changes forecast at LAX as a reaction to the airport facilities available at LAX as modified by the implementation of Alternative D. This forecast change is acknowledging the reduction in the proportion of connecting passengers cited in the text on the same page:

"Domestic air carrier connecting passengers would decrease from the 2015 forecast levels to reflect the projected loss of connecting passengers from commuter flights." (page 3-65 in Chapter 3 of Part I of the Final EIS).

FAL00003-85

Comment:

Final EIR:

6. "... The average aircraft size would increase from existing levels without significantly exceeding the unconstrained forecast seats per departure for each air service component. This is reflective of the already large fleet size serving LAX."

Response:

Seating assumptions in the LAX Master Plan do not agree with this assumption. They are in many cases lower than what is already at LAX. (Refer to Table 1 below).

Response:

Please see Response to Comment FAL00003-80, which addresses the commentor's use of sources other than the Official Airline Guide (OAG) that reports the actual seating configurations by aircraft type, by airline actually serving LAX and as used for the LAX Master Plan.

FAL00003-86

Comment:

SAL00015-318

Final EIR:

"The correct input parameter to the analysis when annualizing design day activity, should be annual to design day operations factors by market segment. This is the factor that is forecasted and correctly reflects the hourly airfield and gate constraints addressed in the Master Plan." And:

"... The Design Day to annual operations factors are a reflection of the seasonal characteristics of the LAX market. This seasonality profile does not change over time..."

Response:

These are two inconsistent statements. First, regardless of how the annualization factor is segmented, its average should not fall below the current values. The overall average, which has been in the range 310-312 for the years since the base year of 1996 will only grow as the traffic de-peaks in the future. The FEIR says that only aircraft operations will be de-peaked, and that passenger peaks will remain the same and be accommodated by larger aircraft and higher load factors! This is not consistent with the Master Plan's assumptions about aircraft sizes and load factors!

For the second, if these seasonality factors are stable then there is no logical basis for the Master Plan to drop these numbers from 310-312 to 300. One can only conclude that the annualization figure of 300 is reverse-engineered to arrive at a desired passenger load of 78.9 MAP. It has no basis in facts and should not be the basis for annual capacity calculation.

Response:

The commentor asserts several incorrect points. First, the commentor does not provide a complete analysis of the historical trend of the design day to annual passenger factor at LAX. The commentor relies on the report prepared in November 2003 by commentor's consultant (Comments 2003 LAX Master Plan Addendum & Supplement to the DEIS/EIR, November 2003 - referred to henceforth as the "November 2003 Report"), The November 2003 Report begins its related analysis using factors identified and disclosed in the LAX Master Plan analysis, but goes on to incorrectly vary and apply this factor as a way of annualizing aircraft operations without a rational basis for doing so. Specifically in the November 2003 Report it asserts on page 2 of Appendix A under "5. Seasonal Patterns" that "current and recent historic" ratios of design day to annual passenger factors (i.e., annual passenger ratio) allegedly have been consistently around 310. The Report then goes on to vary these factors between 300 and 320 in various multiplication tables in Appendix A. In reality this ratio does vary given a whole range of year-to-year and seasonal traffic variations. In particular, the annual growth rate for total annual passengers is often higher or lower than the corresponding year's August activity. This variability has more to do with other busy months activity being higher or lower than August for any given year. In recent years the average for this factor has been as low as 295. (It was even lower in 2001 at 276, but this was due to the very low levels of activity in the fourth quarter of that year.)

The indication of incorrect use of the annual passenger ratio in the November 2003 Report is revealed on the same page (Section 5. Seasonal Patterns, page 2, Appendix A). It states, "The implication of the [Master Plan] Addendum's assumption that the capacity constraint will cause traffic peaks to spread rather than accentuate is that these factors should rise and not decline." The LAX Master Plan's gate capacity constraint on "peak" activity to which the commentor's consultant refers comes in the design day on an hour-by-hour basis; it is not included within the LAX market's month-to-month seasonal peaks, as reflected by the annual passenger ratio (See page 3-65, forth bullet under "Air Service Changes" in Part I of the Final EIS. These seasonal variations are the natural peaking of the market around peak spring, summer and holiday travel periods. These patterns have more to do with the market's cultural calendar than any other single factor involved in airport planning.

As fully explained in the LAX Master Plan and acknowledged by the commentor's consultant, the use of the annual passenger ratio of 300 is made up of weighted averages for each segment of the market (i.e., domestic, commuters, Hawaii and international). This is a consistent planning factor to ensure that

facilities are properly sized to handle seasonal peaks of activity that take place regularly throughout each year.

Second, the commentor's assertions are incorrect on the relationship between design day and peak hour aircraft operations and load factor forecasts. The commentor incorrectly states that, "The FEIR says that only aircraft operations will be de-peaked, and that passenger peaks will remain the same and be accommodated by larger aircraft and higher load factors! This is not consistent with the Master Plan's assumptions about aircraft sizes and load factors!" The depeaking of operations in the design day has already occurred in recent years (See Appendix A of the Final LAX Master Plan). The use of peak hour load factors in the design day are the industry accepted standard for properly sizing the passenger terminal facilities because of the market's desire to travel at these highly desirable times of the day. This market reaction happens in addition to the increasing size of aircraft operating in these constrained hours. Please see page IV-2.32 in Section 2 of Chapter IV, Facility Requirements, of the Draft LAX Master Plan for a full discussion of this planning factor and its proper use. This is a clear assumption used consistently throughout the Master Plan process that the commentor's consultant has not used in his analysis of the physical capacity of the terminal facilities contrary to standard industry planning practice.

Finally, the LAX Master Plan Alternatives including Alternative D have been "engineered" or designed to satisfy the purpose and need for the project including design criteria, planning objectives, planning standards and policies set forth by decision makers in the process. As described in Chapter 2 in Part I of the Final EIS, the improvements to LAX that are suggested by Alternative D are the best mix of the many disparate views that have shaped this complex planning process. To state that these facility improvements as described and analyzed fully in the Final EIS and the LAX Master Plan, "[have] no basis in facts and should not be the basis for annual capacity calculation," is to ignore the record to the contrary.

This comment has elements and issues that are similar to airport capacity planning issues addressed in Response to Comment FAL00003-2. Please see Response to Comment FAL00003-2 for additional information on these issues.

FAL00003-87

Comment:

Final EIR:

"Design day aircraft operations are the only parameter that is assumed to be de-peaked. In the case of design day and peak hour passengers, the number increases even with fewer operations due to the combined effects of larger aircraft (higher seat capacity) being used in the peak hour and higher peak hour load factors representing high passenger demand for these key travel periods during the day."

Response:

This seems inconsistent with the Master Plan's assumptions that aircraft sizes will not increase. It also is not reflected by higher load factors as the statement implies. If this statement in the FEIR is correct then this would result in higher aircraft seating and higher load factors causing the capacity estimate to increase even further. Furthermore this is not an assumption that is justified by facts. Under pressure from limited facility capacity all traffic patterns will be de-peaked and the annualization factors will rise. Additionally, there is no evidence that airlines use different aircraft types, with higher seating capacities only during the peak hours especially if, as mentioned in the FEIR, load factors rise during these hours.

Response:

Please see Response to Comment FAL00003-86 regarding issues related to the design day fleet mix, peak hour load factor assumptions, schedule peaking characteristics, and design day to annual factors for operations and passengers used in the LAX Master Plan including Alternative D. Also, please see Response to Comment FAL00003-2 regarding capacity and other Master Plan issues raised in this comment. The commentor's consultant report is silent on the issue of peak hour load factor assumptions used in the LAX Master Plan including Alternative D. This is a common industry approach for properly developing terminal facilities associated with passenger processing. Peak hour load factors are not factors that are used to convert annual passenger forecasts to design day operations or vice versa. While these two airport facility planning issues are related they have different purposes in that

they are used for planning very different types of facilities (i.e., passenger forecasts for terminal and access facilities and aircraft operations forecasts for airside and gate facilities).

As for the commentor's incorrect assertion that, "there is no evidence that airlines use different aircraft types, with higher seating capacities only during the peak hours . . ." one simply needs to look to the justification upon which Airbus Industries is investing over $12 billion on the development of the Airbus A380 new large aircraft. This aircraft has been developed exclusively for peak hour seat capacity increases in constrained world hubs like LAX, London Heathrow, Kennedy International Airport and Tokyo Narita Airport.

Finally, larger aircraft sizes and higher load factors in the peak hours of the design day are not mutually exclusive as asserted by the commentor. These are the logical and historical reactions that airlines have made to their fleet utilization at congested world hubs like LAX.

FAL00003-88

Comment:

SAL00015-319

"Ramp charts are provided for Alternative D in Appendix E, Alternative D Airside Analysis, Figures E-5 and E-6 in the Draft Master Plan Addendum. "

Response:

We have not questioned the gate utilization use in the Master Plan and implied in the ramp charts. As mentioned earlier, the long inter-gate times used for some traffic categories mean that these utilization factors can be increased, resulting in more throughput from the given number of gates.

Response:

Please see Response to Comment FAL00003-2 regarding capacity and other Master Plan issues raised in this comment. Also, please see Response to Comment FAL00003-64 regarding inter-gate time assumptions and analysis used in the LAX Master Plan.

FAL00003-89

Comment:

SAL00015-333

Final EIR:
"The commentor's analysis actually identifies a range of capacities based on several variables that range from a low of 73 MAP to the consistently stated high of 87 MAP. "

Response:

The purpose of the sensitivity analysis is to show how capacity can vary with factors such as aircraft seating, load factors and annualization rates. The fact that some of these numbers can results in a figure of 73 MAP does not mean that that is the capacity of the airport. In the estimate of capacity used in our original comments we use the load factors adopted in the Master Plan 72%-73.4%, the annualization factor of 310 which is a conservative estimate given that it is the current value and likely to increase rather than decrease in the future, and seating configurations based on aircraft currently in use at LAX or on order by airlines flying at LAX. Our estimate of 87 MAP is conservative and based on many assumptions in the Master Plan that we did not question. As mentioned elsewhere here, we question some of these assumptions and believe that if anything, the capacity of the Master Plan could be even higher than our original estimate.

Response:

Please see Response to Comment FAL00003-2 regarding capacity and other Master Plan issues raised in this comment. Also, please see Response to Comment FAL00003-64 regarding inter-gate time assumptions and analysis used in the LAX Master Plan. Please see Response to Comment FAL00003-

86 regarding proper use of design day to annual factors for passengers and aircraft operations. Please see Response to Comment FAL00003-87 regarding the aircraft load factor and peak hour load factor forecasts and their proper use in the LAX Master Plan.

FAL00003-90

Comment:

Final EIR:

"LAX Master Plan Alternative D has a stated constrained activity level of 78.9 MAP which is within the range the commentor's analysis finds to be probable with the proposed 153-gate airport. "

Response:

See the response just above. Our analysis shows that 78.9 MAP is not a likely capacity figure and is not a reasonable estimate of the capacity of the airport.

Response:

Please see Response to Comment FAL00003-2 regarding capacity and other Master Plan issues raised in this comment. Also, please see Response to Comment FAL00003-89 as this comment is very similar to the issue raised in this comment.

FAL00003-91

Comment:

Final EIR:

"The commentor also fails to state which assumptions were rejected. "

Response:

In the part 2. of our Review of the Addendum's Design and Market Assumptions we state clearly all the Master Plan assumptions, and list the ones that we accepted and the ones we subjected to scrutiny, and why. Furthermore, as mentioned elsewhere here, our purpose was to calculate the capacity and not to comment on the Master Plan's market analysis.

Response:

Please see Response to Comment FAL00003-2 regarding capacity and other Master Plan issues raised in this comment.

FAL00003-92

Comment:

Final EIR:

"Manufacturer and airline internet sites, though reasonable sources of data, are not as accurate as OAG data which was used to determine the seat capacity of each aircraft serving the LAX market in the Alternative D analysis. "

Response:

We have compared seating arrangements from all sources, including the OAG. As shown in Table 1 below, OAG figures agree with the figures from the airlines' websites and if anything when they differ they do tend to be higher. Table 1 shows that the figures used in our original comments and capacity analysis are in many cases conservative, even in comparison with OAG and all the other sources.

Table 1: Please see original letter for table.

Response:

Comment noted. It appears that the commentor is agreeing that the Official Airline Guide (OAG) is an appropriate data source for determining the correct aircraft seating capacities for airlines serving LAX.

FAL00003-93

Comment:

Final EIR:

"As mentioned previously in this response to comment, the commentor uses alternative and questionable data sources to determine seat capacity for each aircraft. The results are inconsistent with the OAG seating configuration of aircraft used in the LAX market and therefore unacceptable for use in analysis." And "... The portion of the comment related to a sensitivity analysis on aircraft seating capacities does not use OAG data and is, therefore, inconsistent with the Master Plan analysis. "

Response:

See the previous response and Table 1 here. Table 1 includes OAG seating and if anything shows the number used in the capacity analysis to be conservative. A strict adherence to OAG as the single source can only result in adjusting the capacity estimates upwards.

Response:

The commentor here appears to contradict its previous comment offered in Comment FAL00003-92. The table listed in the commentor's report does not rely exclusively on OAG data but rather a number of other sources that do not report the actual seat configurations, by airline actually serving LAX.

FAL00003-94

Comment:

Final EIR:

"No reason is given for the use of mid-range values rather than the high ends of the ranges in relation to the sensitivity analysis. "

Response:

If all airlines used high level seating configurations then the capacity of the system can well exceed 100 MAP. As to our choice of middle range, even the Master Plan does not specify which configuration they use for all aircraft types. Instead only ranges are given for some aircraft types. We reiterate that we have a conservative estimate of capacity.

Response:

Comment noted. Please see Response to Comment FAL00003-2 regarding capacity and other Master Plan issues raised in this comment.

FAL00003-95

Comment:

Final EIR:

"... [an]activity level of 78.9 MAP...is within the range of each table presented by the commentor which would appear to validate that this is a reasonable constrained activity level for the 153-gate LAX Alternative D. "

Response:

A capacity number of 78.9 MAP can only be obtained using assumptions regarding the annualization, load factors, and seating configurations that are unrealistic and inconsistent with facts. The presence of this figure in the sensitivity analysis is intended to illustrate this very fact and to show that it is an erroneous estimate of capacity. Furthermore the FEIR mention of the 153 gate figure is not credible, since the plan phasing shows it carrying all 163 gates all the way to the very last phase!

Response:

Please see Response to Comment FAL00003-2 regarding capacity and other Master Plan issues raised in this comment. Also, please see Response to Comment FAL00003-64 regarding inter-gate time assumptions and analysis used in the LAX Master Plan, Response to Comment FAL00003-86 regarding proper use of design day to annual factors for passengers and aircraft operations, and Response to Comment FAL00003-87 regarding the aircraft load factor and peak hour load factor forecasts and their proper use in the LAX Master Plan. Also, please see Response to Comment FAL00003-63 regarding issues associated with the phasing of gates and construction-related congestion associated with the implementation of Alternative D improvements at LAX.

FAL00003-96

Comment:

Final EIR:

"The commentor's Tables 4 and 5 contain inaccurate information as described above. Incorrect seat capacities for the LAX market are contained in data presented in Tables 4 and 5. "

Response:

For Table 4 we used LAX Master Plan assumption regarding seating for the stated "design aircraft" for each market group. Table 5 contains the same analysis for higher seat configurations, which are more likely if the airport gate capacity is constrained. As shown in Table 1 above, seating configurations used are consistent with current airline practice and are if anything on the conservative side.

Response:

Please see Response to Comment FAL00003-2 regarding capacity and other Master Plan issues raised in this comment. Section C.2. from Response to Comment FAL00003-2 specifically addresses the commentor's allegations regarding seating capacity.

FAL00003-97

Comment:

Final EIR:

"Section 3.3 of the commentor's text, Capacity of Alternative D makes several peculiar statements. For example, the commentor accepts the 73.46 percent load factor presented in the Alternative D analysis but rejects the annualization factor of 300 and instead uses 310. "

Response:

We accept that this load factor is in the range of likely load factors to occur in the future. We also include a range of load factors (70%- 76%) in our analysis, not only the mentioned 73.46%. Indeed we agree with the Master Plan that 73.6% is a reasonable load factor to work with especially as a factor that has been observed. The FEIR responses to comments confuse this and the annualization factor issue, which is totally different. Annualization observed at LAX has been in the 310-312 range for a number of years. As stated elsewhere in our comments, there is no rational reason or basis for reducing this to 300. If anything, as the traffic grows and capacity constraints presumably set in, the peaks will spread and the annualization factor will grow. We have again taken a conservative estimate of capacity based on the current 310 factor. To follow the Master Plan's and the FEIR's statements about de-

peaking would mean to use an even larger annualization factor, such as 315 or 320, and to adjust the capacity upward.

Response:

Please see Response to Comment FAL00003-2 regarding capacity and other Master Plan issues raised in this comment. Please see Response to Comment FAL00003-86 regarding proper use of design day to annual factors for passengers and aircraft operations. Please see Response to Comment FAL00003-87 regarding the aircraft load factor and peak hour load factor forecasts and their proper use in the LAX Master Plan.

FAL00003-98

Comment:

Final EIR:

"The upper limit of potential passenger activity is consistently highlighted without acknowledging the commentor's complete results which illustrate a range of possible outcomes - including those presented in the Draft Master Plan Addendum. Furthermore, the commentor's results appear to illustrate the potential for activity levels even lower than those forecast in the Draft Master Plan. "

Response:

The FEIR continues to confuse forecasts and market analysis with capacity analysis. We show all the results, as well as the value of variables, that would lead to the specific result. The FEIR refers to the estimate of 87 MAP as the upper limit of capacity. In fact the upper limit is much higher than that. A figure of 93 MAP is possible with fairly likely values of load factors and seating configurations. For example if we accept the FEIR's statement about de-peaking and adjust load factors and annualization factors accordingly, to 76% and to 320 respectively, then the capacity of the system will reach 93 MAP.

Response:

Please see Response to Comment FAL00003-2 regarding capacity and other Master Plan issues raised in this comment.

FAL00003-99

Comment:

Final EIR:

"The data presented by the commentor validates the constrained forecast passenger activity level of 78.9 MAP for LAX.... "

Response:

This is incorrect. See response above.

Response:

Comment noted. Please see Response to Comment FAL00003-2 regarding capacity and other Master Plan issues raised in this comment.

FAL00003-100

Comment:

COMMENTS

The City of Los Angeles ("City") through its Department of Airports, known as Los Angeles World Airports ("LAWA"), developed a plan for an extensive modernization of Los Angeles International Airport

("LAX") ("Project"). In April 2004, the City, as the lead agency under the California Environmental Quality Act ("CEQA"), published a Final Environmental Impact Report1 ("Final EIR"), which analyzes four build alternatives, Alternatives A, B, C, and D, and a No Action/No Project ("NA/NP") alternative for the Project.

This Final EIR also includes Responses to Comments ("RTCs") received on the Draft Environmental Impact Statement/Environmental Impact Report2 ("Draft EIS/EIR") and the Supplement to the Draft EIS/EIR3 ("Supplement"). In September 2004, the City decided to prepare an Addendum to the Final EIR4 ("Addendum") "to provide additional information that clarifies and amplifies the contents of the Final EIR." (Addendum, p. 1-1.)

The comments at hand discuss the failure of the Final EIR and its Addendum to satisfy the requirements of CEQA. We previously commented on the inadequate environmental review presented in the Draft EIS/EIR and its Supplement and the failure of these documents to meet the requirements of CEQA and identified and discussed a number of issues including air quality and human health and safety. (Fox 20015; Fox & Pless 2003.6) Our comments below demonstrate that the Final EIR not only falls short of resolving most of these issues - identified not just by us but also by a large number of other commenters - but further carries forth and exacerbates the inadequacy of the environmental review process for the Project and introduces a host of new problems. The Final EIR presented to the public is incomplete and fragmented in such a way that it obscures public review, thereby effectively preventing an essential element of the CEQA process. (See Comment I.) The responses to our previous comments on the Draft EIS/EIR and Supplement have for a large part not been addressed in LAWA's responses to comments. (See Comment II.) The emission estimates presented in the Final EIR are flawed. (See Comment IV.) The air quality impacts from the Project are underestimated and not adequately mitigated. (See Comments V and VI.) Similarly, the public health risks are underestimated and not adequately mitigated. (See Comment VII.) In sum, the Final EIR falls short of satisfying the requirements of CEQA, requiring extensive revisions and recirculation for public review.

1 City of Los Angeles, Los Angeles International Airport (LAX), Proposed Master Plan Improvements, Final Environmental Impact Report (Final EIR), State Clearinghouse No. 1997061047, April 2004.

2 LAX Master Plan, Draft Environmental Impact Statement/Environmental Impact Report, January 2001.

3 LAX Master Plan, Supplement to the Draft Environmental Impact Statement/Environmental Impact Report, July 2003.

4 City of Los Angeles, Los Angeles International Airport (LAX), Proposed Master Plan Improvements, Final Environmental Impact Report (Final EIR), State Clearinghouse No. 1997061047, Addendum, September 2004.

5 J. Phyllis Fox, Ph.D., Comments on Air Quality and Human Health and Safety, LAX Master Plan Draft EIS/EIR, July 13, 2001; Attachment C to September 18, 2001 Comments submitted on behalf of the City of El Segundo by Shute, Mihaly & Weinberger LLP.

6 J. Phyllis Fox, Ph.D., and Petra Pless, D.Env., Comments on Air Quality and Human Health and Safety, LAX Master Plan Supplement to the Draft Environmental Impact Statement/Environmental Impact Report, November 2003; Attachment 3 to November 4, 2003 Comments submitted on behalf of the City of El Segundo by Shute, Mihaly & Weinberger LLP.

Response:

Comment noted. Please see Responses to Comments below.

Please see Responses to Comments AL00033-140, AL00033-141 and AL00033-311 through AL00033-350 in Part II-Volume 3 of the Final EIS, and Responses to Comments SAL00015-55 through SAL00015-65 and SAL00015-235 through SAL00015-289 in Part II-Volume 10 of the Final EIS for responses to comments on the Draft EIS/EIR and Supplement to the Draft EIS/EIR related to air quality and human health and safety submitted by Dr. J. Phyllis Fox and Dr. Petra Pless on behalf of the City of El Segundo.

FAL00003-101

Comment:

I. FRAGMENTED AND INCOMPLETE PRESENTATION OBSCURES PUBLIC REVIEW

The Final EIR claims to provide "a comprehensive investigation, analysis, and disclosure of the reasonably foreseeable potential impacts of the alternatives being considered for the proposed LAX Master Plan..." (Final EIR, p. 2.) The Final EIR further claims to present a "comprehensive and complete side-by-side evaluation of all five alternatives ... within a single integrated document" that "integrates the information and analyses of the Draft EIS/EIR with that of the Supplement to the Draft EIS/EIR." (Final EIR, pp. 11/12.) Regrettably, the Final EIR does not even come close to achieving this laudable goal.

Instead of the promised "comprehensive and complete" review "within a single integrated document," the Final EIR in reality is a disjointed and poorly organized document whose utter lack of transparency and availability frustrates an integral part of the CEQA process, i.e. public disclosure, thereby effectively preventing the public review CEQA seeks to encourage. (CEQA Guidelines7, Section 15201.) The Final EIR, as presented, is not a single coherent and up-to-date document with associated up-to-date appendices but consists of a multitude of documents in various stages of revisions, which severely obstructs any review. The fact that some of the documents comprising this Final EIR are not readily available for public review presents an additional hurdle to the reviewer.

7 Title 14, California Code of Regulations, Chapter 3, Guidelines for Implementation of the California Environmental Quality Act.

Response:

Comment noted. This comment pertains to compliance with CEQA regulations, and does not address requirements under NEPA. Nevertheless, at the time of the publication of the Final EIR (April 2004), Volumes 1 through 4 provided a comprehensive and complete evaluation of all five alternatives in a single location. As noted by the commentor, some portions of the Final EIR text contained in Volumes 1 through 4 were later amended through addenda to the Final EIR, and a limited portion of the Final EIS text was amended or updated in Volume A. All of the addenda and Volume A of the Final EIS carefully provide links to Volumes 1 through 4 to enable the reader to follow the analysis.

The revisions and/or updated information contained in the Final EIS, through Volume A, and the adoption of the First, Second and Third Addenda and Errata to the Final EIR, represent the type of changes or additional information that are typical of the NEPA process. NEPA does not require that a Final EIS be a complete reproduction in a single document of all revisions or corrections to the final document combined with pre-existing information and documentation that has been relied on in the Final EIS's preparation. In fact, CEQ's implementing regulations do not set forth any prescribed method for documenting revisions or changes to the EIS.

Regarding the availability of the EIS and EIR for public review, please see Response to Comment AL00033-255 in Part II-Volume 3 of the Final EIS. The Final EIR is available for review at www.laxmasterplan.org. In addition, the documents were distributed to 52 public libraries in the region, and were available for review at a public reading room at LAX. The documents are also available for purchase. To reduce the purchase price, CD-ROMs containing all of the document components are also available for purchase for $125.

FAL00003-102

Comment:

I.A Final EIR Components Are Not Readily Available

The main body of the Final EIR including the results and conclusions has been updated and five new appendices, Appendices F-1 through F-E, were prepared. These new appendices, including environmental justice materials, new and revised air quality data and methodologies, errata to the Draft EIS/EIR and Supplement, a revised traffic impact assessment, and the Biological Opinion from the U.S.

Fish and Wildlife Service, are essential for a review of the Final EIR, yet they are not posted on LAWA's website and are only available as hard copies or on the CD-ROM set that accompanies the hard copy, both of which must be purchased.

Response:

This comment pertains to the availability of the Final EIR and is not a comment on the adequacy of the Final EIS. Nor does this comment implicate FAA's satisfaction of NEPA requirements. Questions regarding the Final EIR should be addressed to LAWA, as the lead agency responsible for preparation of the Final EIR.

The Final EIS was released to the public on January 13, 2005. The Notice of Availability of the Final EIS appeared in the Federal Register on January 21, 2005. The Final EIS in its entirety, including the appendices noted in this comment, is available for review at www.laxmasterplan.org, and was distributed to 52 public libraries in the region. Three copies of the Final EIS were provided to the City of El Segundo, one to the Mayor's office, one to the El Segundo Planning Department, and one to the city generally. As noted by the commentor, the Final EIS is also available for purchase. To reduce the purchase price, CD-ROMs containing all of the document components are also available for purchase.

FAL00003-103

Comment:

Further, several links to documents on LAWA's website are inaccessible - at least temporarily - or link to corrupted documents, e.g., Final EIR, Part II - Volume 2 through Volume 11, which contain LAWA's responses to comments on the Draft EIS/EIR and the Supplement.8 While the complete print version is available for public review at a number of public libraries within the Los Angeles Basin, a document of this importance should be made available in its entirety to all members of the public seeking electronic access.

8 Unsuccessful attempts to download these documents from two independent, not networked computers on November 11, 12, 15, 16, 18, 19, and 22, 2004.

Response:

FAA provided copies of the Final EIS to the City of El Segundo on January 14, 2005. The Notice of Availability of the Final EIS appeared in the Federal Register on January 21, 2005. Comments regarding the availability of LAWA's EIR on LAWA's web site are not relevant to the information disclosed in the FAA's Final EIS.

Regarding the availability of the EIS and EIR for public review, please see Response to Comment AL00033-255 in Part II-Volume 3 of the Final EIS. In addition to the Final EIR being available for review at www.laxmasterplan.org, the documents were distributed to 52 public libraries in the region and were available for review at a public reading room at LAX. The documents are also available for purchase. To reduce the purchase price, CD-ROMs containing all of the document components are also available for purchase for $125. The web site to which the commentor is referring is maintained by LAWA. LAWA made a good faith effort to make the Master Plan and all related environmental documents available via the Internet, as well as via other means, over and above the requirements of NEPA and CEQA.

FAL00003-104

Comment:

And finally, the Final EIR claims that "appendices and technical reports for this Final EIR include, in their original form, all of the appendices and technical reports from the Draft EIS/EIR and from the Supplement..." (Final EIR, p. 14.) Yet, the hardcopy of the Final EIR distributed by LAWA does not contain any of these appendices. While these documents can be found on the CD-ROMs accompanying the hard copy or, alternatively, can be accessed under the "Past Publications" link on LAWA's website, not everyone who desires to review the Final EIR can be expected to have access to or knowledge about how to use a computer. Further, while these appendices and technical reports are posted on LAWA's website, there are no direct links from the Final EIR for the reviewer to follow.

Access to these documents therefore requires familiarity with prior documents and revisions published in this environmental review process.

Response:

This comment pertains to the availability of the Final EIR and is not a comment on the adequacy of the Final EIS. Nor does this comment implicate FAA's satisfaction of NEPA requirements. Questions regarding the Final EIR should be addressed to LAWA, as the lead agency responsible for preparation of the Final EIR. Please see Response to Comment FAL00003-102 regarding the availability of the Final EIS.

FAL00003-105

Comment:

Considering the large regional impact of the Project and the enormous public participation of the public that this project has drawn to date - including more than 5000 individual comment letters submitted on the Draft EIS/EIR and Supplement (Final EIR, p. 1-1) - LAWA ought to make every reasonable effort to make the Final EIR in its entirety available to the public in as many forms as possible, including as complete hard copies and as electronic copies on its website.

Response:

This comment pertains to the availability of the Final EIR and is not a comment on the adequacy of the Final EIS. Nor does this comment implicate FAA's satisfaction of NEPA requirements. Questions regarding the Final EIR should be addressed to LAWA, as the lead agency responsible for preparation of the Final EIR.

Please see Response to Comment FAL00003-102 regarding the availability of the Final EIS. As indicated in that response, the Final EIS is available for review electronically at www.laxmasterplan.org. Hard copies are available for review at 52 public libraries in the region. The Final EIS is also available for purchase. To reduce the purchase price, CD-ROMs containing all of the document components are also available for purchase.

FAL00003-106

Comment:

I.B Final EIR Relies On Outdated Documents

As discussed above, the Final EIR is presented as a main revised document with five new appendices and a large number of appendices and technical reports in their original form from the Draft EIS/EIR (11 appendices and 17 technical reports) and the Supplement (8 appendices and 10 technical reports). In other words, instead of revising and consolidating these appendices and technical reports from the Draft EIS/EIR and the Supplement to support the results and conclusions in the main text, the Final EIR attaches outdated appendices and technical appendices in duplicate, and merely adds new appendices containing yet another layer of additional information and errata.

Response:

Comment noted. The environmental documents were prepared in accordance with NEPA, the CEQ implementing regulations (40 CFR part 1500-1508), and FAA Order 5050.4A, The Airport Environmental Handbook. In accordance with these laws and regulations, the Final EIS consisted of a rewrite of the Draft EIS/EIR and the Supplement to the Draft EIS/EIR that incorporated suggestions made in the comments on these documents and added new analysis and information, as appropriate. The applicable laws and regulations do not require similar rewriting of related appendices and technical reports. The Final EIS was made available for review by the public in accordance with, or in exceedance of, the requirements of NEPA.

FAL00003-107

Comment:

Further, the Final EIR itself has been revised with publication of the Addendum in September 2004, which contains additional discussion of environmental consequences, refinements to the preferred alternative - Alternative D - a feasibility analysis of three additional alternative proposals - Alternatives ARSAC E, ARSAC E-1 and Parks E-1 - and an errata to the Final EIR. The Addendum also presents a revised Environmental Action Plan, summarizing the Master Plan commitments and proposed mitigation measures, which replaces and supersedes the version of the Environmental Action Plan presented in the Final EIR. (Addendum, pp. 1-2 and 5-1.)

This disjointed and confusing presentation - of what is supposed to be a "complete and comprehensive" review "within a single integrated document" - requires the reviewer to continually go back and forth between a large number of documents in various stages of revision. Every one of these documents - each several hundreds to thousands of pages long with multiple references to prior, largely outdated documents - contain only a piece of the information the reviewer seeks. To analyze the information, the reviewer must continually check whether the information found in one document has not been revised and superseded by information in a newer document. Moreover and most importantly, it requires the reviewer to compare information and methodology contained in outdated documents with the revised results and conclusions in the Final EIR. This fragmented presentation in conjunction with the multiple revisions of the analyses and conclusions presented in the previous iterations of this environmental review process make it next to impossible for even experienced technical experts with prior in-depth knowledge of the Project to comprehensively review the methodologies, assumptions, and data upon which the Final EIR is based. Consequently, the results presented in the Final EIR and the conclusions drawn from these results are largely removed from public review.

The following description of the air quality impact assessment presented in the Final EIR exemplifies and illustrates this general problem; however, it should be kept in mind that this problem is not restricted to air quality but is also encountered in other areas including, but not limited to, human health and safety, biology, hydrology and water quality, and noise. This example is, however, illustrative of the type of information weaknesses present throughout the document. The main body of the Final EIR contains a revised air quality impact analysis in Section 4.6, Air Quality, with considerably different results and conclusions for the five Project alternatives than those presented in the Supplement, or prior to that in the Draft EIS/EIR. (See Comment I.C.) The Final EIR presents additional information, revised data and refined methodology in Appendix F-B. The Addendum further presents refinements to Alternative D. All other information, data and methodologies, however, are only incorporated by reference. These referenced documents include the Draft EIS/EIR Appendix G, Air Quality Impact Analysis, Draft EIS/EIR Technical Report 4, Air Quality Technical Report, subsequently revised with the Supplement Appendix S-E, Supplemental Air Quality Impact Analysis, and Supplement Technical Report S-4, Supplemental Air Quality Technical Report. (Final EIR, p. 4-653.) What's more, the Master Plan commitments and the mitigation measures for the Project's air quality impacts are presented in the Final EIR and further updated in the Addendum. The associated timing of implementation, the monitoring frequency, and the performance standards are found in yet another document - the Mitigation Monitoring and Reporting Program9 ("MMRP") - published by the City in April 2004 and revised in September 2004.

As a result, the reviewer, rather than being able to examine one coherent, revised document with associated appendices, is forced to flip back and forth between tables and segments of text in nine voluminous (and in large portions obsolete or revised) documents.

9 City of Los Angeles, LAX Master Plan, Mitigation Monitoring and Reporting Program, April 2004 and September 2004.

Response:

Comment noted. The LAX Master Plan project is very complex and the resulting environmental impact analyses are similarly complex. In addition, LAWA was ready and prepared to issue a Final EIR prior to FAA's readiness to issue a Final EIS, which created a need to prepare certain additional materials for NEPA purposes that were not pertinent for CEQA purposes. At the time of the publication of the Final EIR (April 2004), Volumes 1 through 4 provided a comprehensive and complete evaluation of all five alternatives in a single location. As noted by the commentor, some portions of the Final EIR text contained in Volumes 1 through 4 were later amended through addenda to the Final EIR, and a limited

portion of the Final EIS text was amended or updated in Volume A. All of the addenda and Volume A of the Final EIS carefully provide links to Volumes 1 through 4 to enable the reader to follow the analysis.

The revisions and/or updated information contained in the Final EIS, through Volume A, and the adoption of the First, Second and Third Addenda, including Errata to the Final EIR, represent the type of changes or additional information that are typical of the NEPA process. NEPA does not require that a Final EIS be a complete reproduction in a single document of all revisions or corrections to the final document combined with pre-existing information and documentation that has been relied on in preparation of the Final EIS. In fact, CEQ's implementing regulations do not set forth any prescribed method for documenting revisions or changes to the EIS.

The commentor is correct in stating that the air quality analysis changed from the original analysis provided in the Draft EIS/EIR to the analysis presented in the Supplement to the Draft EIS/EIR and, later, in the Final EIR. Changes to the analysis were made to incorporate comments from the public review process. This is consistent with NEPA, in which a final EIS generally consists of rewriting the draft EIS to incorporate suggestions made in the comments and add new analysis and information (40 CFR 1503.4). As indicated in the Preface to the Final EIR (Part I-Volume 1, pages 11 and 12), the analysis in the air quality section of the Final EIR (i.e., Section 4.6) supersedes the previous documentation; therefore, the reader does not need to "go back and forth between a large number of documents" to read the text of the air quality section. The commentor is correct that minor revisions to the air quality section were made in the September 2004 Addendum to the Final EIR. These revisions were clearly identified with major subheadings in the text and in Appendix AD-B, Errata to the Final EIR. The edits in the main text of the Addendum that pertain to air quality included adding three Master Plan commitments to the air quality section that were previously identified as Environmental Justice benefits, and revising the text of a single paragraph in one of the mitigation measures; no changes to the air quality methodology or results were made. Edits provided in the errata were made in italics and strikeout to make it easy to identify the revisions. Again, no edits to the methodology or results were made in the errata.

The commentor is also correct that further revisions to the air quality analysis were made in the Final EIS Volume A. These impending revisions were identified when the Final EIR was published in April 2004 (see inside cover of the Final EIR as well as the Preface in Part I-Volume 1, specifically, page 1, in bold text, and page 12). The Final EIS Volume A provides a discussion of the results of the General Conformity Determination, and presents differences between the results of the determination and the NEPA air quality analysis. The methodology and results of the NEPA analysis were not modified in the Final EIS from that which had previously been published in the Final EIR.

Section 4.6.2 of the Supplement to the Draft EIS/EIR, details differences in the general approach and methodology used in the Draft EIS/EIR versus the Supplemental to the Draft EIS/EIR. As described, the majority of these changes in methodology were included to update analyses using the most current available methodologies and to assess air emissions and concentrations against the most current, applicable air regulations and standards. This included an updated on-airport emissions analysis making use of the most current version of the FAA's Emission and Dispersion Modeling System available at the time, updated on and off-airport traffic analysis using the most current version of EMFAC available, and updated construction emission inventories using the most current version of OFFROAD available. Changes were further documented in Appendix S-E of the Supplement to the Draft EIS/EIR, which later became part of the Final EIS. Technical Report S-4 of the Supplement to the Draft EIS/EIR, which also became part of the Final EIS, provided additional technical information specific to the Year 2000 analysis and to the Alternative D analysis, as well as information that updated and replaced information previously provided in Technical Report 4. In particular, Attachment F of Technical Report S-4 supersedes the previous documentation provided in Attachment K of Technical Report 4, Attachment I of Technical Report S-4 supersedes the previous EMFAC emission factors provided in Attachment M of Technical Report 4; and Attachment P of Technical Report S-4 supersedes the previous supplemental air dispersion modeling discussion provided in Attachment Z of Technical Report 4.

Regarding the comment that the Final EIR presented additional information, revised data and refined methodology in Appendix F-B, the Introduction to that appendix clearly identifies the components of previous technical reports and appendices that were revised by the appendix, and how each component had changed (see page 1 of Appendix F-B). In many cases, these revisions were in response to public comments received on the previous analyses.

The commentor is correct that the mitigation measures for air quality are included in the Final EIR, as updated in the Addendum to the Final EIR, but that information regarding the timing of implementation,

monitoring frequency, and performance standards are found in the Mitigation Monitoring and Reporting Program (MMRP) document. The purpose of an MMRP is to provide a mechanism for monitoring and/or reporting on the status of mitigation measures that were adopted or made conditions of project approval. Although the contents of an MMRP are not prescribed, MMRPs typically identify the timing of implementation, monitoring frequency, and measures or performance standards to determine if the mitigation measure has been successful. These components are not required to be identified in an EIR or an EIS.

FAA and LAWA have made every effort to direct readers, through cross-references provided throughout the documentation, in locating all materials relevant to the issue at hand. It must be realized that the proposal being evaluated is a complex undertaking and, despite the complexity inherent in the review, FAA and LAWA have done all we can to make the documents, and their relationship to each other, clear.

FAL00003-108

Comment:

I.C Final EIR Is Not Transparent

We previously commented on the inadequacy and lack of transparency of the Draft EIS/EIR and Supplement and the lack of supporting calculations and modeling. (Fox 2001) In response to a similar comment on the Draft EIS/EIR and Supplement, the Final EIR simply states that the documents "are clearly organized with extensive use of summaries and explanatory charts and diagrams so that it can be useful and understandable to the reader." (Final EIR, RTC AL00033-9.) Nothing could be further from the truth. In sum, in our many years of experience reviewing CEQA documents for similarly large projects, including several airports, we have never come across a document that was as obscure and difficult to review as this Final EIR.

For example, the Final EIR presents considerably different results for on-airport emission estimates from those previously presented in the Supplement for the baseline and all alternatives evaluated for the Project. Yet the document provides no discussion of these differences nor does it alert the reviewer to their existence. The main text of the Final EIR air quality section contains no indication that any of the methodology, data or assumptions were changed or that emission estimates have been considerably revised since publication of the Supplement. The reviewer only finds out about these differences by painstakingly comparing the corresponding tables of emission estimates between the two documents. Appendix F-B to the Final EIR discusses some of the data and methodology revisions, yet the main text of the air quality analysis does not even contain a single reference to this appendix. As previously discussed, the appendix is only available as a hard copy and not posted on LAWA's website and, thus, not readily available for review.

Response:

Comment noted. In accordance with Section 1503.4 of the Council on Environmental Quality (CEQ) Regulations for Implementing CEQA (40 CFR 1503.4), possible actions in response to comments on a draft EIS include supplementing, improving, or modifying the analysis as part of the final EIS. In response to comments received on the Draft EIS/EIR and the Supplement to the Draft EIS/EIR, FAA and LAWA incorporated a number of changes and corrections to the analyses as part of the Final EIR and Final EIS. Please see Responses to Comments FAL00003-101 and FAL00003-102 regarding the availability of appendices to the Final EIR and Final EIS.

The commentor is incorrect regarding the lack of reference in the main text to Appendix F-B. Appendix F-B is referenced in the first paragraph of Section 4.6, Air Quality, in Part I of the Final EIS. Appendix F-B was prepared to present additional air quality information that was not included in the Draft EIS/EIR or Supplement to the Draft EIS/EIR or had been revised since the publication of those previous documents. All changes in calculation methods and results that occurred between the Draft/Supplement to the Draft and the Final EIR are identified in Appendix F-B. The reasons for these changes are also described in Appendix F-B.

FAL00003-109

Comment:

Another example of this general lack of transparency relates to the air dispersion modeling of emissions presented in the Final EIR, which summarizes the maximum mitigated, combined operational and construction air pollutant concentrations including the background reported at any receptor location for each alternative in the interim year as well as in 2015 and lists National Ambient Air Quality Standards ("NAAQS") and California Ambient Air Quality Standards ("CAAQS") for each pollutant. (Final EIS, p. 4-732 and Table F4.6-24.) This kind of summary table is insufficient to illustrate the air quality impacts of the Project. The reviewer is required to study the results for each pollutant and compare them to the baseline as well as the NAAQS and CAAQS to decide if the Project causes or contributes to an existing violation. Typically, the results of air dispersion analyses are visually interpreted in the form of isopleth charts, which illustrate where in relation to the project boundaries ambient air concentrations exceed AAQS. The Final EIR instead provides a summary table, which indicates exceedance of standards by acronyms (LS = less than significant, S = significant), however, it the results are split into on-airport operational plus construction air quality impacts and off-airport air quality impacts. This kind of fragmented presentation makes it very difficult for the reviewer to assess the overall impacts of the Project.

Response:

This comment is not a comment on the adequacy of the Final EIS, but rather is a statement regarding the commentor's preferred presentation format for the air quality impacts. NEPA does not mandate that information regarding environmental impacts be presented in a particular format, much less that the air quality impacts be presented in the commentor's preferred format, which is a "visual[] interpret[ation] in the form of isopleth charts." The format used in the Final EIS fully satisfies NEPA, clearly identifying the type, meaning, and significance of the information presented.

In recognition of the complexity of the air quality analysis, project-related air quality impacts are summarized in a number of places in the Final EIS and Final EIR. For each build alternative, there is a separate heading in Section 4.6 of Part I of the Final EIS titled "Overall Significance . . . After Mitigation" (see pages 4-741, 4-743, 4-745, and 4-748). These discussions of overall significance are broken down into subheadings for CEQA conclusions and NEPA conclusions. A similar overview for the No Action/No Project Alternative is also provided (see page 4-706). Impacts are also summarized in the Executive Summary (Part I-Volume 1). A summary of the NEPA air quality analysis is provided in Section A.2.3.1 of Volume A of the Final EIS.

FAL00003-110

Comment:

Likewise, the presentation of mitigated Project emissions is equally insufficient and obscure. The Final EIR presents a table summarizing total operational and construction emissions for each pollutant and source for all four build alternatives and the NA/NP alternative for the interim year and the horizon year 2015. Absent from this table are the South Coast Air Quality Management District ("SCAQMD") CEQA significance thresholds, against which the significance of Project operational and construction emissions are measured. The Final EIR lacks a summary table comparing the incremental Project emissions over the baseline to the significance thresholds. Rather, the Final EIR presents the significance of the Project alternatives using the same fragmented approach as for resulting ambient air concentrations. This approach deprives the reviewer of an unambiguous presentation of the magnitude of Project emissions that remain after all mitigation has been implemented. For a discussion of the inappropriate use of two different baselines and the resulting erroneous conclusions regarding the significance of Project emissions see Comment V.H below.

Response:

This comment is not a comment on the adequacy of the Final EIS or FAA's compliance with NEPA, but rather discusses CEQA requirements. Please see Response to Comment FAL00003-109 regarding the presentation of air quality information in the Final EIR and Final EIS. The commentor refers to their Comment V.H below; no Comment V.H is provided in the comment letter. Rather, the numbering skips

from Comment V.G to Comment V.I. Nevertheless, please see Response to Comment FAL00003-117 below which addresses the use of the environmental baseline in the Final EIR air quality analysis.

FAL00003-111

Comment:

I.D Information Contained In Final EIR Is Incomplete

The appendices to the air quality impact analysis of the Final EIR and Draft EIS/EIR and Supplement provide endless lists of data, assumptions, and modeling input parameters as well as summary tables presenting the results of emissions estimates, yet all these documents wholly lack a demonstration of intermediate calculation steps, i.e. exactly how these emission estimates were derived. For example, the Final EIR contains summary tables of unmitigated and mitigated construction emissions, Tables F4.6-11 and Table F4.6-23. Attachment 1 to Appendix F-B contains more construction parameters and emission factors, mostly equipment and schedule-related. Neither these documents nor the Draft EIS/EIR and Supplement technical reports and air quality impact analyses upon which the Final EIR relies for methodology includes a step-by-step demonstration for emission estimates. All documents lack a demonstration of how construction emissions were derived.

Response:

Detailed emission spreadsheets and emission model input files that were used to calculate operational and construction emissions were included on CD-ROMs that were provided to the commentor on several occasions during development of the Final EIS. These spreadsheets and files were also provided to and reviewed with the environmental regulators. Appendix F-B, Attachment 1 of the Final EIS provides the pertinent tables from these spreadsheets in hardcopy. The tables in Attachment 1 of Appendix F-B list the parameters used to derive the construction emission inventories such as equipment sizes, load factors, emission factors, and crew assignments, among other parameters. The spreadsheets provided the intermediate steps and equations used in calculating the emission inventories. In addition, modeling and emission calculation methodologies for operational and construction sources are detailed in Appendix S-E of the Final EIS. The analysis for this project was developed to be conservative, and included substantial input from the South Coast Air Quality Management District, California Air Resources Board, USEPA Region 9, and the Southern California Association of Governments. Therefore, the results of the air quality impact analysis and general conformity determination are reasonable and provide the lead agencies with the appropriate data to make informed decisions.

FAL00003-112

Comment:

Another example relates to the estimated ranges of emission reductions for construction-related air quality mitigation measures, presented in Table F4.6-18. The Final EIR contains no information whatsoever about how these ranges were derived, nor does it contain any information about which value from each range had been applied.

Response:

Please see Response to Comment FAL00003-111 regarding detailed construction emission calculations, both mitigated and unmitigated, for all alternatives. The specific emission reductions associated with the components of the construction mitigation measure (MM-AQ-2) are included in the detailed spreadsheets referenced in that response. The ranges of emissions reductions are summarized in subsection 4.6.8 in Part I of the Final EIS and represent the ranges across all build alternatives, by pollutant; emissions calculations were based on methods identified in the Air Quality Modeling Protocol for Criteria Pollutants (see Attachment A of Technical Report 4 of the Final EIS) which was reviewed by SCAQMD. For example, Table 1-5 of Attachment 1 of Appendix F-B of the Final EIS provides the data for the emissions reductions by pollutant for Alternative D.

Heavy construction equipment emission control efficiencies for combined PuriNOx fuel, particulate traps, and injection timing retarding were estimated to be 24 percent for NOx and 85 percent for PM10. The on-site internal combustion engine generator emission control efficiencies for combined PuriNOx fuel, particulate traps, and use of grid power for one-third of the construction power requirement were

estimated to be 33 percent for CO, 33 percent for VOC, 46 percent for NOx, 33 percent for SO2, and 83 percent for PM10. The emission control efficiencies for fugitive dust stabilization included in the spreadsheets was 63 percent. These control efficiencies were based on information provided by CARB, interviews with Port of Los Angeles staff (the Port uses PuriNOx fuel and particulate traps on certain engines), and potential fugitive dust control efficiencies presented in Table 11-4 of the 1993 SCAQMD CEQA Handbook. These control efficiencies are shown in the spreadsheets provided previously to the commentor and regulatory agencies (SCAQMD and USEPA Region 9).

The specific emission reductions, in tons per year (tpy), for a given pollutant under a given alternative for a given year were calculated by multiplying the appropriate control efficiency for that pollutant by the unmitigated emissions for the alternative in that year. The resulting emission reductions associated with Alternative D construction mitigation measures in 2005 are 11 tpy for CO, 3 tpy for VOC, 342 tpy for NOx, and 149 tpy for PM10. Please also see Response to Comment FAL00003-60 regarding emission reductions for construction mitigation measures. Therefore, the ranges of construction emission reductions presented in Table F4.6-18 of the Final EIS are the result of calculated reductions for all alternatives and years.

FAL00003-113

Comment:

The same criticism holds for the emission reductions for operational emissions from the Project. Table F4.6-9 presents emission reductions for eight new flyaway terminals for 2015. The Final EIR contains no explanation of how these values were derived beyond stating that they are based on EMFAC emission factors for 2015. The document contains no information on the amount of traffic that is expected to be reduced by these flyaway terminals. Further, Table F4.6-20 shows ranges of emission reductions for conversion of ground-support equipment ("GSE") to zero emission or extremely low emission equipment by 2015. No support is provided demonstrating how these values were derived.

Response:

With regard to the emission reductions associated with the new flyaway terminals, the existing Van Nuys Flyaway facility removes approximately 750,000 round trips per year from the roadways between Van Nuys and LAX. The emission reductions estimated for the Final EIS assumed that, on average, the flyaways would reduce approximately 470,000 round trips per year, each, based on LAWA's research into potential flyaway locations. A round trip was assumed to be 30 miles, slightly less than the Van Nuys flyaway round trip distance of approximately 40 miles. These estimates were developed to avoid overestimating the potential benefits associated with the flyaways that might occur if all flyaway terminals were assumed to be as successful as the Van Nuys flyaway.

With regard to the GSE emission reductions, the assignments of GSE for each alternative were presented in Appendix F-B (Attachment 4, Tables 4-6 through 4-10 (EDMS input files)), of Appendix F-B, Air Quality Appendix, of the Final EIS and the emission factors used for each GSE type are included in Attachment 3 of Appendix F-B. Emission reductions associated with full conversion of GSE to zero or near-zero emission equipment by 2015 can be found by looking at the unmitigated emissions from GSE in 2015, and realizing that all of the unmitigated GSE emissions are assumed to be eliminated with Mitigation Measure MM-AQ-4.

FAL00003-114

Comment:

The Final EIR also lacks a table summarizing the operational emission reductions applied to the alternatives as well as an explanation of which emission reductions from implementation of mitigation were applied to the alternatives in the interim year. In a response to a comment on discrepancies in claimed emission reductions, the Final EIR provides the unhelpful answer that "[i]n general, emission reductions were revised to maintain a similar percent reduction across all alternatives." (Final EIR, RTC AL00033-324.) It is exactly those "similar percent reduction" values that should have been provided in a summary table for each alternative and for each year, detailed by the contribution of each mitigation measure.

These are just some of the many examples where the Final EIR fails to provide sufficient information to allow a reviewer to retrace the steps taken in the Final EIR to derive emission estimates and perform air quality dispersion modeling.

Response:

Through Mitigation Measure MM-AQ-1, LAWA has committed to limiting the airport emissions to specific values through implementation of Mitigation Measures MM-AQ-2, MM-AQ-3, and MM-AQ-4 as described in the Mitigation Monitoring and Reporting Program (MMRP). Please see Response to Comment FAL00003-14 regarding the enforcement of air quality mitigation measures included in the MMRP.

Unmitigated and mitigated construction emissions by year for Alternative D can be found in Attachment 1, Table 1-5 of Appendix F-B of the Final EIS. Unmitigated and mitigated construction emissions for the peak year of construction for each alternative are presented in Tables F4.6-11 and F4.6-23 in Section 4.6, Air Quality, in Part I of the Final EIS, respectively. The differences between the unmitigated and mitigated emissions in these tables represent the reductions associated with Mitigation Measure MM-AQ-2.

Unmitigated and mitigated on-airport operational emissions can be found in Attachment 7, Tables 7-1 and 7-5 of Appendix F-B of the Final EIS. The reduction in emissions for the GSE line items are the reductions associated with Mitigation Measure MM-AQ-4. The reduction in emissions for roadways and parking lots are the on-airport emission reductions associated with Mitigation Measure MM-AQ-3. The percent reduction associated with these on-airport related mitigation measures are included in Table F4.6-21 in Section 4.6, Air Quality, of Part I of the Final EIS.

Unmitigated and mitigated off-airport (traffic) emissions for each alternative are presented in Tables F4.6-10 and F4.6-22, in Section 4.6, Air Quality, in Part I of the Final EIS, respectively. The reduction in emissions for off-airport traffic are the off-airport reductions associated with Mitigation Measure MM-AQ-3.

The emission reductions summarized here address the issues raised in the comment. Please note that a single summary table outlining the emission reductions by mitigation measure is not required by NEPA.

FAL00003-115

Comment:

II. RESPONSES TO COMMENTS ARE NOT RESPONSIVE

Rather than addressing specific comments individually, the Final EIR provided so-called "topical responses," which allegedly address the same comments from several commenters. However, review of these topical responses reveals that most are nothing more than summaries of information already presented in the Final or Draft EIS/EIR and Supplement. Our specific comments, as well as those submitted by other commenters, often remain unaddressed. When specific responses to comments were provided they often do fail to address and/or resolve the concerns of the comment. In this case, our comments were typically addressed superficially only by repeating the information already contained in the Draft EIS/EIR or Supplement. Some of the most blatant examples relating to air quality and public health are relayed in the comments below. (See Comments IV.B, IV.D, V.B, V.C, V.F, V.G, and VII.B and VII.C.)

Response:

Comment noted. This comment lacks sufficient specificity for FAA to substantively address the concerns raised. Responses to comments on the Draft EIS/EIR and the Supplement to the Draft EIS/EIR were prepared in accordance with the Council of Environmental Quality NEPA Regulations (40 CFR 1503.4) and the State CEQA Guidelines (California Code of Regulations Section 15088) and focused on the disposition of significant environmental issues raised. Detailed, technical responses were provided in both individual and topical responses, where warranted by the comment. Responses to the comments labeled by the commentor as IV.B, IV.D, V.B, V.C, V.F, V.G, VII.B, and VII.C are provided in Responses to Comments FAL00003-118, 120, 125, 126, 130, 131, 138, and 139 below.

FAL00003-116

Comment:

III. AIR QUALITY IMPACT ANALYSIS IS INADEQUATE BECAUSE PM2.5 IMPACTS ARE NOT ADDRESSED

We previously commented on the failure of the Draft EIS/EIR and the Supplement to evaluate PM2.5 impacts based on the new NAAQS and CAAQS. (Fox 2001, Comment III.D, pp. 18/19; Fox & Pless 2003, Comment II.A.) These comments are herewith incorporated by reference.

In response, the Final EIR acknowledges that the U.S. Environmental Protection Agency ("U.S. EPA"), the California Air Resources Board ("CARB") and the SCAQMD now recognize PM2.5 ambient air quality standards. (Final EIR, RTC AL00033-329.) However, the Final EIR claims that, due to a lack of sufficient PM2.5 monitoring data, at the present time it is difficult to establish whether the area near LAX is in compliance with the NAAQS and CAAQS. (Ibid.) This conclusion is invalid for a several reasons. First, CARB has designated the entire South Coast Air Basin ("SoCAB") as non-attainment for PM2.5 standards in 2003.10 Second, this argument is irrelevant because emissions from the Project likely result in regionally significant contributions to PM2.5 ambient air concentrations, not just local impacts. Currently, there are 16 PM2.5 monitoring stations in the South Coast Air Basin and all but one had been collecting data since 1999.11

Combustion emissions from LAX constitute a considerable contribution to the regional particulate matter load, irrespective of whether the ambient air quality standards are exceeded in the immediate vicinity of the airport or not. Most of the Project's operational emissions originate from combustion sources, e.g., aircraft, ground support equipment, passenger cars. The major fraction of the particulate matter emissions from combustion sources is typically smaller than 2.5 microns in size, i.e. PM2.5, rather than PM10. For example, the PM2.5 fraction of particulate matter emissions is 92% for diesel vehicle exhaust, 93% for gasoline vehicle with catalysts exhaust, and 99% for aircraft exhaust. The PM2.5 fraction of particulate matter emissions from stationary internal combustion engines firing gasoline or diesel, e.g., heaters, typically range from 87% to 99%.12 Thus, well over 90% of the operational particulate matter emissions from the Project are PM2.5. PM10 standards are therefore an inadequate substitute for evaluation of compliance with PM2.5 standards. PM2.5 must be properly analyzed, and standards appropriate to this more prevalent pollutant should be used, to assure that the adverse environmental and health impacts of PM 2.5 emissions are properly disclosed.

10 California Environmental Protection Agency, Air Resources Board, Updated Informative Digest, www.arb.ca.gov/regact/area04/uid.pdf; California Environmental Protection Agency, Air Resources Board 2003 Area Designations for State Ambient Air Quality Standards, PM2.5, November 17, 2003, www.arb.ca.gov/desig/adm/s_pm25.pdf.

11 California Environmental Protection Agency, Air Resources Board, 2002 Particulate Monitoring Network Description, http://www.arb.ca.gov/aqd/pm25/pmfnet02.htm, accessed November 23, 2004.

12 California Environmental Protection Agency, Air Resources Board, Determination of Particle Size Distribution and Chemical Composition of Particulate Matter from Selected Sources in California, NTIS Report PB89-232805, June 30, 1989, Figure 5.2-2.

The Final EIR acknowledges that it is expected that U.S. EPA will designate the SoCAB as non-attainment for PM2.5 standards in 2004. The U.S. EPA does in fact intend to so designate the SoCAB.13 As mentioned above, CARB has designated the SoCAB as non-attainment for PM2.5, effective July 3, 2003, over a year ago. Yet, the Final EIR continues to decline analyzing PM2.5 impacts, citing a 1997 U.S. EPA guidance document that "compliance with the PM10 standards be considered a surrogate for compliance with the PM2.5 standards before final designations are made and implementation guidance can be developed." (Final EIR, p. 4-656.) The Final EIR further states that the "SCAQMD has confirmed that, at this time, it would be premature to fully analyze PM2.5 since the SCAQMD has not yet developed CEQA significance emission thresholds or other guidance regarding PM2.5 analysis." (Final EIR, p. 4-656.)

It is irrelevant whether the SCAQMD has developed significance thresholds for project emissions or not. The State CEQA Guidelines clearly identify the criterion for a project to be considered of statewide, regional, or area-wide significance if it interferes with attaining the federal or state air quality guidelines. (CEQA Guidelines, Section 15206(b)(2).) As discussed above, the substantial operational emissions of the Project will contribute to already existing regional exceedances of NAAQS and CAAQS and therefore results in significant impacts that were not identified in the Final EIR and were not properly mitigated.

Response:

Please see Responses to Comment FAL00001-28 regarding PM2.5 analysis.

USEPA has designated the South Coast Air Basin (SCAB) as a PM2.5 nonattainment area, as published in the Federal Register on January 5, 2005, and effective April 5, 2005. The area is required to attain the PM2.5 NAAQS in 2010. The commentor states " . . . PM2.5 must be properly analyzed, and standards appropriate to this more prevalent pollutant should be used . . . " FAA agrees with the commentor on this statement, and it is for this reason that no PM2.5 analysis was performed in the EIS, since neither USEPA, CARB, nor SCAQMD have yet provided the proper analysis guidance. Absent this proper and standardized guidance, there is no context to determine in a reliable manner whether the proposed action "interferes with attaining the federal or state air quality guidelines."

It should be noted that regardless of other measurements of PM2.5 made within the SCAB, there are currently no representative PM2.5 measurements in the vicinity of LAX. Since background tends to be site-specific, there are no relevant background concentrations for an appropriate analysis.

FAA disagrees with the commentor's assertion that the project would result in significant impacts that were not identified in the Final EIR [sic] and were not properly mitigated. As explained in subsection 4.6.3.2, of Section 4.6, Air Quality, in Part I of the Final EIS, the PM10 analysis has been used as a surrogate for PM2.5 emissions. Therefore, significance for PM10 implies significance for PM2.5. It should also be noted, that mitigation measures suggested for PM10 would be the same measures used to mitigate PM2.5 emissions.

FAL00003-117

Comment:

IV. EMISSION ESTIMATES ARE FLAWED

The following comments demonstrate that the emission estimates are erroneous, incomplete, and underestimated. This results in significant impacts that were not identified and discussed in the Final EIR and were not properly mitigated.

IV.A Use Of Two Baselines Inappropriately Segments Project Impacts And Results In Failure To Identify Significant Impacts

The Final EIR describes the methods for determining significance for the Project impacts as follows:

For purposes of CEQA, in general, significance was determined by comparison of: (1) estimated pollutant emissions from each build alternative in the interim year and 2015 to the pollutant emissions from the environmental baseline, (2) maximum predicted concentrations from each build alternative in the interim year and 2015 to the ambient air quality standards... The selection of the appropriate environmental baseline depends on whether the sources were on-airport or off-airport. On-airport source impacts were compared to the "environmental baseline" and off-airport source impacts were compared to the "adjusted environmental baseline," as described in the Introduction to Chapter 4. The difference in emissions between the environmental baseline and each build alternative was defined as the incremental project-related emissions. These incremental project-related emissions were then compared to the emission thresholds presented in subsection 4.6.4, Thresholds of Significance. Consistent with the SCAQMD CEQA Handbook, an air quality impact analysis (dispersion modeling) is included in the EIS/EIR for each alternative with incremental emissions rates that exceed the operations or construction emission threshold. (Final EIR, p. 4.6-668/669, emphasis added.)

The adjusted environmental baseline is based on future projected conditions against which project incremental impacts are measured. This type of analysis has been developed and used to evaluate traffic impacts for many years. The Final EIR justifies the use of an adjusted environmental baseline for

air quality impacts for off-site emissions because it "build upon the cumulative traffic impacts analysis contained in the off-site surface traffic impacts analysis. Consequently," the Final EIR argues, the off-site air quality analysis too is "based on that 'adjusted baseline' methodology." (Final EIR, TR-GEN-1.)

Yet, the Final EIR fails to understand the difference between the way the traffic impact analysis and the air quality impact analysis are conducted. The Final EIR compares the entire extent of incremental traffic impacts against the adjusted environmental baseline. In contrast, the Final EIR segments the air quality impacts into a) on-airport operational and construction impacts measured against the 1996 environmental baseline and b) off-airport impacts measured against the adjusted environmental baseline. This segmentation of the Project's impacts, in effect, equates to segmenting the Project into two parts. This treats Project emissions/concentrations as if they resulted from two projects not from one. Consequently, the emissions/concentrations from a) operational and construction and b) off-airport that are compared to the respective baselines are individually lower than if the whole of the project emissions/concentrations had been compared to a baseline.

CEQA requires that a project's be evaluated as a whole and does not allow for segmentation of projects. CEQA mandates "that environmental considerations do not become submerged by chopping a large project into many little ones - each with a minimal potential impact on the environment - which cumulatively may have disastrous consequences." (City of Santee v. County of San Diego, 214 Cal.App.3d 1438, 1452 (1989), quoting Bozung v. Local Agency Formation Comm'n, 13 Cal.3d 249, 283-84 (1975).) Here, the City failed to analyze the whole of the proposed project due to the segmentation of the air quality impacts.

Due to the segmentation of the air quality impact analysis into two parts, the Final EIR finds significant impacts for some but not all criteria pollutants for operational and construction impacts and for off-airport impacts. (See Final EIR, Tables F4.6-25 through F4.6-28.) Evaluation of the Project's total impacts, i.e. on-airport operational and construction plus off-airport emissions/concentrations, however, would result in significant project emissions for all criteria pollutants, no matter which baseline is used. Therefore, the Final EIR fails to identify significant Project impacts.

13 Letter from Wayne Nastri, U.S. Environmental Protection Agency, to Arnold Schwarzenegger, Governor of California, received June 29, 2004.

Response:

This comment pertains to the analysis of air quality impacts conducted for purposes of CEQA and is not a comment on the Final EIS. There are no federal emissions thresholds. Rather, for purposes of NEPA, criteria pollutant concentrations are compared against the National Ambient Air Quality Standards (NAAQS).

FAL00003-118

Comment:

IV.B Ratio Method Is Invalid

On-airport emissions were calculated based on a ratio method to reflect revisions in FAA's Emissions and Dispersion Modeling System ("EDMS") from version 3.2 to version 4.11. (Final EIR, pp. 4-659/660 and Supplement pp. 4-357/358.) The Supplement had developed ratios for each pollutant for results obtained with EDMS version 4.11 and version 3.2 runs for Alternative D and applied these ratios to results from EDMS 3.2 runs for all other alternatives and the baseline. The Final EIR revised this approach and derived an average ratio for each pollutant for the Interim Year and for the Horizon Year 2015 derived from several model runs with both EDMS versions.14 We previously commented on the improper use of this ratio method with a detailed discussion of the various reasons why this approach is scientifically flawed and will not yield reliable and comparable results. (Fox & Pless 2003, Comment I.A.) We herewith incorporate this comment by reference.

In sum, the differences in the EDMS model versions incorporate several technical changes that affect modeled emissions inventories including an updated emission factor database for aircraft; updated ground support equipment emission factors based on model year, power output, and fuel type; additional assessment of emissions from aircraft landing roll time-in-mode ("TIM"); inclusion of aircraft flight profile to model dispersion after takeoff and on approach; use of the most current dispersion modeling methods; and an improved characterization of aircraft plume dispersion behavior. Because

the alternatives are based on greatly differing airport capacities and/or regional distributions, the annual total number of aircraft and fleet mix are substantially different under all alternatives. Thus, using a constant ratio for each pollutant applied across all scenarios and analyzed years results in incorrect emission estimates and invalidates any inter-alternative comparisons. Further, in applying the same ratio to mitigated and unmitigated emissions, the Final EIR blatantly disregards that some on-airport emission sources will be mitigated to a much greater extent than others and to a different extent under the different alternatives.

The Final EIR argues that the ratio approach is "reasonable since no changes were made to the assumed activity levels and source locations in the other alternatives." (Final EIR, p. 4-660.) This statement, which has also been provided as the sole response to our detailed comments on the Supplement, entirely misses the point. (Final EIR, RTC SAL00013-115.) It is not a proposed change to the activity levels and source locations of the proposed alternatives that is of concern - those have, according to the Final EIR not changed - but the entirely different scenarios of flight activities and capacities these alternatives were based on to begin with. The alternatives are based on considerably different airport capacities and/or regional distributions, and, as a result, the annual total number of aircraft and fleet mix are substantially different.

Further, inspection of the ratios developed for the different model runs should have made abundantly clear that the ratios are not even close to being comparable for different scenarios, i.e. alternative/year combinations, and therefore cannot be used to derive an average ratio or be applied to another, entirely different scenario. For example, the total (all on-airport sources) carbon monoxide ("CO") ratio for the horizon year 2015 for Alternative D Mitigated is 1.06, for Alternative D Unmitigated it is 1.15, and for the NA/NP alternative it is 0.65. Based on these three values, the Final EIR derives an averaged ratio used to adjust emissions from Alternatives A, B, and C in 2015 from EDMS version 3.2 to version 4.11 of 0.95. Another example is the average ratio for VOCs in 2015 of 0.97 derived from these three EDMS 4.11 runs from the ratios 0.92, 0.91, and 0.79, respectively. (Final EIR, Appx. F-B, Attachment 7, Table 7-3.) Deriving an average value for such a ratio would only be justified if the base values were similar. Deriving an average from values that are as dissimilar as the ones presented in the Final EIR, is absurd. Further, the ratios for each pollutant applied to Alternatives A, B, and C for the Interim year are based on the ratios derived from the NA/NP alternative alone. Considering the wide range of ratios derived for the horizon year 2015, there is a high risk that this ratio for the Interim Year, based on only one set of data, is entirely unreliable and therefore renders any comparison of alternatives moot.

In sum, the ratio method has been demonstrated to be entirely unreliable for the purpose of "converting" emissions estimated with the outdated version of EDMS. Considering the magnitude of estimated on-airport emissions - several hundreds or thousands of tons per year for each pollutant - the continued use of this ratio method introduces the potential for massive errors. For instance, if emissions of CO are estimated at 10,000 tons per year ("ton/year") with EDMS 3.11 15, the averaged ratio of 0.95 would adjust CO emissions to 9,500 ton/year, a difference of 500 tons. However, if the upper range of the three ratios, 1.15, were used, the resulting CO emissions would be 11,500 ton/year, or a difference of 1,500 tons. Emissions of 1,500 ton/year translate to more than 8,000 16 pounds per day ("lb/day"). To put this value in perspective, the SCAQMD CEQA significance threshold for project operations is 550 lb/day. In other words, the uncertainty alone introduced by using this ratio method is at least an order of magnitude larger than the CEQA significance threshold to which any project operational emissions are typically compared. Such uncertainty in emission estimates is unacceptable for a project of the magnitude of LAX.

Elsewhere, the Final EIR takes great pains to list the various input parameters in enormous detail, e.g., schedules and emission factors for each piece of construction equipment; aircraft taxi/idle TIM for every type and model of aircraft; emission factors for each and every piece of ground support equipment ("GSE"); etc. The detail of these assumptions, data, and calculations are entirely nullified by "adjusting" on-airport emissions with this ratio method. LAWA should not be allowed to introduce such enormous uncertainty into the emission estimates when reliable and, particularly, comparable data can be readily obtained by running the revised model EDMS 4.11 for all alternatives, the NA/NP alternative, and the baseline. Compared to the enormous amount of work that went into collecting baseline information and the preparation of the EIS/EIR, this is a minor effort.

The Final EIR devotes not a single word to why it chose to update some but not all EDMS model runs. Considering the fact that LAWA continues to deem this ratio method suitable for estimating "approximate EDMS 4.11 results," it is curious why LAWA updated emission estimates for selected alternatives only. (Final EIR, p. 4-66-.) Until Alternative D has been selected as the only alternative that will be pursued, all estimates for all alternatives must be revised and updated in the same manner to ensure directly comparable values.

14 EDMS 4.11 emission inventory runs were conducted for Alternative D 2015 mitigated, Alternative D 2015 unmitigated, NA/NP Alternative 2015, NA/NP Alternative 2005, Baseline 1996, Alternative D 2013 mitigated, Alternative D 2013 unmitigated. (Final EIR, Appx. F-B, Attachment 7, Table 7-1.)

15 EDMS 3.2 CO emissions estimates for mitigated Alternatives A, B, and C in 2015 range from about 9,000 to about 9,500 ton/year. (Final EIR, Appx. F-B, Attachment 7, Table 7-4.)

16 (1,500 ton/year) / (365 days/year) x (2,000 lb/ton) = 8,219 lb/day

Table A1: Please see original letter for table.

Response:

The commentor states that the ratio method to convert emission inventories from EDMS 3.22 to 4.11 is inappropriate, primarily because the fleet mix and activities are "substantially different" between the alternatives.

The conversion to EDMS 4.11 from EDMS 3.22 directly affects the emissions from aircraft and auxiliary power units (APU), only. The maximum difference in aircraft operations between Alternative D in 2015 and the 1996 Environmental Baseline, 2005 and 2015 No Action/No Project Alternatives, 2005 Alternatives A and B, and 2005 and 2015 Alternative C is only 3 percent, and the difference with 2015 Alternatives A and B is approximately 20 percent. Since aircraft emissions cannot be directly mitigated beyond USEPA emission standards and International Civil Aviation Organization (ICAO) certification limits, aircraft are not affected by mitigation. The airfield is being designed to handle roughly the same future aircraft fleet under each alternative; therefore, the ratio method can be used for changes in operations of at least 20 percent, and applying the ratio method to aircraft is appropriate and reasonable. Since the APU emissions are based on the number of aircraft operations, the ratio method is also appropriate for estimating APU emissions between alternatives.

The GSE emission factors are converted from the EDMS 3.22 default values to values based on the CARB OFFROAD model. However, the GSE total emissions are based on the number of aircraft operations, which do not vary substantially between alternatives. In addition, the same basic aircraft fleets are being assessed for each alternative. Finally, the same mitigation measure for GSE (MM-AQ-4) is being applied to Alternatives A, B, C, and D; therefore, applying the ratio method to GSE is reasonable and appropriate for estimated mitigated and unmitigated GSE emissions.

The ratio method is not applied to on-road mobile source emissions (roadways and parking), since these estimates for all alternatives and scenarios are based on EMFAC, not EDMS. Nor is the ratio method applied to stationary source emissions, since these emissions are based on tenant surveys, permitted emissions, and estimated future operations of stationary sources.

Therefore, the ratio method is a reasonable and efficient method to estimate the potential emissions for Alternatives A, B, and C under EDMS 4.11. The resulting emissions provide values that can be compared to Alternative D and the No Action/No Project Alternative.

At the time the detailed air quality impact analysis was being conducted for Alternative D, it was obvious that the magnitude of the Master Plan under Alternative D was substantially smaller than that for Alternatives A, B, and C, both for operating emissions and construction emissions. EDMS 3.22 was used initially to assess Alternative D on-airport operational emissions, and the results from this analysis are shown in Appendix F-B, Attachment 7, Table 7-2, of the Final EIS. One can see by comparison of the unmitigated 2015 Alternative D emissions to the unmitigated 2015 emissions from EDMS 3.22 for Alternatives A, B, and C (found in Table 7-4 of the same attachment), that Alternative D emissions are noticeably lower. When the detailed analysis for Alternative D (as well as the No Action/No Project Alternative) was reassessed using EDMS 4.11, ratios were developed for specific source emissions from the EDMS 4.11 and EDMS 3.22 model runs, and those ratios were applied to the EDMS 3.22 results for Alternatives A, B, and C. This approach is reasonable since the relative ranking of the alternatives was already demonstrated with the EDMS 3.22 runs, and the ratio calculations were an efficient means to compare Alternatives A, B, and C with the model results for Alternative D. This produced reasonable results, which is demonstrated by the fact that the ranking of each alternative mirrored their ranking under EDMS 3.22.

FAL00003-119

Comment:

IV.C Ratio Method Calculations Contain Numerous And Considerable Errors And Are Applied Incorrectly

Careful review of the ratios presented in the Final EIR further reveals that they contain numerous and considerable errors, exacerbating the above discussed errors introduced by the use of this ratio method. Appended Tables A2 to A6 illustrate and summarize these errors; Table A1 is a copy of the ratios presented in the Final EIR, Appendix F-B, Attachment 7, Table 7-3 for comparison.17 The inset Table 1 below illustrates the glaring discrepancies for total on-airport emission ratios calculated based on the EDMS runs compared to the ratios presented in the Final EIR.

Table 1: Please see original letter for table.

It is not conceivable why a spreadsheet would calculate a simple ratio of two values correctly in some instances and not in others. A brief appraisal of the accurateness of the calculated ratio values for the totals on-airport sources and comparison with individual contributions should have alerted the reviewer that something must be wrong. Closer inspection of Tables A2 to A6 and comparison with the results presented in the Final EIR (see Table A1) suggests that the ratios might have been edited.

In addition, the values presented in the main text of the Final EIR air quality impact analysis for unmitigated operational emission inventories for on-airport sources, Table F4.6-9, do not match the values derived from the ratios and EDMS 3.2 model runs for Alternatives A, B, and C. They neither match the correctly calculated values nor those presented in the Final EIR.

Since this step - the modeling of on-airport emissions-is crucial to determining Project impacts, the entire modeling for all alternatives and the baseline should be revised to eliminate the errors discussed above using the most current model of EDMS, version 4.2 18, released in September 2004. These clear and unexplained discrepancies undermine the analytical integrity of the air quality analysis in general.

17 Ratios in Tables A2 through A6 were derived consistent with the method used in the Final EIR by dividing EDMS 4.2 emission estimates by EDMS 3.2 for those model runs provided in the Final EIR, Appendix F-B, Attachment 7, Table 7-1 and 7-2.

18 Federal Aviation Administration, Emissions and Dispersion Modeling System Updates http://www.aee.faa.gov/emissions/edms/edms_Updates/Updates.htm.

Table A2: Please see original letter for table.

Table A3: Please see original letter for table.

Table A4: Please see original letter for table.

Table A5: Please see original letter for table.

Table A6: Please see original letter for table.

Response:

Please see Response to Comment FAL00003-118 regarding the ratio method for assessing emissions associated with Alternatives A, B, and C.

There are no discrepancies between the values presented in the main text of the Final EIS and the values derived from the ratios applied to the EDMS 3.2 model runs for Alternatives A, B, and C. The emissions information provided in Attachments 4 and 7 of Appendix F-B of the Final EIS does correspond to the information provided in Table F4.6-9 of Section 4.6, Air Quality, in Part I of the Final EIS. Please see Tables 7-1 and 7-5 of Attachment 7 of Appendix F-B for CO, NOx, SOx, and PM10 emissions and Attachment 4 of Appendix F-B for VOC emissions.

In the commentor's Tables A2 through A6, the commentor has made incorrect assumptions concerning the calculation of ratios for the GSE, Stationary Source, Roadway, and Parking Lot source group types. As detailed in Section 4.6, Air Quality, and Appendix F-B of the Final EIS and noted in Response to Comment FAL00003-118, emissions from on-airport roadways and parking lots were calculated using the EMFAC2002 emissions model for each alternative, including Alternatives A, B and C. This calculation is independent of either version of EDMS, therefore the roadway ratio for purposes of comparison between EDMS 3.2 and 4.1 was set to 1.0. Similarly, the emission factors used to calculate emissions from stationary sources are based on calculations for each alternative independent of either EDMS version and the ratio was, therefore, set to 1.0. Thus, the roadway, parking lot, and stationary source emissions for Alternatives A, B, and C were not adjusted (i.e., no ratio was applied) since the appropriate emissions model was already used. As described in Section 4.6 in Part I of the Final EIS, the methodology used to calculate emissions from GSE sources had changed from the use of default EDMS 3.2 factors based on the USEPA NONROAD model to emissions calculated independent of EDMS based on the CARB OFFROAD emissions model.

Note that the emission ratios used in the Final EIS were applied individually to each source group (aircraft, APU, GSE, traffic/parking, stationary) and not to the alternative emission as a whole. Therefore, the approach used by the commentor in developing Table 1 in the comment, which presented overall alternative ratios, would not be appropriate for comparison to the values developed from the individual source groups.

FAL00003-120

Comment:

IV.D Rollback Procedure Is Not Warranted

Air quality impacts are evaluated by using dispersion models to convert project emissions into increases in ambient concentrations of each pollutant. These incremental concentrations are then added to background ambient concentrations to estimate ambient concentrations after the project is built. These projections are then compared with ambient air quality standards to determine if the project would cause a significant air quality impact.

It is standard practice to use the maximum measured existing ambient concentration at the nearest monitoring station as the background in these calculations. The Final EIR, however, deviated substantially from the accepted approach and estimated future background concentrations using a linear rollback approach used in the 1997 AQMP to determine if the proposed region-wide controls would bring the basin into compliance with standards. (Final EIR, p. 4-665; Draft EIS/EIR, Technical Report 4.) This approach assumes that changes in emissions will affect ambient air concentrations proportionally. The use of this approach resulted in very substantial reductions in future background concentrations, a factor of more than two for CO and nearly two for NOx. (See Final EIR, Tables 4.6-2 and 4.6-5.)

The use of this questionable approach obscured at least one major air quality impact of the Project. Inset Table 2 below demonstrates that if this approach were not used, both the federal and State 8-hour CO air quality standard would be exceeded.

Table 2: Please see original letter for table.

This impact is not discussed in the Final EIR. The South Coast currently violates the federal and State 8-hour CO standard. The Project would aggravate violations of this standard, preventing the South Coast from coming into compliance and resulting in serious economic and other penalties.

We previously commented on the inappropriate use of the linear rollback approach to estimate background concentrations. (Fox 2001, Comment III.A.) We herewith incorporate this comment by reference. We identified three reasons why a linear rollback approach is not warranted for determining background concentrations for the Project. The response to our comment, RTC AL00033-326 via RTC AF0001-29, failed to address and resolve the following two points.

First, many of the emission reductions that are forecast to occur in the region are based on rules that have not been adopted and control technologies that do not yet, and may never, exist. Speculative improvements are not acceptable for use in a CEQA analysis.

Second, the appropriate amount of rollback, if any, depends on the emission reductions achieved by the AQMP in the immediate vicinity of the Project. The analysis presented in the Final EIR relies on an extrapolation from the 1997 AQMP for downtown Los Angeles. As the RTC correctly points out, "a substantial portion of emission decreases in future years is due to on-road mobile source emission reductions." The vicinity of LAX contains a number of very large stationary sources, e.g., the El Segundo Refinery, which will not be substantially affected by the proposed AQMP control measures. Thus, predicted air quality concentrations in downtown Los Angeles are not a reasonable surrogate for the immediate vicinity of LAX.

In sum, a rollback procedure is not warranted. If the linear rollback procedure is not employed, the results would clearly indicate that the Project would significantly contribute to existing violations of CO CAAQS and NAAQS compared to the 1996 baseline, significant impacts that were not identified and properly mitigated in the Final EIR. As discussed below, the Final EIR also significantly underestimates emissions of all pollutants, particularly NOx and PM10. Revisions of these emission estimate would likely result in new violations of the NOx CAAQS and NAAQS compared to the 1996 baseline and contribute to existing violations of the PM10 CAAQS and NAAQS.

Response:

Please see Response to Comment FAL00001-29 regarding the rollback method used to estimate future background concentrations. The development of future background concentrations was made in consultation with SCAQMD, and is consistent with SCAQMD's projected future background concentrations. The use of the controlled future emission inventory from the 1997 AQMP was specifically discussed with the SCAQMD and determined to be applicable to this project as detailed in the Protocol. These controlled future emission inventories did, to some extent, rely on regulations and technologies that were not in place at the time the 1997 AQMP was prepared. Since that time, some of these regulations have been adopted and some of the technologies have become available. In fact, as noted in Tables 1-2 and 1-3 of the 2003 Air Quality Management Plan (AQMP), the SCAQMD, CARB, and USEPA have adopted regulations that will achieve more emission reductions from NOx sources by 2010 than were budgeted in the 1994 and 1997 AQMPs. In addition, the 2003 AQMP demonstrates that the South Coast Air Basin has achieved the CO NAAQS. For these reasons, the future background concentrations assumed in the Final EIS were reasonable and appropriate.

The commentor claims that the approach deviates from the accepted approach of using measured concentrations at the nearest monitoring station. The approach referred to by the commentor is appropriate for projects with relatively short construction periods (typically two years or less). However, for projects that are constructed over a period of 10 years or more, use of the linear rollback approach is acceptable.

As noted by the commentor and previous responses to comments (AF00001-28 in Part II-Volume 2 of the Final EIS, and SAL00015-58, SAL00015-248, and SAL00015-249 in Part II-Volume 10 of the Final EIS), "a substantial portion of emission decreases in future years is due to on-road mobile source emission reductions." While there are a number of stationary sources near the LAX area, control of mobile sources (traffic) in the LAX area will result in a reduction of emissions.

Please see the Responses to Comments FAL00003-123, FAL00003-124, and FAL00003-126 through FAL00003-131 below regarding emissions.

FAL00003-121

Comment:

IV.E Air Quality Analysis Is Riddled With Errors

We previously commented on the numerous erroneous assumptions, methodological flaws, and calculation and modeling errors of the air quality analysis contained in the Draft EIS/EIR and the Supplement. (Fox 2001, Fox & Pless 2003.) We hereby incorporate these comments by reference. As discussed in Comment I.B above, the Final EIR relies on the methodology, assumptions, and data presented in the technical reports and appendices to the Draft EIS/EIR and Supplement, except where it provides updates. While the Final EIR contains some updates, almost none of the issues we pointed out were addressed in the Final EIR, its appendices, RTCs or its Addendum. Consequently, the air quality analysis presented in the Final EIR is equally riddled with errors and as flawed as the one previously presented in the Draft EIS/EIR and Supplement.

Response:

The detailed analyses have been reviewed by South Coast Air Quality Management District, the California Air Resources Board, and USEPA Region 9. These agencies have rigorously reviewed the analysis and indicated that the analysis methods are appropriate and the results provided are reasonable.

Please see Responses to Comments AL00033-140, AL00033-141 and AL00033-311 through AL00033-350 in Part II-Volume 3 of the Final EIS, and Responses to Comments SAL00015-55 through SAL00015-65 and SAL00015-235 through SAL00015-289 in Part II-Volume 10 of the Final EIS for responses to comments on the Draft EIS/EIR and Supplement to the Draft EIS/EIR related to air quality and human health and safety submitted by Dr. J. Phyllis Fox and Dr. Petra Pless on behalf of the City of El Segundo.

FAL00003-122

Comment:

V. AIR QUALITY IMPACTS ARE UNDERESTIMATED

The air quality impact analysis presented in the Final EIR considerably underestimates emissions from Project operation, as discussed in Comment V.1 below. The Final EIR also omits a number of sources from the emission estimates. (See Comments V.A through V.G.) While each of these individual contributions to total Project air quality emissions might be small compared to the total emissions from the Project, the cumulative impact of these sources will likely be substantial.

Response:

Comment noted. Please see the Responses to Comments FAL00003-123 through FAL00003-131 below.

FAL00003-123

Comment:

V.A Emissions Are Underestimated Because Airport Capacity Is Underestimated

The planning assumptions reflected in the Final EIR for Alternative D are based on the airport accommodating 78.9 MAP in 2015. (Final EIS, p. 3-15.) This estimated airport capacity - already exceeding the maximum allowable capacity in million annual passengers ("MAP") under the SCAQMD's air quality management plan ("AQMP") and the maximum capacity assumed for regional transportation planning by Southern California Association of Governments ("SCAG") - appears to be a substantial underestimate. The same criticism holds for the capacity estimates of the other alternatives.

An independent evaluation of the capacity of Alternative D by an expert in airport design and capacity determined that LAWA never conducted a proper capacity analysis of the proposed terminal and gate configuration. (Kanafani 2003 19 and 2004 20.) The Final EIR's capacity assumption was not based on the physical gate configuration but on a variety of market assumptions. Obviously, such an estimate cannot be used as a suitable representation of the capacity of Alternative D. The airport design expert concluded that a more realistic, though still conservative, estimate of the capacity of Alternative D, based on the proposed configuration, would be 87 MAP.

19 A. Kanafani, Capacity Analysis of Aircraft Gate Positions, Los Angeles International Airport, Master Plan Alternative D; submitted as Attachment 7 to November 3, 2003 Comments submitted on behalf of the City of El Segundo by Shute, Mihaly & Weinberger.

20 A. Kanafani, Comments on the LAX Master Plan Final EIS/EIR Responses to Comments; attached as Exhibit C to Comments submitted by Shute, Mihaly & Weinberger on behalf of the City of El Segundo.

Response:

The airport activity forecasts and planning assumptions for each of the alternatives included in the Final EIS (i.e., Alternatives A, B, C, D and the No Action/No Project Alternative) meet and exceed industry standards for this type of planning analysis. Please see Response to Comment FAL00003-2 regarding capacity and other Master Plan issues raised in this comment including issues related to the Kanafani report referenced in this comment. It should be noted that the Southern California Association of Governments (SCAG) found the activity level associated with Alternative D to be generally consistent with the level identified in the 2004 Regional Transportation Plan (see Comment Letter SAR00005 in Part II-Volume 10 of the Final EIS).

FAL00003-124

Comment:

Most sources of emissions from Alternative D, except construction, would be expected to scale linearly with MAP and would therefore be about 10 percent higher21 than reported in the Final EIR.

21 (89 MAP)/(78.9 MAP) = 110%

Response:

Please see Response to Comment FAL00003-2 regarding capacity of Alternative D.

Based on the acceptance of the activity forecast for Alternative D by the Southern California Association of Governments (see Appendix C, Section 1, Comment and Information Letters Received on the Draft General Conformity Determination, SCAG Letter Dated February 4, 2004 in Appendix A-2a, Final Clean Air Act General Conformity Determination, of Volume A of the final EIS), the emission inventories for Alternative D do not need adjustment.

FAL00003-125

Comment:

V.B LAX Northside Is Inappropriately Excluded From Alternative D

The Final EIR now considers the 340-acre LAX Northside Development part of the Master Plan for Alternative D. (Final EIR, RTC AL00013-15.) Yet the Final EIR does not include emissions from either construction or operations of LAX Northside in the air quality impact analysis for Alternative D. By not including construction and operational emissions from development of LAX Northside, the Final EIR significantly underestimates emissions associated with Alternative D compared to the baseline.

The Final EIR reasons that it "provides a program level of analysis for the LAX Master Plan" and that "[a]s each improvement advances as an individual project, it will be examined in light of the EIS/EIR to determine what additional analysis is required. If/as the new administration facility advances toward implementation, the appropriate project-level CEQA review will occur." (Final EIR, RTC AL00013-15.) The Final EIR deems this tiered approach consistent with the provisions of CEQA. (Ibid.) We strongly disagree.

CEQA specifically mandates "that environmental considerations do not become submerged by chopping a large project into many little ones - each with a ... potential impact on the environment - which cumulatively may have disastrous consequences. (City of Santee v. County of San Diego, 214 Cal. App. 3d 1438, 1452 (1989).)

The development of LAX Northside is an integral part of Alternative D, without which the proposed on-airport improvements will not be possible and will not function. While the exact design of the facilities might not be known at this point in time, LAWA apparently has enough information to specify a total of 4.5 million square feet ("MSF") office space required for Alternative D.

The NA/NP alternative, on the other hand, includes emissions from construction and operation of LAX Northside. (Final EIR, TR-GEN-2.) Obviously, knowing that Alternative D would be similar to the original LAX Northside Development and knowing its approximate square footage for administrative purposes (4.5 MSF) would permit a "program level" assessment of its air quality impacts. The Final EIR must be

revised to include construction and operational emissions in the air quality analysis for Alternative D and recirculated for public review.

Response:

The comment questions the validity of environmental impacts presented in the Final EIS, particularly as it pertains to LAX Northside as proposed under Alternative D. As indicated in the Record of Decision, the FAA has determined that LAX Northside cannot be approved at this time. In evaluating LAX Northside under Alternative D, the Final EIS relies upon a mix of assumptions regarding the size and characteristics of LAX Northside. While this general level of planning may be appropriate in a situation where only programmatic approval is requested, FAA's approval of Alternative D is an approval at the project level. Thus, the lack of more specific details regarding LAX Northside affects FAA's ability to approve this collateral development. Because LAWA has provided a very general description of what LAX Northside would be under Alternative D, and because this resulted in use of inconsistent assumptions in evaluating LAX Northside's environmental effects, FAA has decided that it would be inappropriate to render a decision on LAX Northside at this time at the project level.

The commentor incorrectly states that under Alternative D, LAX Northside would consist of a full 4.5 million square feet of development. In fact, the FEIS indicated that the total area of development would be something less than the 4.5 million square feet of development identified under the No Action Alternative, with the actual size of the development being scaled to a size necessary to achieve the "trip cap" associated with Alternative D. (See Final EIS, Volume A, Executive Summary, Table AES-3, footnote 5). The actual size of LAX Northside necessary to respond to the trip cap was not determined by LAWA and thus could not be disclosed in the Final EIS. The environmental analysis, however, assumed LAX Northside would contain 4.5 million square feet of development in many, but not all resource categories, for purposes of conducting the environmental analysis. It is because of these inconsistent assumptions underlying the environmental analysis, as well as FAA's inability to make an air space determination regarding LAX Northside, that FAA is unconditionally approving the ALP to depict all aspects of Alternative D except LAX Northside and taking no action at this time regarding LAX Northside. As more fully described in Section VII of the ROD, FAA is requiring LAWA to submit a consistent set of assumptions regarding the size and nature of the development proposals for LAX Northside and the basis for those assumptions before a decision regarding LAX Northside will be made or an airspace determination can be issued. LAWA must provide consistent and reasonable planning assumptions regarding the collateral development proposal so that FAA can undertake a review of the environmental consequences and airspace impacts associated with LAX Northside. Based on that review, FAA will determine whether the project continues to meet the general conformity requirements of the Clean Air Act and whether the Final EIS continues to be sufficient.

It is also important to note that the comment is incorrect in stating that "development of LAX Northside is an integral part of Alternative D, without which the proposed on-airport improvements will not be possible and will not function." While there is a direct relationship between Alternatives A, B, and C and Westchester Southside, such is not the case relative to Alternative D and LAX Northside. The north airfield improvements under Alternatives A, B, and C extend northward into the area currently designated for LAX Northside, consequently reducing the subject development area from approximately 340 acres to approximately 210 acres. The nature and amounts of land uses proposed for Westchester Southside were specifically designed to accommodate the existing business that would be displaced by the 200+ to 300+ acres of land acquisition required under Alternatives A, B, and C, as well as provide for a pedestrian-oriented community commercial "village" area to benefit the community of Westchester. Under Alternative D, however, the north airfield improvements would not extend into the area of land designated under the No Action Alternative for LAX Northside. Thus, Alternative D does not encroach into the existing area designated for collateral development. Furthermore, the amount of land acquisition associated with Alternative D would involve only approximately 77 acres and require the relocation of relatively few existing businesses, most, if not all, of which could likely be absorbed into the existing business community around the airport area without having to be relocated to LAX Northside. Thus, Alternative D does not depend on LAX Northside to provide space for businesses relocated as a result of other aspects of Alternative D. In other words, the collateral development known as LAX Northside under Alternative D does not depend on the overall Alternative D proposal for its justification. Nor does the overall Alternative D proposal depend upon LAX Northside for its justification. Each can and will operate independent of the other. Therefore, the comment's conclusion that development of LAX Northside is an integral part of Alternative D is unfounded and incorrect.

FAL00003-126

Comment:

V.C Reverse Thrust Emissions Are Inappropriately Excluded

The Final EIR estimates emission rates for four aircraft operational modes: taxi/idle, takeoff, climbout, and approach. The Final EIR omits emissions associated with aircraft reverse thrust operations from its air quality analysis because "adequate emission factors have not been developed for reverse thrust and regulatory guidance for calculation [sic] emissions from reverse thrust was not available. (Final EIR, RTC AF00001-21.) As demonstrated below, this is incorrect and, in fact, ignores FAA guidance. The Final EIR then deliberates that "[t]he relative time that aircraft use reverse thrust compared to the other time spent in other operational modes is minimal, thus emissions for this mode are assumed to have minimal impact on the emission inventories." (Final EIR, RTC AF00001-21.) We disagree with this speculative statement.

Engine thrust reversal is typically used after aircraft landing to slow the aircraft to taxi speed and occasionally to "power-back" away from a boarding bridge (a practice not employed at LAX because of the lack of space between terminal buildings.) Reverse thrust describes the practice of setting the engines to full power in the reverse direction and is essentially a high-thrust operating mode. High-thrust operating modes, such as aircraft takeoff, generate very high NOx emissions per unit time relative to other operating modes such as aircraft taxi. While the time in mode ("TIM") for reverse thrust operations is, in fact short, approximately 15 to 20 seconds, it can nevertheless be responsible for an additional 15 percent or more of the on-airport NOx emissions. (Rice & Walton 2003.22)

The Final EIR further claims that "since runway lengths at LAX are able to accommodate even the largest aircraft, use of reverse thrust would be expected to be minimal." (Final EIR, RTC AF00001-21.) The Final EIR ignores that reverse thrust is not only employed by large aircraft to land on short runways but also to reduce brake wear and more often during wet runway conditions. In May 2004, LAWA itself explained 6 out of 84, or 7 percent, of incidents of community noise complaints with the use of reverse thrust.23 This suggests that reverse thrust use at LAX is not minimal.

Perplexingly, LAWA does not follow FAA's official guidance on this matter. The FAA recognizes the importance of including reverse thrust operations in air quality assessments in its Air Quality Handbook,24 which provides guidance, procedures and methodologies for use in carrying out air quality assessments for proposed Federal actions that are required for compliance with the National Environmental Policy Act ("NEPA"), the federal Clean Air Act ("CAA") and other environment-related regulations and directives. This guidance was relied on in preparing the Final EIR. (Final EIR, p. 4-655.)

The Air Quality Handbook, published well before the publication of the Draft EIS/EIR was conducted, unambiguously states that "[r]everse thrust is now considered by EPA as an official mode and should be included in calculation procedures..." [Emphasis added.] It continues "[s]ince reverse thrust engine operating conditions are similar to takeoff, time spent in reverse thrust should be combined with takeoff mode emission indices and fuel flow as a means of accounting for reverse thrust mode emissions. Aircraft reverse thrust typically is applied for 15-20 seconds25 on landing." It explicitly specifies that "[t]akeoff emission indices and fuel flow should be used as inputs for calculating emissions from reverse thrust (as well as takeoff) mode." (Air Quality Handbook, Appendix D26, pp. D-5/6.) Further, reverse thrust operations were recently included in the EDMS modeling for two other airports in the South Coast Air Basin - John Wayne and El Toro - by adding 15 seconds to the total takeoff time. (MCAS El Toro Final EIR,27 p. 4.5-26.)

Of the four phases of the aircraft landing/takeoff operations ("LTO") cycle typically included in aircraft emissions modeling, the greatest NOx emissions are attributable to the takeoff mode. Thus, increasing the amount of time in takeoff mode will considerably increase NOx emissions. (NESCAUM28, p. II-13.) Review of the Final EIR's aircraft emissions confirms that more than 50 percent of NOx emissions from turbofan engines, which are by far the most-used type of engine for aviation use, are due to takeoff. (Final EIR, Appx. F-B, Attachment 4.)

The average takeoff time for aircraft under Alternative D for the year 2015 assumed in the Project's EDMS input files is 0.96 minutes, or 58 seconds.29 Increasing this average takeoff time by just two seconds - considerably lower than the average observed reverse thrust time - to account for emissions from reverse thrust, would increase the total takeoff TIM by 3.5 percent. Aircraft NOx emissions are

directly proportional to the TIM for each LTO. Consequently, an increase of 3.5 percent in the takeoff TIM results in an increase of 3.5 percent in NOx emissions attributable to takeoff and reverse thrust. Assuming 5 or 15 seconds for average reverse thrust would increase takeoff TIM and NOx emissions by about 9 and 26 percent, respectively. Depending on the actual average TIM for reverse thrust at LAX, resulting NOx emissions could be considerable, on the order of thousands of tons per year.

Since the Final EIR does not propose any measures restricting reverse thrust operations at LAX, there is no supportable rationale for excluding reverse thrust emissions from the analysis.

22 Colin Rice and C. Michael Walton, Restricting the Use of Reverse Thrust as an Emissions Reduction Strategy, Research Report SWUTC/03/167231-1, Southwest Regional University, Center for Transportation Research, University of Texas, Austin, TX, revised July 2003.

23 Los Angeles World Airports, LAX, Aircraft Noise Community Response Report, May 2004.

24 Federal Aviation Administration, Air Quality Procedures for Civilian Airports and Air Force Bases, April 1997.

25 A recent study on reverse thrust usage at Bergstrom International Airport in Austin, Texas, demonstrated an average TIM for reverse thrust during landing of 16.0 seconds. (Rice & Walton 2003.)

26 Federal Aviation Administration, Air Quality Procedures for Civilian Airports and Air Force Bases, Appendix D, Aircraft Emission Methodology, April 1997.

27 County of Orange, Final Environmental Impact Report No, 573 for the Civilian Reuse of MCAS El Toro and the Airport System Master Plan for John Wayne Airport and Proposed Orange County International Airport, SCH No. 98101053, August 2001.

28 Northeast States for Coordinated Air Use Management ("NESCAUM") and Center for Clean Air Policy, Controlling Airport-related Air Pollution, June 2003.

29 EDMS File "AIR_POP.dbf" (MODE 3 = takeoff TIM) for Alternative D in 2015 provided on CD-ROM by FAA on January 19, 2004. Average TIM for the NA/NP alternative in 2015 is 0.94 minutes.

Response:

Please see Response to Comment FAL00001-30 regarding reverse thrust emissions.

FAL00003-127

Comment:

V.D Fugitive Dust Emissions From Wind Erosion Of Graded Areas Are Not Included

Wind erosion from graded areas is a major source of fugitive dust emissions during construction. The construction emission estimates presented in the Final EIR include fugitive dust emissions associated with equipment operation, entrained road dust, and wind erosion emissions from storage piles but appear to omit wind erosion of graded, exposed areas. Considering the large expanse of graded and disturbed areas during construction of the Project, the Final EIR omits a major source of fugitive dust emissions.

Response:

Wind erosion of graded areas will be mitigated through the fugitive dust control plans that are required under SCAQMD Regulation 403 and are incorporated in the Mitigation Monitoring and Reporting Program (MMRP) Mitigation Measure MM-AQ-2, Construction Related Measure. Since visibility is an important issue regarding airport operations and safety, visible fugitive dust emissions will be extensively controlled during the construction phase. It is also noted here that the SCAQMD typically does not require calculation of wind erosion from graded areas provided that fugitive dust emissions are calculated for roadways, parking lots, storage piles, earth moving and material handling activities, and demolition activities that occur during construction, per the SCAQMD CEQA Handbook. All of these other fugitive dust sources are included in the construction emission estimates presented in the Final EIS.

FAL00003-128

Comment:

V.5 VOC Emissions From Architectural Coatings And Asphalt Emissions During Construction Are Not Included

The construction emission estimates presented in the Final EIR do not include emissions from architectural coatings, solvents, hot-mix asphalt paving, and runway/taxiway striping and their application. The Supplement, upon which the Final EIR's methodology is based, states that these emissions were not quantified because they were "deemed to be insignificant relative to overall project emissions." (Supplement, Appx. S-E, p. 3.) The rationale for excluding architectural coating emissions is that most surface coatings are assumed to be water-based by 2005 in accordance with SCAQMD rules and regulations, thus minimizing VOC emissions. (Supplement, Appx. S-E, p. 3.) No rationale is given in either the Final EIR or the underlying Supplement for excluding asphalt paving emissions.

Even though most architectural coatings will likely be water-based by 2005, they will still contain a certain amount of VOCs. If applied over large surfaces, e.g. runway stripes or exteriors and interiors of new buildings, VOC emissions could be substantial and should be included in the emissions inventory.

Asphalt paving has the potential to produce VOC emissions. Roadbed preparation, such as for new runways, requires the use of either cutback or emulsified asphalts. The EPA emission estimating report, Compilation of Air Pollutant Emission Factors ("AP-42"), indicates that cutback asphalt is a major source of VOC emissions, while hot mix asphalts have much lower VOC emissions. (AP-42, Sec. 4.5.) The Draft EIS/EIR and the Supplement do not require the use of hot mix asphalt. Therefore, paving emissions could be substantial and should have been included in the emission inventories. Further, emissions from asphalt paving not only include direct emissions from hot asphalt, but also associated combustion emissions from asphalt paving equipment.

Considering the extensive construction activities associated with the Project, viz. "[i]mplementation of the LAX Master Plan would result in one of the largest public works construction projects in the history of the City of Los Angeles" (Final EIR, p. 10.), the deliberate exclusion of emissions from architectural coatings and asphalt paving appears to intentionally underestimate actual construction VOC emissions from the Project compared to the baseline.

Response:

The methods for calculating emissions were developed in coordination with the South Coast Air Quality Management District (SCAQMD), the local agency with expertise in air quality analysis. Preparation of the Air Quality Modeling Protocol for Criteria Pollutants (Attachment A of Technical Report 4 of the Final EIS) included three meetings with the SCAQMD staff in which the District's comments on the protocol were solicited and incorporated into the protocol. Thus, the treatment of emissions from such sources as architectural coatings, solvents, hot-mix asphalt paving, and runway/taxiway striping was handled consistent with the comments from SCAQMD.

The analysis of construction emissions assumes that hot mix asphalt will be used on the airfield. The AP-42 document referred to by the commentor does not contain emission factors for hot mix asphalt, since only cutback asphalt emits quantifiable VOCs. Therefore, VOC emissions from asphalt paving are considered negligible.

Due to the low VOC emissions anticipated from architectural coatings, quantification of such emissions was not necessary for purposes of disclosing the reasonably foreseeable impacts in the Final EIS. However, as LAWA undertakes project level EIRs for specific elements of Alternative D, the design of the facilities will be refined to the point where a more reliable estimate of VOC emissions from coatings can be made. As project-level EIRs are undertaken, LAWA will be able to compare the total project level emissions with the Final EIR construction emissions for that project. FAA will follow the local approval process closely and take any necessary steps should project level EIRs reveal significant new information.

FAL00003-129

Comment:

V.E Urban Heat Island Effect Is Not Included

The Final EIR declines to analyze the urban heat island effect because it is a regional effect and "any increase in "black surfaces" at LAX would be minimal with respect to the entire LAX urban area. The contribution of construction included in the LAX Master Plan, the Final EIR claims, would be effectively zero. (Response to Comment AL00033-330.)

In matters of relative contributions, this might be true (though LAX with its large expanses of paved surfaces is certainly not a negligible contributor); however, the argument is completely beside the point. The urban heat island effect is a cumulative effect due to the increased number of paved surfaces in cities. Every surface that is paved, every removal of a shade tree, and every addition of a dark roof increases the urban heat island effect. There are many individual sources, which - each on their own - might have a negligible contribution. However, their cumulative contributions result in large-scale, regional and global effects. In order to address either problem - air pollution or urban heat island effect (which also results in increased air pollution) - it is precisely these individual contributions that must be targeted. Measures that decrease their relative contribution must be included in the mitigation plan.

The Heat Island Research Group ("HIG") at the Lawrence Berkeley National Laboratory ("LBNL"), jointly funded by the U.S. Department of Energy ("DOE") and the U.S. EPA, is studying measures to cool cities. The increased summertime temperatures causes increased cooling requirements. The HIG estimates that in Los Angeles about 1 to 1.5 Gigawatts ("GW") of power are used to compensate the impact of the heat island. This increased power costs the Los Angeles rate payers about $100,000 per hour, about $100 million per year. The impact of the heat island is also seen in smog. The formation of smog is highly sensitive to temperatures; the higher the temperature, the higher the rate of formation and, hence, the concentration of smog.

LAWA can not simply dismiss its contribution to the air pollution problems, when it can easily implement measures to help reduce the urban heat island effect. As the HIG points out:

Measures to cool heat islands are simple and have been known to human beings for ages: reflective surfaces and trees. Reflective roofs on a building directly reduce the heat conduction into the building and reduce air-conditioning use. Similarly, trees shading a building reduce air-conditioning use. Furthermore, many reflective surfaces (roofs and pavements) and urban vegetation in a neighborhood alter the surface energy balance and result in a lower ambient temperature, in turn leading to further reduction in air- conditioning energy use and urban smog.30

The Project should include all feasible measures to mitigate its contribution to the urban heat island effect.

30 http://eeld.lbl.gov/HeaUsland/LEARN/Overview/index.html

Response:

The commentor notes that the discussion in Response to Comment AL00033-330, indicating that the LAX Master Plan would effectively have no impact on the urban heat island effect, may be true. The primary methods for minimizing heating effects are planting trees and installing reflective surfaces, where appropriate. The planting of trees on the airside at an airport raises substantial safety issues, as does the installation of reflective surfaces that may reflect sunlight into pilots eyes. Therefore, while the appropriate use of reflective surfaces and landscaping may be used on the landside of the airport, similar methods on the airside are not proposed or appropriate. See Response to Comment AL00033-330 in Part II-Volume 3 of the Final EIS for more information.

FAL00003-130

Comment:

V.F Emissions From Electricity Generation Are Not Included

We previously commented on the failure of the Draft EIS/EIR to include secondary emissions from electricity generation, address impacts from increased electricity demand due to the Project, and analyze the increased electricity demand due to the proposed air quality mitigation program as required by CEQA. (Fox 2001, Comment I.C.) We herewith incorporate this comment by reference. The Final EIR responded to our detailed comments with the terse statement that "[t]he Supplement to the Draft EIS/EIR addressed air quality impacts from increased electricity production in Section 4.6, Air Quality (subsection 4.6-10.)" (Final EIR, RTC AL00033-317.)

The Supplement and Final EIR, in fact, include a section quantifying the secondary air pollutant emissions due to electricity generation for Alternative D. (Final EIR, p. 4-749.) However, this section is little more than window-dressing without any consequences. For example, the Final EIR correctly points out that "[a]dding these numbers to the mitigated regional project-specific emissions ... would result in increased regional emissions for Alternative D." (Final EIR, p. 4-749.) Yet the Final EIR fails to include these emissions in a summary table for total operational and construction emissions and also fails to include these emissions in the air quality dispersion modeling. Emissions were only calculated for the preferred Alternative D, not for any of the other proposed build alternatives or the NA/NP alternative or the baseline. None of the emissions are supported by any calculations or data, e.g. the projected increase in electricity demand for the Project in kilowatt-hours ("kWh"), the emission factors used to derive these regional emissions, etc. Further, this section does not address the increased demand for electricity due to the implementation of the proposed mitigation program as required by CEQA. And finally, the Final EIR's emission calculations are based on the assumption that 17.3 percent of the electricity needed would be produced locally and that 100 percent of this 17.3 percent of electricity is generated by natural gas-fired power plants. This analysis is fundamentally flawed because its emission estimates must include not only the 17.3 percent local generation but also the remainder of 82.7 percent regional electricity generation. Further, as we pointed out in previous comments, the LADWP currently produces 52 percent of its power from coal. (See Fox 2001, Comment I.C.) Emissions from coal-fired units are substantially higher than those from natural gas-fired units.

Consequently, the Final EIR has substantially underestimated secondary emissions from electricity generation due to the Project and its mitigation program.

Response:

While the secondary emissions calculated in Section 4.6, Air Quality, of Part I in the Final EIS are not included in the summary tables presented in the same section, the addition of the two results presented would not alter the significance determination for any of the alternatives.

The secondary emissions are very small relative to the total operational and construction emissions. For example, taking the total operational and construction emissions for Alternative D in 2015 from Table F4.6-23a in Part I of the Final EIS and the secondary emissions for Alternative D from Table F4.6-29 in Part I of the Final EIS, respectively, shows the following: (1) VOC: 2,564 tons per year (tpy) + 0.6 tpy; (2) CO: 21,432 tpy + 9.6 tpy; (3) NOx: 7,576 tpy + 5.1 tpy; (4) SO2: 460 tpy + 0.07 tpy; and (5) PM10: 1,835 tpy + 0.9 tpy.

The 17.3% local generation represents that percentage generated within the air basin. The remaining 82.7% occurs outside of the air basin and is therefore not considered in the Final EIS. The 52% of power from coal listed by the commentor is produced outside the South Coast Air Basin and is, again, not included in these calculations.

FAL00003-131

Comment:

V.G Final EIR Fails To Identify Significant Impacts From The Project

As discussed in Comment III, the Final EIR failed to address PM2.5 impacts and, consequently, failed to identify and properly mitigate significant PM2.5 impacts. Further, the above identified methodological flaws in the air quality analysis (see Comment IV), the underestimate of airport capacity, (see Comment V.A), and the failure to include several emission sources into the inventory (see Comments V.B through V.G) results in significant underestimates of air pollutant emissions. These issues likely result in significant impacts from the Project that have not been identified and/or not properly mitigated.

Response:

The FAA has determined the Final EIS was prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, as amended, CEQ Guidance regarding NEPA (40 CFR Part 1500), and the FAA Orders 1050.1E and 5050.4A. Please see Responses to Comments FAL00001-27 and FAL00001-28 regarding PM2.5 impacts. Please see Response to Comment FAL00003-2 regarding airport capacity issues. Please see Responses to Comments FAL00003-125 through FAL00003-130 regarding air pollutant emissions.

FAL00003-132

Comment:

VI. PROPOSED MITIGATION PROGRAM IS INADEQUATE AND MUST BE REVISED

The Final EIR finds significant impacts after implementation of all proposed mitigation measures for the preferred Alternative D for NOx and SO2 for on-airport emissions; for CO, VOC, NOx, and PM10 for off-airport traffic emissions; for CO, VOC, NOx, and PM10 for construction emissions; and for PM10 concentrations for on-airport operational and construction-related sources combined. (Final EIR, 478.) As discussed in Comment V, the Final EIR underestimates emissions and consequently fails to identify and adequately mitigate other significant impacts.

The study area is classified as nonattainment for both the NAAQS and CAAQS: ozone, CO, and PM10. Further, the study area is classified by EPA as "extreme" nonattainment for ozone under the CAA. (Final EIR, Table F4.6-4.) Because of the air basin's nonattainment status, it is particularly important to reduce emissions of these nonattainment pollutants to the greatest extent feasible. As discussed below, the Final EIR does not reduce operational or construction emissions to the greatest extent feasible. Consequently, the Final EIR must be revised to mitigate all emissions to the extent feasible and recirculated for public review.

Response:

Please see Response to Comment FAL00003-23 regarding mitigation measures, Responses to Comments FAL00003-123 through FAL00003-131 regarding the estimation of emissions, Responses to Comments FAL00003-133 through FAL00003-136 below regarding the mitigation program, and Response to Comment FAL00003-23 regarding the selection of mitigation measures.

The FAA has determined the Final EIS was prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, as amended, CEQ Guidance regarding NEPA (40 CFR Part 1500), and the FAA Orders 1050.1E and 5050.4A. Recirculation of the environmental documents is not warranted.

Appendix A to this ROD includes summaries of the mitigation actions discussed more fully in the Final EIS for each environmental impact category. Based upon the information disclosed in the Final EIS, the FAA finds that there is no possible and prudent alternative to the preferred alternative and all reasonable steps have been taken to minimize its significant adverse effects.

It should be noted that the significance determinations listed by the commentor correspond to CEQA significance determinations and not NEPA. For purposes of NEPA determinations, concentrations are compared against the NAAQS. As explained in Section A.2.3, Air Quality, of Volume A of the Final EIS,

Alternative D is the only build alternative that meets the NAAQS for all criteria pollutants in all years analyzed.

FAL00003-133

Comment:

VI.A Emission Reductions Are Not Quantifiable

The goal of the mitigation measures identified in the Final EIS/EIR and the MMRP is to reduce air pollutant emissions associated with the Project to levels equal to those identified in the Final EIR Table F4.6-11a.

The Final EIR quantifies ranges of potential emission reductions for construction-related mitigation measures, the construction of eight new flyaway terminals, and conversion of ground support equipment. (Final EIR, Tables F4.6-18, F.4-19, and F4.6-20.) The Final EIR and the MMRP both claim that reliable emission reductions cannot be quantified for all of the proposed measures. (MMRP, p. 39 and Final EIR, p. 4-724.) Emission reductions for all other proposed mitigation measures are absent from both the Final EIR and the Addendum. It is unclear how LAWA on one hand intends to ensure that post- mitigation levels of emissions identified in the Final EIR are guaranteed when on the other hand it feels that it is impossible to quantify the emission reductions provided by the various mitigation measures.

Response:

Please see Response to Comment FAL00003-23 regarding the selection of mitigation measures. See Response to Comment FAL00003-14 regarding the enforceability of air quality mitigation and see Response to Comment FAL00003-026 regarding achievement of the mitigated emission levels. Please see Response to Comment FAL00003-057 which describes how the LAX Master Plan Mitigation Plan for Air Quality will be used to monitor the effectiveness of the air quality mitigation measures. Please see subsection 2.3.1.1 of the September 2004 Addendum to the Final EIR regarding quantified and unquantified mitigation measures, which states in pertinent part that the estimate of post-mitigation emissions includes only those mitigation measures for which the reductions can be quantified recognizing that implementation of any of the other remaining mitigation measures would provide for additional, albeit unquantifiable, reductions in emissions. Although not all mitigation measure benefits can be measured at this time, monitoring of effectiveness of mitigation measures will measure (quantify) actual emissions reductions, and based upon this monitoring, the anticipated reductions will be achieved because if anticipated reductions are not being achieved, the MMRP requires additional steps be taken to reach the reduction levels committed to in the MMRP.

Appendix A to this ROD includes summaries of the mitigation actions discussed more fully in the Final EIS for each environmental impact category. Based upon the information disclosed in the Final EIS, the FAA finds that there is no possible and prudent alternative to the preferred alternative and all reasonable steps have been taken to minimize its significant adverse effects.

FAL00003-134

Comment:

Further the Addendum indicates that some mitigation measures might be found to be infeasible once the Master Plan process begins. The Addendum asserts that these determinations will not affect the projected post-mitigation emission levels. (Addendum, p. 2-12.) This is problematic because LAWA can not guarantee that only those mitigation measures for which emissions reductions were not quantified in the Final EIR, and which were not included to estimate post-mitigation emissions, will be found to be infeasible. Determining that proposed mitigation measures are infeasible, which LAWA apparently expects will occur, could considerably increase the level of post-mitigation emissions.

Response:

Please see Response to Comment FAL00003-23 regarding the development of air quality mitigation measures and Response to Comment FAL00003-26 regarding steps to be taken to meet the performance standards identified in the air quality mitigation measures. While FAA acknowledges that the feasibility of any given mitigation measure may not be proven until implementation is achieved, it in

no way expects or anticipates that measures already considered feasible will, in the future, be determined to be infeasible. As indicated in Response to Comment FAL00003-26, in addition to the mitigation measures that LAWA has committed to implement, LAWA has also committed to limit airport emissions in 2015 to the values presented in the MMRP. Therefore, if it is determined through the mitigation monitoring program that airport inventories will not meet the specified limits by 2015, LAWA will be required to develop additional reductions to meet the limits. This may be done by quantifying air quality benefits from measures implemented but not previously quantified and/or by identifying and implementing new measures.

FAL00003-135

Comment:

VI.B The MMRP Does Not Address Secondary Emissions From Electricity Generation

The MMRP does not address mitigation for secondary emissions from electricity generation. In fact, the MMRP is satisfied if emission reductions in Table AD5.8 (which is identical to Table F4.6-23a in the Final EIR and presents combined construction and operational emissions from the Project without secondary emissions from electricity generation) are met. Consequently, the mitigation program fails to mitigate secondary emissions from electricity generation.

Response:

Please see Response to Comment FAL00003-23 regarding the selection of mitigation measures. It should also be noted that LAWA and FAA have no legal authority over equipment that does not belong to them; therefore, it is not feasible for the lead agencies to fund or implement mitigation measures for off-airport emission sources, such as those that produce secondary emissions from electricity generation.

Please see Response to Comment FAL00003-130 for more information regarding secondary emissions from electricity generation. In addition, the emissions from existing on-airport utility plants are included in the emission inventories of the environmental baseline, No Action/No Project Alternative, and Alternatives A, B, C, and D. The incremental demand for power under Alternative D was assumed to be provided by off-site utility plants owned and operated by other entities.

FAL00003-136

Comment:

VI.C Additional Mitigation Exists And Is Feasible

In spite of the considerable Project impacts and the severe air quality problems in the SoCAB, the Final EIR does not require all feasible mitigation. Mitigation measures can take a variety of forms. They may avoid the impact altogether; minimize the impact by limiting its degree or magnitude; rectify the impact by repairing, rehabilitating, or restoring; reduce or eliminate the impact; or compensate for the impact by replacing or providing substitute resources or environments. (14 CCR § 15370; CEQA Guidelines, Section 20.22.) There are many feasible mitigation measures that fall into these categories of acceptable mitigation that are not included in the Final EIR or MMRP. Many of these are routinely required as CEQA mitigation in other projects.

The mitigation program LAWA proposes includes only mitigation that directly mitigates construction or operational emissions. However, numerous other indirect mitigation measures beyond those proposed in the MMRP are available that could help offset the enormous impacts of the Project. CEQA requires the implementation of "all feasible" mitigation to reduce significant impacts from a project. CEQA and the case law interpreting it, requires that "public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects ..." (Pub.Res. Code, Section 21002, emphasis added) and that "[e]ach public agency shall mitigate or avoid the significant effects on the environment of projects it approves or carries out whenever it is feasible to do so" (Pub.Res. Code, Section 21002.1.) For example, in Orinda Association v. Board of Supervisors (1986) 182 Cal.App.3d 1145, the court found that no agency can approve a project for which significant impacts have been identified without first adopting any and all feasible mitigation measures or feasible alternatives.

Considering the enormous impacts of the Project on air quality, LAWA must incorporate all feasible mitigation, direct and indirect, to mitigate impacts from the Project. We've previously commented on the availability of additional feasible mitigation measures and incorporate these comments here by reference. (Fox 2001, Comments IV.E, IV.F., and IV.G; Fox & Pless.2003, Comments V.C and V.D.) The Final EIR failed to consider and incorporate a large number of proposed feasible mitigation measures.

For example, as previously noted, the Final EIR fails to account for the urban heat island effect that the Project will create. Accordingly, the proposed mitigation plan does not include adequate mitigation for the urban heat island effect. Examples of feasible mitigation measures which have been included in a large number of other projects as CEQA mitigation include: a) reducing standard asphalt paving with lighter-colored, reflective pavement materials or porous block pavement systems; b) requiring the installation of lowest emitting commercially available fuel-fired equipment (e.g., boilers, furnaces) with a heat input greater than 0.3 MMBtu/hr, consistent with best available control technology; c) installation of energy star roof products; and d) installation of roof photovoltaic energy systems.

Furthermore, in our previous comments, we pointed out the numerous opportunities to offset emissions outside of LAX, e.g., retrofitting heaters, boilers, furnaces, generators, and turbines in the SoCAB, or acquiring RECLAIM offsets. (Fox 2001, Comment IV.F.) The Final EIR declined to consider the retrofitting off- airport combustion sources, arguing that emission reductions elsewhere would not mitigate emissions from LAX and that the FAA has no legal authority over equipment that does not belong to it. (Final EIR, RTC AL00033-336.) We disagree with this reasoning. The Final EIR does not address the option of acquiring RECLAIM offsets.

Offsetting project emissions with retrofits elsewhere is frequently required for large projects, where emission reductions cannot be achieved on site, particularly for projects with a considerable regional impact as is the case here. For example, the California Energy Commission ("CEC"), which follows a CEQA-equivalent to process to license power plants, frequently requires offsite mitigation. See, for example, the mitigation program required for the proposed Riverside Energy Resources Center ("RERC"), which requires as a Condition of Exemption ("CoE") that a specified amount of operational emission offsets be developed through the following measures:

1. The retrofit of emission controls on diesel powered school buses within the Riverside School District or directly adjacent school districts.
2. The retrofit of emission controls on diesel powered equipment under the direct or contracted control of the City of Riverside.
3. The reduction or elimination of other combustion sources within the city boundaries of the City of Riverside as approved by the CPM [Construction Project Manager].
4. Any remaining emission reductions not provided as specified above from their voluntary surrender and retirement of emission reduction credits or RECLAIM trade credits banked with the South Coast Air Quality Management District and approved by the CPM. (RERC Final Initial Study31, CoE AQ-1.)

In sum, there are a large number of additional mitigation measures that could be implemented to reduce the enormous impacts of the Project.

31 California Energy Commission, Riverside Energy Resources Center, Final Initial Study, Application for Small Power Plant Exemption, 04-SPPE-01, August 2004; http: /www.energy.ca.gov/sitingcases/ riverside/documents/index.html.

Response:

Appendix A to this ROD includes summaries of the mitigation actions discussed more fully in the Final EIS for each environmental impact category. Based upon the information disclosed in the Final EIS, the FAA finds that there is no possible and prudent alternative to the preferred alternative and all reasonable steps have been taken to minimize its significant adverse effects.

Please see Response to Comment FAL00003-23 regarding the development of air quality mitigation measures and Response to Comment FAL00003-129 regarding heat island mitigation factors. It should also be noted that LAWA and FAA have no legal authority over equipment that does not belong to them; therefore, mitigation measures for off-airport emission sources are not feasible. In the example mentioned by the commentor, while mitigation factors are off-site of the power plant being proposed, the measures proposed are still under the authority of the City of Riverside.

Please note that Mitigation Measure MM-AQ-1 requires the development of an air quality mitigation plan, which would include an analysis of feasible mitigation measures. Please see Memorandum to Herbert Glaslow, Senior Planner, Los Angeles World Airports, "Inventory of Air Quality Mitigation Measures Considered in Conjunction with the LAX Master Plan EIS/EIR." December 6, 2004 for a listing of all mitigation measures that have been suggested and considered.

As noted in the LAX Master Plan MMRP, LAWA shall expand and revise the existing air quality mitigation programs at LAX through the development of an LAX Master Plan Mitigation Plan for Air Quality (LAX MP-MPAQ). Of import, the LAX MP-MPAQ shall be developed in consultation with the FAA, USEPA, ARAB, and SCAQMD, as appropriate, and shall include technologically/legally feasible and economically reasonable methods to reduce air pollutant emissions from aircraft, GSE, traffic, and construction equipment both on and off the airport. This is currently underway. As LAWA develops the details of the LAX MP-MPAQ, it will seek additional review and comments from FAA, USEPA, CARB, and SCAQMD on these new documents. The intended purpose of the LAX MP-MPAQ is to ensure that all the feasible mitigation measures are identified and implemented to reduce the air quality impacts of Alternative D at least to the levels noted in the Final EIS for the LAX Master Plan and are maintained during and following project implementation. The LAX MP-MPAQ, currently under development, is subdivided into four sections. The section addressing Mitigation Measure MM-AQ-1 (Framework), provides the basic organizational structure for the full program. It is also intended to provide a clear, consistent and convenient foundation for its implementation. With the Framework's "overarching configuration," the individual components of the LAX MP-MPAQ (i.e. MM-AQ-2, Construction-Related Measure, MM-AQ-3, Transportation-Related Measure, and MM-AQ-4, Operations-Related Measure) are more effectively coordinated and completed. Importantly, additional information that is specific or unique to the other three will be contained in their respective volumes, to be published separately.

Regarding three of the measures identified in this comment (i.e., use of alternative paving materials, installation of energy start roof products, and solar roof panels), FAA encourages LAWA to take into consideration these measures during the development of MM-AQ-1 and MM-AQ-4, as appropriate. As indicated in the memorandum to Herb Glasgow, referenced above, installation of the lowest emitting commercially available fuel-fired equipment (stationary) is currently required by SCAQMD regulations. As such, this measure cannot be used as mitigation.

Regarding the RECLAIM program, LAWA/LAX already participates in this program and is pursuing the option of acquiring additional RECLAIM offsets. Participation in the RECLAIM program, however, is a regulatory issue and not considered part of any mitigation measure. In addition, the installation of lowest emitting furnaces and heaters to comply with the SCAQMD Best Available Control Technology (BACT) guidelines is not listed as mitigation for the project because meeting BACT is required under existing regulations.

FAL00003-137

Comment:

VII. PUBLIC HEALTH IMPACTS

VII.A Human Health Risks Are Underestimated

The human health risk assessment is based on the quantity of air pollutant emissions and resulting ambient air concentrations as determined in the air quality section of the Final EIR. As discussed in Comments IV and V above, the emissions from the Project are considerably underestimated. Consequently, the human health risks resulting from the Project as presented in the Final EIR are also considerably underestimated. The health risk assessment must be revised based on a revised air quality impact assessment that includes all emission sources and corrects the methodological flaws. A revised health risk assessment will likely result in significant impacts that were not identified and properly mitigated in the Final EIR.

Response:

The Human Health Risk Assessment (HHRA) is an element of the CEQA analysis that is mandated under California law, and does not relate to NEPA requirements. As clearly indicated in Section 4.24.1.1 in Part I-Volume 4 of the Final EIS, as well as in Section A.2.2.4 (page A.2-88) in Volume A of the Final EIS, the HHRA is not being relied on by the FAA in evaluating the choice among alternatives presented in the Final EIS. The information, analyses, and conclusions reached in the CEQA HHRA analysis were reproduced in the Final EIS for informational purposes only, are not relied upon in the

FAA's Record of Decision, and do not constitute a part of the Final EIS for purposes of NEPA compliance.

FAL00003-138

Comment:

VII.B Acute Health Risks From Construction Were Not Assessed

We previously commented on the lack of an acute health risk impact assessment from construction emissions. (Fox 2001, Comment V.E.) We herewith incorporate this comment by reference. In response, the Final EIR reasons that "[c]onstruction emissions were not included in this assessment because of the difficulty in accurately projecting construction staging. Construction emission may be a contributor to short-term project impacts, and this issue will be considered in decisions of if and how to implement the Master Plan." (Final EIR, RTC AL00033-346.) This is not acceptable.

Acute health impacts from construction are virtually always significant due to emissions of diesel exhaust and acrolein. The construction phase for the Project spans a decade and can therefore hardly be called short-term. The Final EIR acknowledges the extent of project construction, viz. "[i]mplementation of the LAX Master Plan would result in one of the largest public works construction projects in the history of the City of Los Angeles." (Final EIR, p. 10.). The Final EIR may not refuse to analyze acute health risks from construction simply because it is difficult to accurately project construction staging. If an accurate analysis cannot be produced, a worst-case scenario of potential maximum construction emissions at any one time must be analyzed.

Response:

Comment noted. Please see Response to Comment FAL00003-137.

FAL00003-139

Comment:

VII.C Mitigation of Health Impacts Is Inadequate

We previously commented on the failure of the proposed mitigation program presented in the Draft EIR and Supplement to specifically address human health impacts, instead exclusively relying on air quality mitigation measures. (Fox 2001, Comment VI; Fox & Pless 2003, Comment VIII.) The Final EIR still contains only air quality mitigation measures to address the significant and severe public health impacts due to the Project and entirely ignores other available and feasible mitigation measures.

We suggested a number of feasible mitigation measures to reduce toxic air pollutants ("TAPs") including upgrading the LAX ventilation system, installing efficient charcoal filters on the LAX intake air to remove TAPs, and treating the intake air of nearby sensitive receptors who would be most affected by TAP emissions from the Project. The Final EIR declines to consider these measures, reasoning that "[a]lthough ventilation systems... could improve indoor air quality, indoor air is not a primary issue for exposure to TAPs." (Final EIR, RTC AL00033-351.)

Considering the magnitude of impacts resulting from the Project, the proposed mitigation plan should include all feasible mitigation to reduce exposure to TAPs, instead of only addressing the primary sources and exposure routes.

Response:

Comment noted. Please see Response to Comment FAL00003-137.

FAL00003-140

Comment:

SUBJECT: Rebuttal to the Final Environmental Impact Report Regarding the Traffic Impacts of the Los Angeles International Airport Master Plan

Dear Ms. Taylor:

Over the last four years, Tom Brohard, PE, has reviewed various documents associated with the Los Angeles International Airport (LAX) Master Plan prepared for Los Angeles World Airports (LAWA) and the Federal Aviation Administration (FAA). Most recently, our October 28, 2003 report focused on the traffic impacts of Alternative D upon the City of El Segundo as identified in the June 2003 LAX Master Plan Addendum and the July 2003 Supplement to the Draft Environmental Impact Report (Supplement).

We have now reviewed the responses contained in the Final EIR to the 78 comments raised in our October 28, 2003 report (SAL00015-157 through SAL00015-234), and provided rebuttals below. As indicated below, LAWA and FAA have not adequately responded to a number of our earlier comments, and many of the associated problems with the traffic analysis have not been adequately addressed. Several of the LAWA responses attempt to defend their unsupported assumptions and faulty methodology rather than provide the necessary technical support, explanation, and documentation for their opinions. In other responses, impacts have not been mitigated by the proposed measures, or monitoring of the proposed mitigation measures has not been incorporated.

Response:

Comment noted. Please see Responses to Comments FAL00003-144 through FAL00003-157 below.

FAL00003-141

Comment:

It must be pointed out that it is extremely difficult, if not impossible, to conclusively verify and ascertain which changes have been made in the Final EIR in response to our October 28, 2003 comments. The responses to our comments contain references to Topical Responses, responses to comments made by others, and to the Draft EIS/EIR, Master Plan, Master Plan Addendum, Supplement to the Draft EIS/EIR, various technical reports, Errata, and the Final EIR. The logistical difficulties associated with wading through numerous CD's which contain thousands of pages of text and hundreds of intersection capacity calculations are enormous. The resulting compilation of materials in the Final EIR and all the prior documents cannot be remotely considered as "user friendly."

Response:

Comment noted. This comment, as well as comments FAL00003-140 above and FAL00003-142 through FAL00003-160 below, was provided by Tom Brohard and Associates as part of comments on the Final EIS and Final General Conformity Determination submitted by Shute, Mihaly & Weinberger LLP (comment letter FAL00003). Responses to the October 28, 2003 review comments from Tom Brohard and Associates, submitted as part of Shute, Mihaly & Weinberger LLP comments on the Supplement to the Draft EIS/EIR, are provided in Responses to Comments SAL00015-156 through SAL00015-234 in Part II-Volume 10 of the Final EIS.

The LAX Master Plan project is very complex and the resulting environmental impact analyses are similarly complex. In addition, LAWA was ready and prepared to issue a Final EIR prior to FAA's readiness to issue a Final EIS, which created a need to prepare certain additional materials for NEPA purposes that were not pertinent for CEQA purposes. FAA and LAWA have made every effort to direct readers, through cross-references provided throughout the responses to comments and in Volume A of the Final EIS, in locating all materials relevant to the issue at hand. It must be realized that the proposal being evaluated is a complex undertaking and, despite the complexity inherent in the review, FAA and LAWA have done all we can to make the documents, and their relationship to each other, clear.

FAL00003-142

Comment:

Current Understanding of the Alterative D Project

The Master Plan proposal currently before the Los Angeles City Council consists of Master Plan Alternative D as modified by the terms of the LAX Specific Plan. Under the proposed Specific Plan, certain components of the Master Plan will require additional study and evaluation prior to their construction. However, with the controversial nature of some of these so-called "yellow light" components, it is very likely that some of these "yellow light" components will become "red light" components and that they will never be constructed as envisioned in the LAX Master Plan Addendum and as have been evaluated in the Final EIR. Particularly controversial "yellow light" projects include the demolition of Terminals 1, 2, and 3 as well as the removal of public parking structures in the Central Terminal Area, together with construction of a linear aircraft terminal and the Ground Transportation Center (GTC).

Thus, it is reasonably foreseeable and even highly likely that the number of aircraft gates at LAX would remain at 163, or greater, with Terminals 1, 2, and 3 as they are today, rather than be reduced to 153 as was analyzed in the FEIR. Retaining 163 or more aircraft gates, not reducing them to 153 as assumed in the Final EIR for Alternative D, would result in more passengers, more vehicle trips and additional traffic impacts to freeways and streets above those identified. Without the proposed GTC, the origin and destination of many of the airport trips would also shift back to the Central Terminal Area and away from the site of the proposed Ground Transportation Center. Using just the passenger and related trips for Alternative D from Table F4.3.2-4 of the Final EIR, nearly 12,000 a.m. peak hour trips, over 21,000 Airport peak hour trips, and over 13,000 p.m. peak hour trips would be rerouted. No traffic study or analysis has been conducted of the significantly changed off-airport traffic impacts that would occur under this condition, a scenario that is now very likely to occur with the partial implementation of the LAX Master Plan.

In summary, LAWA has not conducted an adequate traffic and circulation analysis of Alternative D, either as initially proposed or as now modified by the LAX Specific Plan. Without further study to address the inadequate analysis and substantiate evidence of significant traffic impacts, as discussed below, it is not legally permissible to conclude, as the Final EIR does, that most of the proposed project's traffic impacts have a less than significant effect on the environment with mitigation. A corrected traffic analysis for Alternative D must be prepared, and the Final EIR for the Los Angeles International Airport Master Plan must be revised and recirculated, to address these critical issues.

Response:

The Final EIS for the LAX Master Plan Improvements addresses the impacts associated with five alternatives; the No Action/No Project Alternative and Alternatives A, B, C, and D. The analysis includes evaluation of impacts associated with buildout of each of the four build alternatives in 2015. As with all airport improvement projects, the FAA reviews and analyzes the proposal identified by the sponsor and alternatives to that proposal in the NEPA document. Here, FAA has selected for implementation the same alternative approved by the local jurisdiction with authority over airport development, the Los Angeles City Council. The City Council approved Alternative D in its entirety; it did not excise or disapprove any element(s) of the proposal. It merely required that additional review take place prior to implementation of individual components of the overall Alternative D proposal. As is generally true with respect to all airport development approved by the FAA, it is possible that a project will subsequently be modified, altered or disapproved for local policy reasons. Thus, the Final EIS does not, and need not, engage in speculation as to what impacts might occur if only certain portions or aspects of each alternative were completed or if various combinations of partial improvements were to be implemented, as the number of possible permutations of such theoretical scenarios could be endless. The FAA has completed the environmental review of the five alternatives considered for the LAX Master Plan in accordance with NEPA requirements and FAA policies and procedures.

FAL00003-143

Comment:

LAX Master Plan Final EIR - Traffic Related Issues - Rebuttal

The following concerns, omissions, and deficiencies relate to the continuing traffic impacts associated with Alternative D upon the City of El Segundo. These rebuttals were developed during our review of the responses to our October 28, 2003 comments (SAL00015-156 through SAL00015-234) contained on Pages 3- 5854 through 3-5891 of the Final EIR for the LAX Master Plan.

Response:

Comment noted. Please see Responses to Comments FAL00003-144 through FAL00003-160 below.

FAL00003-144

Comment:

1. Peak Hour Trip Caps for LAX Northside Development (SAL00015-163)

- Comment - Supporting calculations must be provided to ensure the reductions of 50 percent in the a.m. peak hour and 57 percent in the p.m. peak hour claimed on Page 2-117 will be achieved.

- Response - Recognizing that the continuing growth in airport demand is increasing airport related traffic, Los Angeles World Airports has agreed to reduce development of LAX Northside... Therefore, the reduced trip generation can be achieved simply by staying within the square footage parameters (total of 2.6 million square feet) defined for the project.

- Rebuttal - The Final EIR does not provide any calculations to support the conclusion that 2.6 million square feet of LAX Northside Development, reduced from 4.5 million square feet, will provide the reductions to 50 percent in the a.m. peak hour and 57 percent in the p.m. peak hour, the revised trip caps. Different ranges of land uses that could be developed on this site would generate significantly different levels of peak hour trips. A monitoring plan to ensure peak hour trips do not exceed the revised trip caps, together with penalty provisions for non compliance, must also be included for the 2.6 million square foot LAX Northside Development.

Response:

The comment questions the analysis in the Final EIS related to LAX Northside, specifically whether the trip cap identified in the Final EIS will be realized once the collateral development in the LAX Northside area is built. As an initial matter, it is important to note that the FAA has not approved LAX Northside in the Record of Decision. In evaluating the environmental effects of LAX Northside under Alternative D, the Final EIS relies upon a mix of assumptions regarding the size and characteristics of this collateral development (see Response to Comment FAL00003-125). While this general level of planning may be appropriate in a situation where only programmatic approval is requested, FAA's approval of Alternative D is at the project level. Lacking sufficient detail and consistent planning assumptions, FAA has concluded that a decision regarding LAX Northside is not appropriate at this time.

Notwithstanding the above, in December 2004, the City Council of the City of Los Angeles adopted the Los Angeles International Airport Specific Plan as part of its approval of the LAX Master Plan Program. The Specific Plan is a City Ordinance. The Specific Plan provides adequate measures to ensure that the traffic analysis of the Final EIS will be consistent with the trip generation actually occurring once the project is built.

In the Ordinance, Section 7G, Monitoring and Reporting, requires that an annual traffic report be submitted to the Board of Airport Commissioners, the Los Angeles Department of City Planning, the Los Angeles Department of Transportation, and the Los Angeles City Council. This annual traffic report would identify the number of current trips generated by LAX (including LAX Northside), the number of trips anticipated to be generated at the completion of any Master Plan Project(s) in development at the time of the report, the trips proposed to be generated following the full implementation of the Master

Plan as informed by current and project-based trip counts, and the number of trips anticipated to be generated by on-going Master Plan construction activities.

Section 12C-2 of the Ordinance, LAX Northside Sub-area states in part that "As part of the annual traffic generation report, the number of trips generated by each project shall be documented so that the total number of trips generated by on-going development is monitored and reviewed by the LADOT General Manager for consistency with the maximum allowable number of a.m. and p.m. peak trips. LADOT and LAWA shall agree on procedures for this documentation. These counts shall be taken at the expense of the Applicant."

"A reduction in the total number of trips permitted to be generated by development in the LAX Northside Sub-Area, from that which is approved for this area under previous entitlements, is required as a result of the LAX Plan and shall be imposed by way of this Specific Plan."

"All projects within the LAX Northside Sub-Area together shall not generate more than 3,922 project-related trips in the a.m. peak hour [this number is generated as a total of 3,152 inbound trips and 770 outbound trips] . . . and 4,421 project-related trips in the p.m. peak hour [1,381 inbound trips and 3,040 outbound trips]."

These trip generation numbers are also shown under the Collateral Development category of the year 2015 table of Attachment A, Trip Generation Summary for Alternative D, of Technical Report S-2b, Supplemental Off-Airport Surface Transportation Technical Report, of the Final EIS.

Section 11 of the LAX Specific Plan identifies the procedures for approval of all projects in the LAX Northside Sub-Area. This approval process, called a Project Permit Compliance Review, is set out in Los Angeles Municipal Code Section 11.5.7. The following is the pertinent language of Section 11.5.7:

SEC. 11.5.7 C. Project Permit Compliance Review.

"1. Director's Authority. The Director [of Planning] shall have the initial decision-making authority to decide whether an application for a project within a specific plan area is in conformance with the regulations established by this subsection and in compliance with applicable regulations of the specific plan. In addition, the Director shall have the authority to determine what type of projects are exempt from these Project Permit Compliance procedures based on exemption provisions and other regulations contained in individual specific plans.

(a) The Director shall review and approve, disapprove or approve with conditions an application for a Project Permit Compliance.

(b) In granting a Project Permit Compliance, the Director shall require compliance with the applicable regulations of the specific plan and mitigation of significant adverse effects of the project on the environment and surrounding areas.

2. Findings. The Director shall grant a Project Permit Compliance upon written findings that the project satisfies each of the following requirements:

(a) That the project substantially complies with the applicable regulations, standards and provisions of the specific plan; and

(b) That the project incorporates mitigation measures, monitoring measures when necessary, or alternatives identified in the environmental review which would mitigate the negative environmental effects of the project, to the extent physically feasible."

[The Code also provides for appeals to the Planning Commission of the Director's decision on any Project Permit Compliance, but the Commission is under the same constraints and must make the same findings as the Director.]

Section 12 of the LAX Specific Plan establishes a monitoring system for trips generated in the Northside Sub-Area and sets a maximum number of trips permitted for projects in the LAX Northside Sub-Area. This limitation is found in Section 12 C 2.

"2. LAX Northside Sub-Area. As part of the annual traffic generation report, the number of Trips generated by each project shall be documented so that the total number of Trips generated by on-going development is monitored and reviewed by the LADOT General Manager for consistency with the

maximum allowable number of a.m. and p.m. peak Trips. LADOT and LAWA shall agree on procedures for this documentation. These counts shall be taken at the expense of the Applicant.

A reduction in the total number of Trips permitted to be generated by development in the LAX Northside Sub-Area, from that which was approved for this area under previous entitlements, is required as a result of the LAX Plan and shall be imposed by way of this Specific Plan.

All projects within the LAX Northside Sub-Area together shall not generate more than 3,922 project-related Trips in the a.m. peak hour (part of the total 6,496 net new a.m. peak hour Trips for the LAX Master Plan) and 4,421 project-related Trips in the p.m. peak hour (part of the total 6,914 net new p.m. peak hour Trips for the LAX Master Plan). The number of Trips generated by a project shall be based on the trip generation rates used in Ordinance No. 168,999 (Coastal Transportation Corridor Specific Plan (CTCSP)) and/or determined appropriate by the LADOT General Manager and on square footages of the proposed project. In conjunction with each application for Project Permit Compliance Review for a project within the LAX Northside Sub-Area, the Applicant shall estimate the number of Trips generated by each project and submit the estimate to the LADOT General Manager for review and approval. This subsection shall not apply to development within Area 13 as shown on Map 3."

In order to approve a Project Plan Compliance, the Director, using the procedures called for in Section 11 of the LAX Specific Plan, i.e., Los Angeles Municipal Code Section 11.5.7, must make a finding that the proposed project complies with the trip limitation set out in Section 12 of the LAX Specific Plan. Thus, these regulations and procedures provide assurances that no project can be built in the Northside Sub-Area if the trips generated exceed those identified in the LAX Specific Plan as the maximum number of trips.

FAL00003-145

Comment:

2. Interim Analyses Are Required for Alternative D (SAL00015-165)

- Comment - Analyses must be conducted for each phase of Alternative D so the timely mitigation of associated traffic impacts will occur. Each phase of Alternative D contains major components that will significantly alter traffic patterns and impacts... The traffic impacts after completion of each phase must be identified, together with the timely implementation of necessary mitigation measures.

- Response - The mitigations associated with the major project components were based on location and the anticipated traffic patterns to that facility.

- Rebuttal - No traffic study or analysis has been conducted of the significantly changed off airport traffic impacts that would occur under a segmented, partial implementation of the LAX Master Plan.

Response:

Please see Response to Comments FAL00003-30 and FAL00003-142.

The off-airport surface transportation impact analysis assumes full build-out of Alternative D. Since LAWA intends to construct all components of Alternative D consistent with the City Council's approval of Alternative D in its entirety, the traffic analysis is valid. Please see Table A2.1-8, Recommended Off-Airport Surface Transportation Phasing Plan, in Section A.2.1, Off-Airport Surface Transportation, of Volume A of the Final EIS for the phasing of the recommended off-airport surface transportation improvements. Based upon the LAX Specific Plan, FAA understands that LAWA will conduct project-level traffic impact analyses for the major LAX Master Plan facilities to ensure that the proposed traffic mitigations remain appropriate.

FAL00003-146

Comment:

3. I-405 and I-105 Freeway Impacts (SAL00015-171)

- Comment - A number of freeway ramps as well as mainline sections of the adjacent I-405 and I-105 Freeways will be significantly impacted by Alternative D. Adding even a single trip to freeway segments operating at Level of Service E or F requires detailed study...

- Response - If Alternative D and its mitigation measures are adopted by the Los Angeles City Council, further environmental review will be conducted including the preparation of Project Study Reports for the proposed interchanges. The Project Study Reports will analyze in more detail the effects of the proposed interchanges on the movement of traffic on the I-405 and I-105 mainlines and ramps in the vicinity of LAX.

- Rebuttal - Page 2-217 of the Final EIR states "Alternative D would affect freeway segments." However, the Final EIR attempts to improperly defer the analysis of traffic impacts of Alternative D upon the I-405 and I-105 mainlines as well as on interchanges along both freeways. Without conducting such analyses at this time and including it in the Final EIR, the full extent of the required mitigation of the traffic impacts associated with the LAX Master Plan Addendum remains unknown.

Response:

The Final EIS documents that Alternative D affects freeway segments and freeway ramps. Table F4.3.2-17, Alternative D CMP Impacts on Regional Arterial and Freeway Segments, in Section 4.3.2, Off-Airport Surface Transportation, of Part I of the Final EIS combined with the detailed analysis in Section 6, Congestion Management Program (CMP) Analysis, of Technical Report S-2b, Supplemental Off-Airport Surface Transportation Technical Report, and its Appendix G, provide detailed analysis to identify traffic impacts and to develop necessary mitigation measures. Section 6 of Technical Report S-2b includes Table S15, Estimated Costs of Mitigating Associated CMP Impacts - Alternative D, which provides order-of-magnitude cost estimates for these projects.

In addition, mitigations at freeway ramps are included in Table A2.1-4, Alternative D Recommended 2015 Mitigation Plan with Lennox Boulevard Interchange on the I-405 Freeway, and A2.1-6, Alternative D 2015 Mitigation Plan without Lennox Boulevard Interchange on the I-405 Freeway, in Section A.2.1, Off-Airport Surface Transportation, of Volume A of the Final EIS.

Although the recommended traffic mitigation plan includes construction of the proposed Lennox Boulevard Interchange on the I-405 freeway, no final decision has been made to implement this specific mitigation. LAWA continues to work with Caltrans and the Federal Highway Administration regarding their approval of the proposed interchanges on both the I-405 and I-105 freeways. On February 1, 2005, LAWA received conceptual approval from the FHWA for the Lennox Boulevard Interchange. This conceptual approval was based on a traffic analysis for the operation of the I-405 freeway and its ramps for horizon year 2030 with the addition of the Lennox Boulevard Interchange. It assumed full build-out of the LAX Master Plan. LAWA intends to pursue the Project Study Reports for the Lennox Boulevard and I-105 interchanges as its next step in the environmental review process for these transportation improvements.

FAL00003-147

Comment:

4. Alternative D Construction Schedule (SAL00015-181)

- Comment - The Supplement indicates substantial shifts in airport traffic patterns will occur as the major components of Alternative D are constructed... Construction of the off site roadway improvements, which are assumed in the analysis in the Supplement, must be accelerated...

- Response - The construction schedule in Table S3-15 of the Supplement to the Draft EIS/EIR will be revised to begin the Offsite Roadway Improvements earlier...

- Rebuttal - The Final EIR does not provide the revised construction schedule for the offsite roadway improvements to support this response.

Response:

While it was intended to revise Figure S3-15 in the Supplement to the Draft EIS/EIR (Figure F3-20 in Part I of the Final EIS) to show the Off-Site Roadway Improvements beginning earlier, this change was inadvertently not made. However, it should be noted that Figure F3-20 represents a conceptual summary schedule for Alternative D.

Although approvals necessary to implement the off-site surface traffic mitigation improvements have yet to be obtained, Table A2.1-8, Recommended Off-Airport Surface Transportation Phasing Plan, and A2.1-9, Alternative Off-Airport Surface Transportation Phasing Plan, in Section A.2.1, Off-Airport Surface Transportation, of Volume A of the Final EIS show in more detail when the individual traffic mitigations and traffic-improvement project components are needed. The phasing plan will be used by the Los Angeles Department of Transportation to ensure that the corresponding traffic improvements are approved and implemented prior to the opening of the West Employee Parking Garage, ITC, Southeast Surface Parking, RAC, and GTC. Traffic mitigation that FAA is requiring as a condition of approval can be found in Appendix A of the ROD.

FAL00003-148

Comment:

5. Construction Trips/Impacts on Sepulveda Boulevard (SAL00015-184)

- Comment - Table S4.3.2-10 fails to properly quantify the amount of construction traffic that will impact Sepulveda Boulevard...

- Response - Figure S7 shows that no construction truck trips will travel on Sepulveda Boulevard south of Imperial Highway. Response ST-3.9 indicates dirt and aggregate and all other materials and equipment will use Sepulveda Boulevard north of Imperial Highway.

- Rebuttal - Sepulveda Boulevard south of Imperial Highway routinely carries truck traffic and the use of this roadway by trucks is not restricted or prohibited in any way. If mandatory provisions to totally preclude the use of Sepulveda Boulevard south of Imperial Highway by construction traffic are developed and enforced, then the analysis completed to date is acceptable. To the contrary, however, some construction worker and truck traffic will use Sepulveda Boulevard south of Imperial Highway, especially during the critical airport peak hour. The volumes of construction related traffic during this peak hour on this portion of Sepulveda Boulevard must be forecast, analyzed, and appropriately mitigated.

Response:

Subsection 4.3.2.5 of Section 4.3.2, Off-Airport Surface Transportation, of Part I of the Final EIS shows that Master Plan Commitment ST-22 limits the use of Sepulveda Boulevard as a designated truck route for dirt, aggregate and all other materials and equipment to only the segment between Westchester Parkway and Imperial Highway. Haul routes for any particular LAX Master Plan project must be approved by LAWA as part of Master Plan Commitment ST-18, Construction Traffic Management Plan. NEPA requires the FAA to consider available mitigation to address significant impacts resulting from each alternative analyzed in an EIS. NEPA does not require, however, that a complete mitigation plan be formulated and adopted. It is anticipated that the specifics of the haul routes requirements, including details of enforcement and penalties, would be determined in the development of that plan. It is also expected that Master Plan Commitments ST-18 and ST-22 will be enforced through contractual requirements imposed upon contractors constructing individual projects of the LAX Master Plan.

FAL00003-149

Comment:

6. Construction Trips/Impacts on I-405 (SAL00015-185)

- Comment - The Supplement's failure to disclose the significant adverse effect of construction traffic on I-405 south of Rosecrans Avenue is a significant flaw.

- Response - It is not possible to perform a traffic impact analysis for the 3- 4 p.m. peak hour identified in construction analysis that would be consistent with the detailed analysis performed for the a.m., p.m., and airport peak hours. This is because the available information for this hour is not of sufficient detail. The Ground Access Model cannot be used to model the hour between 3 p.m. and 4 p.m.

- Rebuttal - It does not take a special run of the Ground Access Model to determine that LAX construction traffic will significantly impact I-405. Simply reviewing the data presented in Table S4.3.2-10 in the Supplement discloses the addition of construction traffic to I-405 between 3 and 4 p.m. results in traffic volumes exceeding the freeway capacity. This will cause the mainline freeway to degrade from LOS E to LOS F, resulting in a significant traffic impact. This significant traffic impact remains undisclosed in the Final EIR and measures must be developed to mitigate it.

Response:

The Supplement to the Draft EIS/EIR, as well as Part I of the Final EIS, does disclose the impact to the I-405 Freeway due to construction traffic between the hours of 3:00-4:00 p.m. Table S4.3.2-10, Hourly Total Traffic Volumes on Select Streets - 2008, in Section 4.3.2, Off-Airport Surface Transportation, in the Supplement to the Draft EIS/EIR, and Table F4.3.2-22, Hourly Total Traffic Volumes on Select Streets - 2008, in Section 4.3.2, Off-Airport Surface Transportation, of Part I of the Final EIS, quantifies the impact to the I-405 Freeway due to construction traffic.

The segment of the I-405 Freeway south of Rosecrans Boulevard is already identified in the Final EIS as a significantly impacted freeway segment. This is shown in Table S15, Estimated Costs of Mitigating Associated CMP Impacts - Alternative D, of Technical Report S-2b, Supplemental Off-Airport Surface Transportation Technical Report. It should be noted that the segment identified in Table S15 - "I-405 n/o [north of] Inglewood Ave." - is the same segment as I-405 south of Rosecrans Boulevard. The mitigation for this impact is identified, together with an order-of-magnitude project cost estimate of $5.4 million. Master Plan Commitment ST-24 of subsection 5.2 of the September 2004 Addendum to the Final EIR summarizes LAWA's fair-share commitments toward these projects. Only projects from Table S15 which were not already included in Table A2.1-4, Alternative D Recommended 2015 Mitigation Plan with Lennox Boulevard Interchange on the I-405 Freeway, in Section A.2.1, Off-Airport Surface Transportation, of Volume A of the Final EIS, are included in Master Plan Commitment ST-24.

It should further be noted that total traffic on the I-405 Freeway south of Rosecrans Boulevard is higher during both the 11:00-12:00 noon peak hour and the 5:00-6:00 p.m. peak hour than it is during the 3:00-4:00 p.m. hour. The conclusion reached in subsection 4.3.2.6.2, Construction Impacts, of Section 4.3.2, Off-Airport Surface Transportation, of Part I of the Final EIS that the off-airport surface transportation project impacts for the three primary peak hours address the worst-case impacts, even when considering construction traffic, remains valid.

FAL00003-150

Comment:

7. Traffic Diversions from Freeway Mainlines (SAL00015-191)

- Comment - ...without significant improvement to both the I-405 and I-105 mainlines, airport traffic will still divert off both freeways onto surface streets upstream of LAX, even with the new interchange and the connectors.

- Response - In general, the traffic model indicates that as airport related traffic increases on the I-405 Freeway, non airport traffic shifts to the parallel surface streets...

- Rebuttal - No data is presented to support the traffic model which keeps LAX traffic on I-405 and reassigns non airport traffic to the surface streets.

Response:

Data supporting the traffic model are provided in the LAX Ground Access Model Calibration and Validation Report, dated October 15, 1998. As described in this document, the model is fully calibrated and validated to provide forecasts of traffic within acceptable standards. The document is provided at the end of Technical Report 2b, Off-Airport Surface Transportation Technical Report.

The LAX Ground Access Model included class assignments of trips so that specific types of trips and their patterns can be analyzed. There were five major classes of trips. These were Airport Passengers, Airport Employees, Airport Cargo, "Other" (for example, LAX Northside, Continental City), and Background (non-LAX). In addition, the Cargo Trips were split into Passenger Cars and Trucks.

FAL00003-151

Comment:

8. Traffic Impacts to Freeway Mainlines (SAL00015-192)

- Comment - Various tables show traffic forecasts exceeding freeway capacity. These volume projections indicate the demand to use the freeway but this is a theoretical number because these volumes exceed the actual capacity of the freeway segments. When the number of vehicles exceeds the mainline freeway capacity, vehicles will divert to surface streets, causing additional adverse impacts on those streets, or they will be severely delayed, significantly extending peak hours.

- Response - Some sections of the freeways analyzed for the LAX Master Plan have traffic volumes in excess of capacity as the existing condition. The LAX Ground Access Model takes into account the lengthy delay that occurs when a facility has traffic volumes above capacity, and shifts traffic away to other facilities, if shorter travel times can be achieved.

- Rebuttal - The response attempts to justify what has been done in the analysis, but it fails to respond to this concern and to mitigate the resulting impacts. The data presented in the tables show the demand to use the freeway facility, not the volume that will actually be carried by the freeway.

Freeway capacity is just that, the maximum that the freeway can handle in a given period of time. A freeway flowing at capacity is like a river flowing full of water, right up to the top of its banks. Just as the river cannot handle more water without overflowing its banks, more trips cannot be accommodated by freeway segments already carrying their maximum number of vehicles. Trips in excess of those accommodated by the capacity of the freeway will divert to surface streets just as water will overflow the river banks. By continuing to assign trips to a jammed freeway exceeding its capacity, the model has ignored diversion of the trips in excess of the freeway capacity to the surface streets. Flooding of surface streets by vehicles that the freeway cannot handle will occur.

Response:

The LAX Ground Access Model has not ignored diversion of trips in excess of freeway capacity to the surface streets. Level of Service Criteria for Freeways is shown on Table II-7.5 of Technical Report 2b, Off-Airport Surface Transportation, of the Final EIS. This table, derived from the Congestion Management Program for Los Angeles County, shows that there are recognized levels of service F(0) through F(3) in which demand exceeds capacity. The multiple grades reflect the length of time that traffic exceeds the theoretical capacity. Just as it would be incorrect for transportation planning practices to assume that traffic would divert from an intersection operating over capacity (Level of Service F) until demand equaled capacity, it would be incorrect for transportation planning practices to assume that all trips above the capacity of the freeway will divert to surface streets. Changing the LAX Ground Access Model to perform as the commentor suggests would create unrealistic shifts in traffic patterns not representative of real world conditions.

It is not true that "trips in excess of those accommodated by the capacity of the freeway will divert to surface streets." If this were the case, there would be no queuing on the freeways, as all vehicles

beyond the theoretical capacity of the freeway would somehow exit. In reality, during peak times when the freeway is over capacity, queues result. Drivers make travel path choices based upon the length of these queues and their resulting or perceived delays. Some drivers may chose to divert to surface streets while many others remain on the freeway. As explained in Response to Comment SAL00015-192 in Part II-Volume 10 of the Final EIS, the LAX Ground Access Model takes this into account and is calibrated to match the degree of diversion that occurs throughout the study area. The validation of the LAX Ground Access Model is provided in the LAX Ground Access Model Calibration and Validation Report, dated October 15, 1998. As described in this document, the model is fully calibrated and validated to provide forecasts of traffic within acceptable standards. The document is provided at the end of Technical Report 2b, Off-Airport Surface Transportation Technical Report.

The proposed interchanges on the I-405 and I-105 freeways are mitigations (see MM-ST-12 and MM-ST-13 in Part I of the Final EIS) that are designed to provide incentives for drivers to use the freeway system rather than surface streets to get to and from the airport. However, for those drivers that do choose to use surface streets to access the ITC and GTC, Alternative D includes project-component street widenings to add lane capacity on major arterial roadways near these proposed airport facilities, and the traffic mitigation plan for Alternative D also includes several roadway and intersectional improvements to offset project-related impacts at these locations (see MM-ST-6, MM-ST-7, MM-ST-8 and MM-ST-10 in Part I of the Final EIS and as modified by Volume A of the Final EIS).

FAL00003-152

Comment:

9. Mitigation of Traffic Impacts to Freeway Mainlines (SAL00015-196)

- Comment - The Supplement must examine the Alternative D traffic impacts on the I-405 and I-105 mainline freeway segments in the vicinity of LAX, where the impacts will be obvious and severe, in far more detail.

- Response - ... Project Study Reports will be prepared which will analyze in more detail the effects of the proposed interchanges on the movement of traffic on the I-105 and I-405 mainlines and ramps in the vicinity of LAX.

- Rebuttal - Page 2-217 of the Final EIR states "Alternative D would affect freeway segments." Detailed analysis is required as part of the Final EIR to identify traffic impacts and to develop necessary mitigation measures.

Response:

The Final EIS, which includes the entirety of the subject traffic analysis presented in the Final EIR, clearly documents that Alternative D affects freeway segments. Table F4.3.2-17, Alternative D CMP Impacts on Regional Arterial and Freeway Segments, in Section 4.3.2, Off-Airport Surface Transportation, of Part I of the Final EIS combined with the detailed analysis in Section 6, Congestion Management Program (CMP) Analysis, of Technical Report S-2b, Supplemental Off-Airport Surface Transportation Technical Report, and its Appendix G, provide ample detailed analysis to identify traffic impacts and to develop necessary mitigation measures. Section 6 of Technical Report S-2b includes Table S15, Estimated Costs of Mitigating Associated CMP Impacts - Alternative D, which provides order-of-magnitude cost estimates for these projects.

FAL00003-153

Comment:

10. Arbitrary Peak Hour Volume Adjustments at:
Aviation Boulevard and Imperial Highway (SAL00015-205)
Imperial Highway and Douglas Street (SAL00015-209)
Sepulveda Boulevard and El Segundo Boulevard (SAL00015-215)
Sepulveda Boulevard and Imperial Highway (SAL00015-221)
Sepulveda Boulevard and Mariposa Avenue (SAL00015-223)

- Comment - The Supplement must provide technical support for each of the arbitrary "Project" and "Ambient" peak hour volume adjustments as well as the rationale for making adjustments in various movements during the a.m., Airport, and p.m. peak hours.

- Response - These refinements included manual adjustments to specific intersection turning movements to improve the model forecasts... it is a common practice to manually adjust the intersection turning volumes predicted by the model to ensure reasonableness of the results.

- Rebuttal - This generalized response does not explain the specific volume adjustments questioned in the original comments. The adjustments made are inconsistent from one peak hour to the next. Further, some of the manual adjustments appear to result in a better bottom line performance for the intersection as vehicles projected by the traffic model have been manually deducted from the intersection's critical movements and added to movements that are not critical. Unit specific technical data and supporting documentation are provided, the adjustments remain arbitrary.

Response:

The manual adjustments to turning movements at certain intersections was conducted by the Los Angeles Department of Transportation using engineering judgment and following procedures used in many traffic impact studies over the past several years, including earlier phases of the LAX Master Plan. Thus, the adjustments were not made by LAWA or FAA planners or engineers, but by the local agency with expertise in this area. These adjustments were reviewed by LAWA and FAA and determined to be reasonable. Please see Response to Comment SAL00015-205 in Part II-Volume 10 of the Final EIS where these procedures are adequately described. The original documentation of the specific adjustments made in this case are kept at the LADOT Bureau of Planning and Land Use Development, West LA/Coastal Development Review Office. The Commentor states that "some of the manual adjustments appear to result in a better bottom line performance for the intersection." It should also be noted that some of the adjustments result in worse bottom line performance for other intersections.

FAL00003-154

Comment:

11. MTA Mitigation Measures Are Not Properly Analyzed at:
Sepulveda Boulevard and Imperial Highway (SAL00015-222)
Sepulveda Boulevard and Mariposa Avenue (SAL00015-225)

- Comment - ...there is absolutely no assurance or guarantee that providing funding to MTA for improved Rapid Bus or other transit services would actually mitigate Alternative D traffic impacts on Sepulveda Boulevard at these intersections,

- Response - The revised analysis concludes that the fair share contribution to MTA's proposed Metro Rapid Program or other enhancements to benefit transit will need to fund enhancements to reduce vehicle trips...

- Rebuttal - The original comment remains unaddressed. There are no assurances or guarantees that providing funding to MTA will actually reduce peak hour vehicle trips on Sepulveda Boulevard.

Response:

Under the revised traffic analysis using the reduced Playa Vista Phase II trip generation numbers, fair-share contributions to the MTA's Metro Rapid Program or other enhancements to benefit transit to and from LAX are no longer needed for either Imperial Highway and Sepulveda Boulevard (I/S # 50) or Mariposa Avenue and Sepulveda Boulevard (I/S # 100). However, fair-share transit contributions are being proposed to mitigate project impacts at some other intersections. Please see Table A2.1-4, Alternative D Recommended 2015 Mitigation Plan with Lennox Boulevard Interchange on the I-405 Freeway, and A2.1-6, Alternative D 2015 Mitigation Plan without Lennox Boulevard Interchange on the I-405 Freeway, in Section A.2.1, Off-Airport Surface Transportation, of Volume A of the Final EIS.

NEPA does not set forth a requirement to provide assurances of the variety requested by the commentor. Even so, transit improvements have been used as traffic mitigations for other projects exhibiting impacts similar in nature to the ones at issue here, including the Playa Vista development. At this time it is unrealistic for LAWA to provide guarantees as to the ridership that will result from

improved transit services. However, LAWA continues to partner with the LAC-MTA and other bus operators to improve transit services to and from LAX based upon their ridership projections. The MTA has achieved significant ridership increases with their Metro Rapid Bus program. Through system integration of bus signal priority, low floor buses, headway rather than timetable-based schedules, and fewer stops, passenger travel times have been reduced by as much as 29%. As a result, ridership has increased by 40% in two demonstration corridors, with one-third of the ridership increase from new riders who have never before ridden transit.

LAWA will work with LADOT, FAA and the respective outside agencies to establish the amount of mitigation credit LAWA would receive for each proposed transit enhancement to which it contributes. Based on ridership improvements achieved elsewhere under the MTA's Metro Rapid Program, LAWA continues to maintain that the theoretical trip reductions from the proposed transit improvements are reasonable. Finally, LADOT staff has reviewed the proposed transit enhancement mitigations and found them to be reasonable and achievable.

Please also see Response to Comment SAL00015-222 in Part II-Volume 10 of the Final EIS for an example of proposed transit improvements needed to achieve the vehicle reductions cited.

FAL00003-155

Comment:

12. Mitigation Measures Are Incomplete (SAL00015-231)

- Comment - The listing ... adds a "fair share" contribution toward a future widening of the southbound I-405 Freeway on ramp at El Segundo Boulevard but does not identify the scope of this proposed project. The listing ...fails to provide "fair share" cost estimates for any of the proposed intersection or segment improvements.

- Response - The scope of the referenced ramp widening will be established at the time Caltrans or another agency initiates the project. ... The actual "fair share" costs of the recommended intersection and segment improvements will be determined through consultation with the implementing jurisdictions at a later date.

- Rebuttal - Order of magnitude cost estimates must be developed for the ramp, intersection, and segment improvements required as mitigation, together with the appropriate "fair share" costs associated with the LAX Master Plan.

Response:

This comment is not a comment on the adequacy of the Final EIS, and the information requested is not relevant to sufficiency of the Final EIS under NEPA. Although cost estimates are not required under NEPA, estimates of LAWA's fair-share contributions to Congestion Management Plan improvements were developed. These are provided in Master Plan Commitment ST-24 of subsection 5.2 in the September 2004 Addendum to the Final EIR. The cost estimate of the fair-share contribution toward widening the I-405 southbound on-ramp at El Segundo Boulevard was not developed as part of Master Plan Commitment ST-24 since it was already included as Ramp # 26 in Table F4.3.2-29, Year 2015 Alternative D Mitigation Plan (Adjusted Environmental Baseline Comparison), Section 4.3.2, Off-Airport Surface Transportation. Subsequently, this ramp was also included in Table A2.1-4, Alternative D Recommended 2015 Mitigation Plan with Lennox Boulevard Interchange on the I-405 Freeway, in Section A.2.1, Off-Airport Surface Transportation, of Volume A of the Final EIS.

FAL00003-156

Comment:

13. Mitigation Measures Not Coordinated With Phasing (SAL00015-232)

- Comment - Mitigation measures at Imperial Highway and Main Street must be constructed prior to the scheduled completion of the proposed west employee parking structure in 2006, not in 2015 long after increased LAX employee traffic occurs along Imperial Highway.

- Response - The Conceptual Summary Schedule has been revised in the Final EIR to begin the Offsite Roadway Improvements earlier in the schedule.

- Rebuttal - Table F4.3.2-29, Year 2015 Alternative D Mitigation Plan, still shows the improvements at Imperial and Main occurring in 2015 long after the scheduled completion of the west employee parking structure in 2006.

Response:

Please see Table A2.1-8, Recommended Off-Airport Surface Transportation Phasing Plan (with Lennox Boulevard Interchange), and A2.1-9, Alternative Off-Airport Surface Transportation Phasing Plan (without Lennox Boulevard Interchange), in Section A.2.1, Off-Airport Surface Transportation of Volume A of the Final EIS. Both of these phasing plans show that the intersection improvement at Imperial Highway and Main Street is constructed as part of Phase 1A, the West Employee Parking Garage. As noted in Footnote 3 to these tables, "the required Traffic Mitigation or Project Component of each sub-phase for the corresponding land use sub-phase shall be guaranteed to the satisfaction of LADOT and City of Los Angeles Public Works prior to the issuance of any Building Permit and completed prior to the issuance of any Certificate of Occupancy permit."

FAL00003-157

Comment:

14. Cost Estimates/Fair Share Contributions Not Incorporated (SAL00015-233)

- Comment - Cost estimates for the necessary mitigation measures must be developed and the proportionate "fair share" contributions calculated for Alternative D.

- Response - Some of the proposed traffic mitigations do involve fair share contributions by LAWA toward projects sponsored by another agency... However, it is premature to develop the specific costs of these fair share contributions.

- Rebuttal - This comment has not been addressed by failing to provide cost estimates of mitigation measures and the fair share contributions.

Response:

Please see Response to Comment FAL00003-155 regarding cost estimates for mitigation measures.

FAL00003-158

Comment:

As pointed out in this rebuttal, many of our October 28, 2003 comments have not been adequately addressed in the Final EIR. Several of the responses attempt to defend LAWA's unsupported assumptions and faulty methodology rather than provide the necessary technical support, justification, and documentation for their opinions. In other responses, concerns have not been mitigated by the proposed measures or monitoring of the proposed mitigation measures has not been incorporated.

Response:

In accordance with NEPA requirements and FAA policies and procedures related to the implementation of NEPA, written responses were prepared for all comments received during the public review periods for the Draft EIS/EIR and the Supplement to the Draft EIS/EIR. The commentor's opinion that some of those responses, specifically described in Comments FAL00003-144 through FAL00003-157, did not adequately address the commentor's concerns is so noted. Notwithstanding the primary purpose of the FAA's solicitation of comments on the Final EIS was to obtain public and agency input on the new information contained in Volume A of the Final EIS, and not belabor discussion of issues previously addressed, responses to Comments FAL00003-144 through FAL00003-157 are provided above.

FAL00003-159

Comment:

Retaining 163 or more aircraft gates, not reducing them to 153 as assumed in the Final EIR for Alternative D, would result in more passengers, more vehicle trips and additional traffic impacts to freeways and streets above those identified. No traffic study or analysis has been conducted of the significantly changed off airport traffic impacts that would occur with a segmented, partial implementation of the LAX Master Plan under the "green light/yellow light" scenario.

Response:

Please see Response to Comments FAL00003-30 and FAL00003-142 regarding implementation of Alternative D and the LAX Specific Plan. In accordance with NEPA requirements and federal law, the FAA has evaluated the environmental consequences associated with each of five alternatives considered for the LAX Master Plan. The analysis of Alternative D is fully consistent with the decision of the Los Angeles City Council to implement this alternative.

FAL00003-160

Comment:

The conclusion of the Final EIR, that most of the project impacts from Alternative D would be reduced to insignificance in the areas of transportation and circulation by implementation of the mitigation measures as proposed, is not supportable, in light of the myriad of technical problems in the analysis. These problems have now been compounded by the deferral or elimination from the Master Plan of important plan components including the GTC and terminal demolition.

Response:

The commentor states that there are technical problems in the analysis of transportation and circulation impacts as well as mitigation for such impacts. Please see Responses to Comments FAL00003-10, FAL00003-34, FAL00003-40, and FAL00003-144 through FAL00003-159 above regarding the adequacy of the technical analysis of this topic. The commentor also indicates that components of Alternative D have been deferred or eliminated from the proposal. Please see Responses to Comments FAL00003-30 and FAL00003-142 regarding this topic. Finally, the commentor states that it is insupportable to state that impacts related to transportation and circulation will be mitigated to levels below significance. This is not a comment on the adequacy of the Final EIS or FAA's compliance with NEPA. NEPA does not require that federal agencies demonstrate whether proposed mitigation will reduce impacts to a level below significance, even assuming that a specific threshold of significance exists for a particular resource category.

FPC00001 Mego, Gordon None Provided 12/20/2004

FPC00001-1

Comment:

The Los Angeles International (LAX) Airport is being considered for major changes, including expansion of the facility up to the 405 Freeway, which would involve significant reconstruction that would take place over a 10 year-to-15 year period.

The potential cost of the proposed project for LAX Airport is realistically between $15 billion and $25 billion that include expenditures for acquisition of property in the nearby area, replacement of public and private buildings, upgrades of the infrastructure in the region, improvements in other related areas, mitigation of negative environmental effects, compensation for financial losses by residents, businesses, and local government outlays for cost overruns in various aspects of a major project, etc.

Response:

Comment noted. Property acquisition, financing costs, and environmental mitigation costs, as well as a significant contingency are included in the estimated cost of Alternative D. As discussed in Section 2.8, Funding, of the Final EIS, the proposed funding includes a combination of FAA Airport Improvement Fund grants, passenger facility charges, general airport revenue bonds, airline fees, and other state/federal grants. It is not anticipated that any local tax revenue would be used for this project. Any federal funds for these improvements would not come from the general fund of the United States Treasury.

FPC00001-2

Comment:

While the proposals by Mayor James Hahn and Councilperson Cindy Miscikowski of Los Angeles for LAX Airport have been touted by its supporters as the solution to various inadequacies of the facility, they unfortunately fail to improve 1) user-friendly aspects for passengers, visitors, etc, 2) efficiency of operations at the airport, 3) level of safety and security for people in and around it, 4) quality of life for residents, workers, etc., 5) permanent jobs at businesses in the L.A. region.

Response:

Comment noted. The existing landside infrastructure at LAX is not capable of handling the forecast volume of passenger traffic without significant decline in level of service. There is room to improve safety at the airport and Alternative D includes design elements to take advantage of that room for improvement. Alternative D, the Enhanced Safety and Security Plan, presents a solution that will improve the efficiency of the airfield and the efficiency of the passenger processing facilities at LAX in a safe and secure airport environment. In addition, please see Topical Response TR-SEC-1 in Part II-Volume 1 of the Final EIS which addresses the most frequently raised security-related issues pertaining to the design and ability of Alternative D to enhance existing safety and security at LAX.

Please see Topical Response TR-LU-1 in Part II-Volume 1 of the Final EIS regarding impacts on quality of life.

Employment and socio-economic issues were addressed in Section 4.4.1, Employment/Socio-Economics, of the Final EIS. Each of the Master Plan alternatives, including Alternative D, would be directly associated with a wide range of long-term employment opportunities within 17 different manufacturing sectors related to air cargo and a variety of airline industry, government, and tourism-related sectors related to air passengers.

FPC00001-3

Comment:

On Monday, Dec. 6, 2004, the Los Angeles World Airport (LAWA) Board of Commissioners voted to approve the "Community Benefits Agreement" which involves the expenditure of $500 million to minimize the negative fallout from current operations at and proposed expansion of LAX Airport. Unfortunately, the overall scope is limited, the proposed funding is inadequate, and the expected improvements are long overdue for the people of the Los Angeles region.

Response:

Part I of the Final EIS identifies adverse impacts associated with implementation of the LAX Master Plan and provides a comprehensive set of Master Plan commitments and mitigation measures identified by LAWA and/or FAA to address such effects as identified under the CEQA analysis, the NEPA analysis, or both. (Specifically, these are presented in Chapter 5 of the September 2004 Addendum to the Final EIR and further refined by the Second and Third Addenda to the Final EIR.) A subset of the Master Plan Commitments and Mitigation Measures have been identified in this ROD to address significant impacts identified by the NEPA analysis. These measures are conditions of approval of this ROD and are located in Appendix A of this ROD. The Community Benefits Agreement (CBA) is not a component of the LAX Master Plan or the Final EIS. The CBA is an agreement between LAWA and a coalition of organizations (LAX Coalition) that is separate from the NEPA process. FAA has not been a party to the CBA and furthermore has expressed no opinion about the contents of the CBA.

FPC00001-4

Comment:

On Wednesday Oct. 20, 2004 and again on Tuesday Dec. 7, 2004, the City Council of Los Angeles voted 12 to 3 in favor of the Hahn/Miscikowski proposals for LAX Airport. Unfortunately, the "Yes" votes by a number of L.A. Councilmembers were based upon a multitude of promises that may not be fulfilled regarding various aspects of proposed improvements in the L.A. region.

It has been the contention of Mayor Hahn, Councilperson Miscikowski, and their supporters that the proposed changes for LAX Airport had to be approved in their entirety. Otherwise, they claimed that LAWA and the City of Los Angeles would be forced to start the process all over and will have wasted $130 million of the taxpayers' money.

Mayor Hahn could have saved himself and many other people a lot of trouble down the line regarding the proposals for changes at LAX Airport if he had started the process with numerous public meetings to gather input from the stakeholders in various communities which would have assured everyone more acceptable proposals that are created from the bottom up.

Of course, Mayor Hahn refuses to now accept responsibility for his failure of leadership on such an important matter and his decision to ignore environmental laws of the Federal EPA and California EPA. Further, he refuses to accept legal opinions of the L.A. County Counsel who has said that the objectionable elements of the Hahn/Miscikowski proposals can be taken out without requiring more environmental studies or public review.

On Tues. Dec. 7, 2004, the L.A. County Board of Supervisors voted unanimously to pursue legal action against the City of Los Angeles for their approval of the Hahn/Miscikowski proposals for LAX Airport.

In conclusion, it has become necessary to seek legal remedies in the form of lawsuits by governmental bodies, organizations, businesses, residents, etc. in L.A. County so that we can achieve truly acceptable proposals for LAX Airport.

Response:

Comment noted. The LAX Master Plan Final EIS was completed in accordance with NEPA, NEPA's implementing regulations (40 CFR Part 1500-1508), and FAA Order 5050.4A. FAA and LAWA provided the public with numerous opportunities to provide input regarding changes at LAX to address identified needs from the very earliest stages of the NEPA and CEQA process. In 1996/1997, eight public informational meetings/workshops, designed for the general public, were conducted in the communities surrounding LAX to inform the public about the EIS/EIR process, the project's status, and to allow the public an opportunity to present their perspectives on the analysis to be presented in the EIS/EIR. Please see Appendix B, Public Involvement, of the Final EIS for the dates and locations of these public informational meetings/workshops. In addition, three public scoping meetings regarding the LAX Master Plan EIS/EIR were held at the start of the environmental review process. Please see Appendix B, Public Involvement, of the Final EIS for the dates and locations of the public scoping meetings.

Following publication of the Draft EIS, nine public hearings/public workshops were held regarding Alternatives A, B, and C. Please see Topical Response TR-PO-1 in Part II-Volume 1 of the Final EIS for the dates and locations of the public hearings/public workshops on the Draft EIS. Furthermore, following publication of the Supplement to the Draft EIS, twelve public hearings/public workshops were held regarding Alternative D. Please see Topical Response TR-PO-1 in Part II-Volume 1 of the Final EIS for the dates and locations of the public hearings/public workshops on the Supplement to the Draft EIS.

FPC00002 Ehret, John None Provided

FPC00002-1

Comment:

In reviewing LAX (D) and LAX (E) I find them full of holes and VERY EXPENSIVE.

1. Leave the terminals and existing access as is. This allows people to drop off and pick up the elderly and handy capped right at their terminals. This scatter of terminals is safer than the proposed concentration.

2. Moving runways and putting a taxiway between them has not improved wing tip clearance versus 45 degree holding between existing runways. Nobody shows which way the airplanes would be going in those center taxiways. This is very unsafe.

3. The time and cost of moving a runway will effect a shortage of operational runways for a long time and with the existing air traffic will cause a real delay problem.

4. The location of the new tower solved the visibility problem that occurred on the north runway and taxiway that one time. NO PROBLEMS SINCE.

5. With the financial shortage in Federal, State and City, leave as is except to improve the security in the existing terminals.

6. I went to the library to review the airport plan D and was shocked by the extent of the environmental study. About 6 feet of books full of GOBBLED- GOOK. When there wasn't an acceptable plan to evaluate. What a waste of taxpayer funds.

7. Cargo truck traffic mixed with passenger traffic could be solved by utilizing Ontario airport where the truck traffic can come and go in all directions and not restricted to approach only in one direction.

Response:

The content of this comment is essentially the same as comment letter SPC00022; please refer to the responses to comment letter SPC00022, which can be found in Part II-Volume 10 of the Final EIS.

FPC00002-2

Comment:

8. To accommodate the new double deck Aerobus at the terminal, a two level ramp system must be available.

Response:

Alternative D would provide a wide range of contact gates capable of serving the existing and future aircraft fleet based on the forecast including New Large Aircraft (NLA). The 153 contact gate positions proposed under Alternative D provide parking for an aircraft adjacent to an airline concourse structure that is directly reachable by a passenger loading bridge. The contact gates allow passengers to board or disembark an aircraft directly to or from the airline concourse facility. The contact gates provide a greater level of passenger service and operational efficiency for the airlines.

As described in Chapter 2 and listed in Table 2.2-3 of the Final LAX Master Plan, different gates are able to accommodate varying sizes of aircraft. For example, 32 of the gates planned as part of Alternative D would accommodate commuter aircraft. These 32 gates would not be able to accommodate larger long haul domestic and international air carrier aircraft such as Boeing 757s. As shown on page 3-59, Figure F3-14 in Part I of the Final EIS, six of the planned gates would be for the exclusive use of NLA aircraft such as the Airbus A380, which is scheduled to enter commercial service in 2006. The gates designed to accommodate the A380 would be located at the new north linear concourse, the reconfigured Tom Bradley International Terminal, and the West Satellite Concourse. Jet bridges connecting the proposed terminal hold rooms to Airbus A380 type aircraft will likely allow for

simultaneous loading of the upper and lower decks of the airplane. This capability is a service and efficiency improvement feature similar to existing wide-body aircraft parking positions that have two jet bridges available to simultaneously load large aircraft on one level.

FPC00003 Rowe, Jill None Provided 2/9/2005

FPC00003-1

Comment:

Subject: LAX Master Plan D-Concerns about expansion.

Thank you for taking your time to review my concerns about Plan D.

My Concerns

As a longtime residents of Playa del Rey. We have not truly been represented by our Councilwomen Miscikowski regarding extending the runway on the Playa del Rey/Westchester Northside.

History will show you that more expansions and more flights take off on the PDR/Westchester side vs. the El Segundo side. This is due to the better representation of the city of El Segundo fighting to keep reduction down on their side of the runway. Our Councilwomen Miscikowski I (whom we did not vote for, but rather forced on us by redistricting) has failed to consider our Long-time concerns (see below). In her recent move to place a feather in her hat as the outgoing representative of district 11, she has OVERLOOKED our concerns to make a name for herself in joining with Mayor Hahn LAX Multibillion expansion plan D.

Response:

Comment noted. Please note that the north airfield runways do not have more departures than on the south airfield runways, both historically and currently. As shown in Appendix S-C1, Table S-2 on page 7 of the Final EIS, 54.2 percent of all departures in the Year 2000 used the south airfield as compared to 43.9 percent of all departures used the north airfield. With respect to concerns regarding new runways or runway relocations under Alternative D, please note that no new runways would be added under Alternative D. The existing number of runways (2) on the north runway complex would remain unchanged and Runway 6L/24R on the north runway complex would be not relocated. Each of the alternatives is "constrained" because none have sufficient peak-hour runway capacity to meet forecast demand in 2005 or 2015 without changes in the activity profiles. Alternatives A and B each include an additional commuter runway and were proposed to accommodate the growing demand at LAX to the extent possible and to serve the Master Plan goals and objectives. Please see Chapter V, Section 3.3.1 of the Draft LAX Master Plan for a detailed discussion on development of the alternatives and Section 3.3.2 for development of the constrained activities. The Enhanced Safety and Security Plan, Alternative D, analyzed in the Final EIS, has been added to provide a build alternative designed to serve a level of future (2015) airport activity comparable to the No Action/No Project Alternative. Chapter 3, Alternatives, of Part I of the Final EIS provides extensive information on the formulation of this alternative and its consistency with the SCAG 2001 RTP. Please see Response to Comment AL00022-188 in Part II-Volume 2 of the Final EIS for a discussion on the need for runway extensions at LAX and Topical Response TR-LU-2 in Part II-Volume 1 of the Final EIS regarding impacts to the community of Westchester.

FPC00003-2

Comment:

CONCERNS if runway is expanded again on the Northside-

1. INCREASED NOISE.

Response:

The anticipated changes to the cumulative and single event noise patterns in the areas along the north side of Los Angeles International Airport were addressed in detail in Section 4.1, Noise, and particularly subsection 4.1.6.1.5, Alternative D - Enhanced Safety and Security Plan, regarding Alternative D, as

well as Appendix SC-1, Supplemental Aircraft Noise Technical Report. Section 4.1 indicates that CNEL noise levels along the north side of the airport would be only minimally changed as a result of Alternative D.

FPC00003-3

Comment:

2. SAFETY of homeowner. Many times planes fly over our homes flying outside the runway flying right over Manchester just making it over the hills of Playa del Rey. This happens several times a month. Planes taking off turn to soon thereby FLY OVER our Homes. By giving more runways on the PDR side this occurrence will increase and our safety and passenger will be at a greater risk.

Response:

Comment noted. Under Alternative D, no additional runways are proposed. Runway 6L/24R would remain in place and Runway 6R/24L would be relocated to the south approximately 340 feet further away from Playa de Rey. Please see Part II-Volume 1 of the Final EIS for Topical Responses TR-SAF-1 regarding aviation safety and TR-N-3 regarding aircraft flight procedures. For further information about early turns, please see Topical Response TR-N-3, particularly Subtopical Response TR-N-3.2 regarding early turns over areas north and south of LAX, and Subtopical Response TR-N-7.1 regarding enforcement of noise rules.

Alternative D is designed for a future (2015) level of activity at LAX comparable to that of the No Action/No Project Alternative, and would have the fewest total annual aircraft operations of all the Master Plan alternatives, even slightly less than the No Action/No Project Alternative.

Additionally, mitigation measures have been developed for all build alternatives to address early turns. These are identified in subsection 4.1.8, Mitigation Measures, in Part I of the Final EIS.

FPC00003-4

Comment:

3. PLANES Divert right over Playa del Rey. Perhaps due to aborted landings several times a month planes divert to the Northside of the runway. When they divert they fly dangerously over our homes outside the proper runway departure zone. Because no flight diversions fly south over the El Segundo side (except for the furthest south runway) due to further danger to other takeoff/landing planes, we again take ALL the diversions on the PDR side. With several thousand take off & landings daily, moving the runway closer to the PDR side will increase potential harm to homeowners & passengers.

Response:

Please note that under Alternative D, Runway 6L/24R would not be relocated closer to communities to the north such as Westchester and Playa de Rey, but would remain in place. Runway 6R/24L would be relocated to the south approximately 340 feet further away from these communities. Please see Response to Comment PC01881-22 in Part II-Volume 6 of the Final EIS and Topical Response TR-N-3 in Part II-Volume 1 of the Final EIS, in particular Subtopical Response TR-N-3.4, regarding standard missed approach procedures. Also see Topical Responses TR-SAF-1 regarding aviation safety and Topical Response TR-N-3 regarding aircraft flight procedures in Part II-Volume 1 of the Final EIS.

FPC00003-5

Comment:

I urge you to please review our concerns in deciding on this long-term decision that will impact all of us. Further more our true representation will take place when we will be voting March 3, 2005 for our Councilperson to truly represent us in the 11th District (note all candidates share the above concerns). Please listen to our concerns and not allow additional expansion on the Playa del Rey/Westchester side.

Response:

Comment noted.

FPC00004 Velasco, Valeria Alliance for Regional Solution to Airport Congestion 2/20/2005

FPC00004-1

Comment:

The Record of Decision approving LAX Master Plan Alternative D should not be issued.

ARSAC agrees that a safe, secure, and convenient LAX Airport is not just desirable, but is a necessity. But, the preferred Alternative D fails to meet those objectives. The FAA should acknowledge that the documentation package is incomplete, has inadequate analysis, and promotes misleading statements in several substantive ways. Despite extensive draft Master Plan/ EIS/EIR hearings that resulted in over 19,000+ comments generated no substantive changes to the Plan were made. The substantial mass of paperwork generated contains fatal flaw assumptions, is based on old and incomplete data resulting in inaccurate environmental assessments.

Response:

Comment noted. Please see Responses to Comments below. The LAX Master Plan Final EIS was completed in accordance with NEPA, the NEPA implementing regulations found at 40 CFR Part 1500-1508, and FAA Order 5050.4A.

FPC00004-2

Comment:

The resultant safety and security projected by the extensive modifications is questionable.

There are differing opinions about the effectiveness of the ground and air safety and security approach in Alternative D. To reduce opposition to Alternative D an independent, cost/benefit assessment was promised with great fanfare in July 2004. It has not been performed. The FAA should require this critical information.

Response:

This comment is not a comment on the adequacy of the Final EIS prepared pursuant to NEPA, as NEPA does not require preparation of a cost/benefit assessment. FAA does provide advisory guidance on the proper application of benefit/cost analysis related to airport capacity projects requesting special Letter of Intent (LOI) funding or Airport Improvement Program (AIP) discretionary grants of $5 million or more. For more information on the application of these procedures see Airport Benefit-Cost Analysis Guidance, Office of Aviation Policy and Plans, Federal Aviation Administration, December 15, 1999. Please see Topical Response TR-SAF-1 in Part II-Volume 1 of the Final EIS regarding issues related to aviation safety. Also please see Topical Response TR-SEC-1 in Part II-Volume 1 of the Final EIS regarding issues related to the security approach of Alternative D. The FAA will continue to monitor and participate in federal airport issues related to the implementation of the LAX Master Plan over time, including as it pertains to safety and security enhancements.

FPC00004-3

Comment:

The baseline no action/no project alternative specified is flawed resulting in inappropriate conclusions.

Instead of a straight forward no action/no project baseline for comparison with selected alternatives future projects and assumptions of their magnitude are cherry picked to predetermine conclusions.

Any Plan should minimize the impacts upon the surrounding communities while remaining a key element in the Regional Solution to air commerce. Elements including video monitored fences and gates, upgrades to the Bradley International Terminal facilities and gates, replacement of the baggage handling system throughout LAX, and cargo handling facility improvements are already on-going. Each project was approved without being a part of the master plan. These are a part of the baseline; how were these accounted for in the analyses?

The no project/no action "baseline" contains many additions and changes beyond the Interim LAX Plan and adds future projects not yet fully conceived. Virtually all of the projects since the 1980s were approved incrementally without environmental review (other than a project Negative Declaration) to assess cumulative impacts. Further, airport capacity has been increased by incrementally by the addition of boarding gates and taxiways. Are future increases of this type in the "baseline" for comparison, how/where are they identified?

Response:

Please see Topical Response TR-GEN-2 in Part II-Volume I of the Final EIS regarding the No Action/No Project Alternative assumptions. Among all the build alternatives, Alternative D would have the fewest impacts on surrounding communities and would encourage growth at regional airports by limiting the future (2015) capacity of the alternative to a level comparable to that of the No Action/No Project Alternative.

Projects such as improvements to Tom Bradley International Terminal (TBIT) and improvements to certain cargo handling facilities were accounted for in the No Action/No Project Alternative, notwithstanding the fact that not all of these actions have been approved at the local level. Inclusion of these projects in the No Action/No Project Alternative is consistent with the provisions of NEPA and CEQ's guidance regarding implementation of NEPA. In particular, "where a choice of 'no action' by the agency would result in predictable actions by others, this consequence of the 'no action' alternative should be included in the analysis." (Question 3, Forty Most Asked Questions Concerning the Council on Environmental Quality's NEPA Regulations) The fact that some of these projects may not have been previously approved at the local level does not negate the fact that their implementation is a "predictable action by others." It should be noted that these projects do not require federal approval. Please also see Responses to Comments AL00033-51 through AL00033-55 in Part II-Volume 3 of the Final EIS regarding inclusion of these projects in the No Action/No Project Alternative.

Specific to TBIT, as indicated in Response to Comment AL00033-54 in Part II-Volume 3 of the Final EIS, inclusion of the TBIT facility renovation project in the No Action/No Project Alternative is justified as these improvements are independent of the LAX Master Plan. The proposed improvements, including renovation and completion of airlines club rooms, remote hold room, an international bag claim area, FIS offices and various concessionaires, are intended to modernize the terminal facility and to accommodate baggage screening equipment mandated by the Transportation Security Agency following September 11, 2001. These improvements would not be capacity enhancing. The improvements are the subject of a separate environmental analysis being prepared by LAWA in compliance with CEQA. To the extent that additional improvements would occur at TBIT in conjunction with the Master Plan, beyond those proposed and evaluated in the environmental analysis currently underway, such improvements are included in the build alternatives and are properly analyzed in the LAX Master Plan Final EIS. Additional improvements at TBIT that would occur under LAX Master Plan Alternatives A, B, C, and D are described on pages 3-34, 3-42, 3-49, and 3-75 in Chapter 3 of Part I of the Final EIS, respectively. Please also see Response to Comment FAL00003-17 regarding the improvements to TBIT.

LAWA is currently pursuing additional facility improvements at LAX, including those noted by the commentor (video monitored fences and gates and upgrades to the baggage handling system in Terminals 1 through 8). These improvements were not contemplated at the time the No Action/No Project Alternative was developed. LAWA must continue to plan for and implement improvements at LAX to accommodate existing operations. These projects are independent of the Master Plan and do not affect the environmental impact analysis of the Master Plan alternatives. Regarding the baggage handling system, the proposed improvements are specifically focused on providing new space or reconfiguring or improving existing space for purposes of baggage screening and handling in support of security requirements. As a result, the proposed project would not increase the existing passenger capacity or aircraft parking capacity at any of the terminals at LAX. The improvements would not affect the number of gates or improve the ground transportation system at the airport, which currently constrain its capacity.

FPC00004-4

Comment:

There is also a pattern of assigning large impacts to the "baseline" while complementary projects are reduced in the Alternatives presented. Baseline projects include the Northside Development (ND). The ND removed hundreds of local housing units in 1981 to become a 4.5 million square foot "light industrial/commercial buffer zone" between the airport and the community to the immediate north, Westchester. ND was proposed to have been completed in 2000 but remains virtually empty except for the new fire station recently built. Alternative D takes a credit for reducing traffic from the "baseline" by calling for an undefined, reduced 1.5 million square foot build out renamed Westchester South. No one realistically expects any of the hotel development in ND as reduced in Alternative D, but not from baseline consideration.

Similarly, an early 1980s project to the southeast of LAX, Continental City, was approved for a large square footage but was abandoned as a hole in the ground for over twenty years. Again, nothing of the originally conceived size is expected to be built out yet environmental credit for Continental City reduction is not taken from the "baseline."

Response:

Please see Topical Response TR-GEN-2 in Part II-Volume 1 of the Final EIS regarding No Action/No Project Alternative assumptions, including assumptions regarding LAX Northside and Continental City.

As described in Chapter 3, Alternatives, of Part I of the Final EIS, Alternative D does not propose development of Westchester Southside. This proposal is contained in Alternatives A, B, and C. Under Alternative D, the LAX Northside would be implemented. As indicated on page 3-78 in Chapter 3 of Part I of the Final EIS, the original LAX Northside Development, which is assumed under the No Action/No Project Alternative, provided entitlements for 4.5 million square feet of development, subject to a limitation on the total number of daily vehicle trips (a "trip cap"). Alternative D includes a proposed reduction in the existing trip cap included in the original LAX Northside Development. The reduced trip cap would limit the amount of total daily traffic generated by the LAX Northside Development to a level comparable to that associated with the Westchester Southside development proposed under Alternatives A, B, and C.

The commentor is correct that buildout of the LAX Northside project has not occurred since the project was approved in 1983. For further information regarding the appropriateness of including LAX Northside and Continental City in the No Action/No Project Alternative and the current state of those development projects, please see Response to Comment FAL00003-45.

FPC00004-5

Comment:

Questions about the "baseline" versus alternatives exist. Traffic impact projections were reduced to account for the reduced, but still massive Playa Vista Project Phase II to the north. In addition to the mega project, however, the many other smaller projects added have a cumulative impact in the other direction. Dramatic growth in surrounding cities and in unincorporated County areas is minimized by the review yet the LAX area is already among the most congested in the nation. How are these accounted for in the "baseline" for comparison? As much of the environmental data was collected in the 1994-96 time frame and not conceived at that time, how does the FAA account for the substantially changed conditions both at LAX and the surrounding regions?

Response:

It is important to note that NEPA does not utilize the "environmental baseline" concept, which is the CEQA basis of comparison for purposes of determining environmental impacts of action alternatives. The discussion of the environmental baseline is included to meet CEQA requirements, and is not required under NEPA. Rather, when evaluating the impacts of "action" alternatives, NEPA utilizes future conditions in the absence of any federal approval as the point of comparison, which is represented by the No Action/No Project Alternative in this instance.

Growth in surrounding cities and in unincorporated County areas was taken into account as part of the off-airport surface transportation study for the Final EIS.

The cumulative impacts analysis was based on applicable planning documents designed to evaluate regional and area-wide conditions, as well as an assessment of 182 separate projects expected to occur in the LAX vicinity through 2015. This list of approved development projects was developed with the assistance of the County of Los Angeles and the cities of Culver City, El Segundo, Inglewood, Los Angeles, Manhattan Beach and Santa Monica. These projects are listed on Table 3S, Planned Development Projects Added to Background Assumptions, of Technical Report S-2b of the Final EIS. In addition to the 182 projects in this table, additional projects were also considered when the Supplement to the Draft EIS/EIR was prepared. These projects included the El Segundo Corporate Campus/Media Center, a 2,200 unit residential development near Long Beach Airport and a new hotel in Marina del Rey.

Traffic growth from the approved development projects was compared to the forecasts of growth from the Southern California Association of Governments (SCAG). If the SCAG forecasts were large enough to account for the approved development projects(s) in a particular zone, the SCAG forecast was used. If the SCAG growth forecast was not large enough for a particular zone to account for the approved development project(s), then population, housing and/or employment growth was added to that zone to ensure that sufficient growth was assumed to include all of the approved development projects. These trips were then "assigned" to a network of roadways to represent peak hour traffic flows.

For further information regarding the steps taken for the development of the future traffic conditions model, please see subsection 4.3.2.2, General Approach and Methodology, of Section 4.3.2, Off-Airport Surface Transportation, of the Final EIS. For information regarding the estimates of the trip generations for the original and reduced Playa Vista Phase II project, see Table A2.1-1 of Volume A, Section A2.1, Off-Airport Surface Transportation, of the Final EIS.

FPC00004-6

Comment:

Assumptions are unsubstantiated and future growth prospects are not addressed.

The capacity of LAX, and therefore environmental impacts, does not reflect current or future conditions. Assumptions related to boarding gate types (present and to be built), aircraft mix, gate locations and quantities, and throughput capacity need to be substantiated. Virtually all environmental impacts relate to airport passenger and cargo capacity - yet there is no enforceable capacity restriction in place. Although we are told that the LAWA capacity assessment for Alternative D constrains capacity to 78.9 MAP, a comprehensive review by Professor Kanafani, preeminent expert on airport capacity at University of California, Berkeley, states LAX ground air traffic to be a much higher number. How does the LAWA and the FAA justify not accounting for any level of service above the 78.9 MAP? Further, there are numerous changes to the existing Alternative D that could increase either passenger or cargo capacity. How are these accounted for in the assessment?

Response:

Please see Response to Comment FAL00003-2 regarding capacity and other Master Plan issues raised in this comment. Also, please see Response to Comment FAL00003-64 regarding inter-gate time assumptions and analysis used in the LAX Master Plan, Response to Comment FAL00003-86 regarding proper use of design day to annual factors for passengers and aircraft operations, and Response to Comment FAL00003-87 regarding the aircraft load factor and peak hour load factor forecasts and their proper use in the LAX Master Plan. Also, please see Response to Comment FAL00003-63 regarding issues associated with the phasing of gates and construction-related congestion associated with the implementation of Alternative D improvements at LAX.

For more information on the topics discussed above and in the Responses to Comments cited above, please see the Final LAX Master Plan in which all existing conditions, aviation forecasts (both unconstrained and constrained), demand/capacity simulation analyses, facility requirements and alternatives for meeting these requirements have been prepared, reviewed and presented along with all associated methodology and assumptions. In particular, see Appendices A through I of the Final LAX Master Plan for substantial technical update and analyses of existing airport conditions and future demand/capacity simulation results associated with Alternative D. Please see Chapter 2 in Part I of the Final EIS in which this airport planning process has also presented the results and conclusions of this

process in context with the demonstrated purpose and need for the plan. Please see Chapter 4 of Part I of the Final EIS and Chapter A.2 of the Final EIS for the environmental impacts associated with each of the LAX Master Plan alternatives, including Alternative D. Please see Responses to Comments SAL00015-11 in Part II-Volume 9 of the Final EIS regarding commentor's consultant analysis and AL00015-312 in Part II-Volume 2, SAL00015-326 and SAL00015-333 in Part II-Volume 9 of the Final EIS regarding capacity issues. Also please see Part II-Volume 1 of the Final EIS for Topical Responses TR-GEN-3 regarding projected versus actual capacity levels at LAX and TR-MP-1 regarding air cargo activity and demand.

FPC00004-7

Comment:

Potential for additional growth is established for LAX with the open spaces created and airport layout changes made. Right now there are no ways to constrain growth in a "market driven" only environment. Yet future impacts are not discussed. Transportation growth into and around LAX and connecting to other airports in the region is not addressed for either passengers or cargo.

Response:

The comment is unclear as to where and how "additional growth is established for LAX with the open spaces created and airport layout changes made." Implementation of Alternative D would add more improved surface area at LAX than currently exists, and would therefore actually reduce the amount of open space area at the airport. In the event the commentor is suggesting that areas at LAX that are not proposed for improvements under Alternative D would be subject to additional growth in the future, that theory is speculative at best and is contrary to how airport improvements are regulated by FAA. FAA requires that LAWA maintain a current and approved Airport Layout Plan (ALP) that indicates all existing and future land uses associated with LAX. As described in Section 2.7, Proposed Federal, State and Local Actions and Required Permits, of Part I of the Final EIR, the current ALP for LAX is proposed to be amended as one of the federal approvals required for the project. That ALP will reflect the improved and unimproved areas associated with Alternative D. In order for LAWA to receive an unconditional approval of the ALP or to erect structures or change land uses in open spaces that are not on the approved ALP, FAA requires that any such proposal would first have to undergo federal environmental review and approval. Even for improvements shown on the approved ALP, FAA requires ongoing coordination with LAWA to ensure that proposed facilities meet applicable FAA Airport Design Standards.

In addition to the primary point raised in this comment, for additional information related to this comment, please see Response to Comment FPC00004-6 regarding Alternative D capacity constraints at LAX. Surface transportation impacts were addressed in Section 4.3, Surface Transportation, of Part I of the Final EIS and Section A.2.1, Off-Airport Surface Transportation, of Volume A of the Final EIS, with supporting technical data and analyses provided in Technical Reports 2 and 3 and Technical Reports S-2a and S-2b, Appendix F-D, and Appendix A-4. Please see Part II-Volume 1 of the Final EIS for Topical Responses TR-MP-2 regarding the SCAG Regional Transportation Plan, TR-MP-1 regarding Air Cargo Activity/Demand and TR-ST-1 regarding cargo truck traffic.

Also please see Part II-Volume 1 of the Final EIS for Topical Responses TR-RC-1 regarding the LAX Master Plan role in the regional approach to meeting demand and TR-RC-3 regarding high-speed rail including the section discussing the Intra-Regional (Southern California) Maglev System. The SCAG-sponsored Maglev studies closely analyzed the effects that a high speed Maglev system would have on the system of regional airports in Southern California.

FPC00004-8

Comment:

Another example of misleading assessments is the revision of the south runway complex. Priority has been given to increasing the spacing between runways by "only" 50 feet and to add a new center line taxiway. This large expenditure will facilitate increased ground air traffic. This controversial element is purported to address incursion avoidance, but an independent analysis and simulation by AAMES Research Labs using actual controllers questioned the relevance.

Response:

Comment noted. The south airfield runways have had a high incidence of runway incursions despite a number of management initiatives and physical improvements to the facilities. FAA air traffic controllers, airline chief pilots and FAA runway safety experts agree that the improvements associated with the LAX South Airfield are the best way to deal with the need to effectively eliminate runway incursions in this location. The following is an excerpt from Chapter 3 in Part I of the Final EIS describing the reasons for the suggested improvements.

The primary purpose for modifying the airfield as suggested in Alternative D is to develop a physical solution that will greatly reduce the risk of runway incursions. A runway incursion, as defined by the Federal Aviation Administration (FAA), is any occurrence in the airport runway environment involving an aircraft, vehicle, person, or object on the ground that creates a collision hazard or results in a loss of required separation with an aircraft taking off, intending to take off, landing, or intending to land. In June 2002, FAA published a study entitled, "FAA Runway Safety Report: Runway Incursion Trends at Towered Airports in the United States - CY 1998 - CY 2001." This report identified a total of 1,460 runway incursions out of 268 million airport operations in the U.S. that resulted in three collisions and four fatalities over the four years studied. LAX had 38 total runway incursions during the period of the FAA study and had an average rate of occurrence of 1.24 incursions per 100,000 operations. Annual runway incursions at LAX totaled 12, 10, 8, and 8, respectively, for the years 1998 through 2001. In 2002 total runway incursions declined further to six. FAA also classifies runway incursions by their relative severity. The highest severity is given to an incursion in which extreme action is needed to avoid a collision or if a collision occurs. Five of the 38 runway incursions at LAX during the period of the FAA study were in this category and none of the five resulted in a collision. Over 80 percent of these incursions took place on the South Airfield Complex.

The goal of the FAA is to raise awareness of runway incursions, identify solutions, and implement strategies to reduce their severity and frequency as well as the risk of a runway collision. Airport surface radar technology and airport infrastructure implementation at key airports like LAX are some of the strategies identified by FAA to help solve the problem. LAWA has already implemented improvements to airfield lighting, taxiway marking, runway signage, and has sponsored on-going seminars on airfield familiarization with airport users. However, more improvement is needed. Taxiway system configuration is one of the key infrastructure methods to solving the problem.

LAWA, in cooperation with NASA Ames Research Center, conducted a study titled "Los Angeles International Airport Runway Incursion Studies, Phase III - Center Taxiway Simulation" (published on July 31, 2003), comparing the costs and benefits of a center parallel taxiway and an "end-around" taxiway on the south airfield complex. LAWA sponsored and participated in this operational analysis and human-in-the-loop testing that included FAA Air Traffic Controllers from LAX Tower. The study concluded that the end-around taxiway greatly increased taxi time and delays for arriving aircraft and thereby increased the operational costs of this option and did not give any increased safety margin. Air traffic controllers also found the center parallel taxiway to be an operationally efficient solution to the primary cause of the most severe types of runway incursions experienced at LAX.

A new parallel center taxiway would be constructed between Runways 6L/24R and 6R/24L to reduce the potential for runway incursions and to enhance the safety of aircraft operations at LAX. The new taxiway would be 10,420-feet long and 100-feet wide. It would be planned as a full-length Modified Group VI parallel taxiway located 520 feet north of relocated Runway 6R/24L and 520 feet south of Runway 6L/24R. FAA Design Group VI taxiway separation standards call for 600 feet between a runway centerline and taxiway centerline intended to serve aircraft with Design Group VI tail heights, length and wing span. Significant analysis was provided in the Draft LAX Master Plan, Chapter VI, Section 3.2.6.3, Justification for the Modified Group VI Standards to Accommodate the NLA at LAX, documenting the feasibility of using 520 feet separation at LAX and meeting the same safety standards set by FAA for airfield safety.

In summary, the purpose of the center taxiway is to enhance safe aircraft operations and reduce the potential for runway incursions. It does not increase capacity. For additional information, please see Response to Comment SPHF00021-3 in Part II-Volume 11 of the Final EIS regarding the purpose of the center taxiway and aircraft runway operations of Alternative D and Response to Comment SPHSP00003-3 in Part II-Volume 11 of the Final EIS regarding the proposed runway and taxiway configuration in the south airfield complex. In addition, please see Response to Comment AL00037-16 in Part II-Volume 3 of the Final EIS regarding the feasibility and potential environmental impacts of using an end-around taxiway to reduce the potential for runway incursions. Also, please see Response to Comment PC00298-7 in Part II-Volume 4 of the Final EIS for more discussion on the need for airfield improvements.

FPC00004-9

Comment:

Mitigations proposed, timing, and their effectiveness are questionable.

Development at LAX has a long history of mitigation promises deferred and forgotten. The Interim LAX Plan of 1981, now superseded by the new documentation in December 2004, lists numerous mitigations never finished. The Interim Plan stated that if LAX exceeded 40 million annual passengers (MAP) the air commerce should be disbursed to Ontario and Palmdale. LAX passenger traffic was about 68 MAP prior to September 11, 2001 without such action.

Response:

Please see Topical Response TR-GEN-3 in Part II-Volume 1 of the Final EIS regarding the LAX Interim Plan and activity levels at LAX. Also see Topical Response TR-RC-1 in Part II-Volume 1 of the Final EIS regarding the role of LAX in meeting regional aviation demand, and the fact that Alternative D is designed to provide for a future (2015) activity level that is consistent with the Southern California Association of Government's (SCAG's) 2003 Regional Transportation Plan (RTP), which anticipates no growth at LAX and the dispersal of increased aviation activity to other airports such as Ontario and Palmdale.

As indicated in Topical Response TR-GEN-3, the LAX Interim Plan was, by intent, design, and title, only a short-term general guide for coordinating the development of Airport facilities with that of the surrounding community. As indicated in the statement of the Purpose and Use of the Plan, at the beginning of the document, "Major policies issues with regard to Airport capacity, roadway access, adjacent land use compatibility and environmental impacts will be addressed in a new plan to be initiated upon adoption of the Interim Plan." The very limited improvements that have occurred at LAX since 1981, primarily those completed in conjunction with the 1984 Olympics, were made consistent with the policies and programs of the LAX Interim Plan.

As also described in Topical Response TR-GEN-3, the Los Angeles Department of Airports (now Los Angeles World Airports - LAWA) completed in 1978 a Final EIR addressing several major improvement projects and actions identified as being necessary for LAX to accommodate the future growth level of 40 MAP. Based on regional aviation demand forecasts projected at the time, such growth was anticipated to occur by 1985. The 1978 EIR specifically recognized that the 40 MAP activity level for LAX was anticipated to be reached by 1985, and growth beyond 40 MAP would require an additional EIR to quantify potential impacts.

The 4-page LAX Interim Plan adopted in 1981 includes policies, general standards and criteria, a description of Airport features, and lists of potential Airport improvements and actions contemplated within a 5-year program and a 20-year program, as a general guide recognizing that the more complete long-term development plan for LAX will be developed following adoption of the LAX Interim Plan. As described in Topical Response TR-GEN-3, the LAX Master Plan serves as that long-term plan that, in accordance with the introduction to the LAX Interim Plan, addresses major policies issues such as capacity, roadway access, land use compatibility, and environmental impacts. It is important to note that the LAX Interim Plan does not state or require that "if LAX exceeded 40 million annual passengers (MAP) the air commerce should be disbursed (sic) to Ontario and Palmdale" as indicated in the comment. The Interim Plan states: The projected maximum air passenger volume will be approximately 40 million annually. Further increases in passenger volume are planned to be accommodated by Palmdale International Airport and satellite airports." The subject statement reflects the fact that, at the time, the future activity level at LAX was projected to reach 40 MAP by around 1985, and it was anticipated that improvements planned at that time for Palmdale International Airport and other satellite airports (i.e., Ontario International Airport) would attract and accommodate a passenger market demand that would have otherwise gone to LAX. The commentor has misunderstood or misrepresented the subject statement to suggest that it established a mandate for the activity level at LAX to be capped at 40 MAP, and that additional activity be assigned by the City to use the Ontario and Palmdale airports. The basis for, wording of, and facts surrounding, the 1981 LAX Interim Plan do not support that interpretation.

FPC00004-10

Comment:

LAX has rebounded to 62 MAP (and cargo tonnage has increased). The resultant LAX incremental traffic will have an even greater impact. Traffic mitigation potential is limited as there are few north-south arteries. The local non-airport related traffic and congestion has grown substantially since 2001 and is expected to worsen. The City of LA, for instance, has enacted a 34% density bonus above zoning allowance for all developments along transit corridors. Additionally, the local Community Plan authorized further increases.

Response:

Please see Response to Comment FPC00004-5 regarding how the Final EIS accounted for non-airport background growth. Proposed ground access improvements are described in Chapter 3, Alternatives, in Part I of the Final EIS for the four build alternatives under the heading "Traffic/Parking/Circulation Facilities," specifically in subsection 3.2.6 for Alternative A, subsection 3.2.7 for Alternative B, subsection 3.2.8 for Alternative C, and subsection 3.2.9 for Alternative D. Traffic mitigation measures for Alternatives A, B and C are presented in subsection 4.3.2.8, Mitigation Measures, of Section 4.3.2, Off-Airport Surface Transportation, of the Final EIS. Traffic mitigation measures for Alternative D are presented in subsection A.2.1.2.4.3 of Section A.2.1, Off-Airport Surface Transportation, of Volume A of the Final EIS.

In general, included in each of the four build alternatives are a variety of ground access improvements and traffic mitigation measures. These include improved freeway connectivity to LAX, widening of arterial roadways, an expanded series of remote terminals (FlyAways), intersection improvements (e.g., additional lanes, upgrading of signal control software, restriping, signal phasing) and fair-share contributions toward transit improvement projects. Alternatives A, B and C also include the LAX Expressway, which is a proposed roadway parallel to the I-405 Freeway for the exclusive use by LAX traffic.

The City of Los Angeles does offer a 35% density bonus above zoning allowance for developers proposing housing near a bus or rail stop. However, the list of approved development projects in Table 3S, Planned Development Projects Added to Background Assumptions, of Technical Report S-2b of the Final EIS would have already accounted for any planned density bonus. Not all property owners who could legally take advantage of a density bonus for housing will do so, and certainly not by 2015. It would be unreasonable to assume otherwise.

In addition, Southern California Association of Governments' growth projections for the region are already factored into the traffic model. Traffic growth from known, approved development projects was compared to the forecasts of growth from the Southern California Association of Governments (SCAG). If the SCAG forecasts were large enough to account for the approved development projects(s) in a particular zone, the SCAG forecast was used. If the SCAG growth forecast was not large enough for a particular zone to account for the approved development project(s), then population, housing and/or employment growth was added to that zone to ensure that sufficient growth was assumed to include all of the approved development projects. These trips were then "assigned" to a network of roadways to represent peak hour traffic flows.

Therefore, it is reasonable to conclude that the density bonus for housing near bus and rail stops has already been taken into account in the growth assumptions used for non-airport background trips in the ground access model for the Final EIS.

FPC00004-11

Comment:

The timing and completion of mitigation of impacts - in and out of Environmental Justice areas - is of serious concern. The health impacts of increased traffic and pollution affect all people and these costs are not included in any analyses. Tables documenting project characteristics and mitigations do not include schedules nor do they include responsible agencies to track remediation. In many cases mitigations such as intersection improvements and road widening is the responsibility of agencies in which the funding is not even requested (i.e. listed in the SCAG Regional Transportation Plan). The

EIS assumes full procurement of Manchester Square before implementation of the Master Plan, yet the "voluntary" buyout has not been accomplished because some people do not want to sell. The Master Plan and EIS/EIR all assume fully empty land where the Ground Transportation Center is to be built. Eminent domain is mentioned in a few short paragraphs, but no schedule or the impacts of this are mentioned. What is the federal government going to do to ensure tracking and completion?

Response:

Part I of the Final EIS identifies adverse impacts associated with implementation of the LAX Master Plan and provides a comprehensive set of Master Plan commitments and mitigation measures identified by LAWA and/or FAA to address such effects as identified under the CEQA analysis, the NEPA analysis, or both. (Specifically, these are presented in Chapter 5 of the September 2004 Addendum to the Final EIR and further refined by the Second and Third Addenda to the Final EIR.) Pursuant to Section 21081.6(a) of CEQA, a mitigation monitoring and reporting program (MMRP) for the LAX Master Plan - Alternative D has been prepared and adopted which specifies the timing of and monitoring responsibility for implementation of adopted mitigation measures.

A subset of the Master Plan commitments and mitigation measures has been identified in this ROD to address significant impacts identified by the NEPA analysis. These measures are conditions of approval of this ROD and are located in Appendix A of this ROD. In accordance with 40 CFR 1505.3, the FAA will take appropriate steps, through Federal funding grant assurances and conditions, airport layout plan approvals, and contract plans and specifications, to ensure that the mitigation actions identified in Appendix A are implemented during project development, and will monitor the implementation of these mitigation actions as necessary to assure that representations made in the Final EIS with respect to mitigation are carried out. The approvals contained in this ROD are specifically conditioned upon full implementation of these mitigation measures. These mitigation actions will be made the subject of special conditions included in future Federal airport grants to the City of Los Angeles.

The Final EIS is considered a project level environmental analysis for purposes of NEPA and will support the unconditional approval of all aspects of Alternative D except for LAX Northside (as described in detail in the ROD). However, for purposes of CEQA, the LAX Master Plan and EIR were considered to be completed at a program-level of analysis. As individual projects of the Master Plan are advanced for implementation, additional environmental evaluation will occur for purposes of CEQA, and additional details of mitigation will be provided, as appropriate.

There are no requirements under NEPA or CEQA that funding sources for mitigation measures be specified. A specific funding plan has not yet been prepared for the LAX Master Plan; however, it is anticipated that a joint funding effort would be pursued, involving Federal and State grants and other efforts. Much of the project would likely be funded with airport-generated revenues, such as concession fees, landing fees, revenue bonds, leases, and passenger facility charges (PFCs). It is not anticipated that any local tax revenue would be used for this project. Any federal funds for these improvements would not come from the general fund of the United States Treasury.

LAX is a major transportation facility located in an urbanized area, having many local jurisdictions, and operating within the regulatory environment of many agencies. As such, the potential impacts and regulatory authority over mitigation of those impacts may involve many agencies outside of LAWA. NEPA and CEQA require the presentation of mitigation measures for identified significant impacts irrespective of whether the lead agency has control of implementation of those measures. For mitigation measures presented in the Final EIS and Final EIR for which control and responsibility of the mitigation measures lie outside of LAWA's and FAA's jurisdiction, the lead agency shall participate in a fair-share manner to implement the measures, or otherwise encourage or promote the responsible agency to implement the measures as appropriate. In addition, please see Topical Response TR-ST-2 in Part II-Volume 1 of the Final EIS regarding the airport's funding abilities outside of the airport.

Please see Response to Comment FPC00006-8 regarding the acquisition program for Manchester Square.

FPC00004-12

Comment:

The analysis approach mandates a take it all or leave it.

The Master Plan and associated environmental reviews are inadequate. The preferred alternative, Alternative D, was added as an entirely new item by Addendum in 2002. Although necessarily lacking in specifics, an array of similar approaches (and project elements) from which to choose was not made. Environmental assessments, we've been told, were prepared for the comprehensive alternative only. Elements could not be segmented. These elements should be independently studied. No project segregating out the negative impacting elements can be configured.

Response:

The comment is unclear or mistaken about the background of Alternative D. As described in the Preface of Part I of the Final EIS, Alternative D was formulated in the fall of 2001, following the events of September 11, 2001 and the direction of Mayor James Hahn to develop a new alternative for evaluation along with the other alternatives (i.e., the No Action/No Project Alternative and Alternatives A, B, and C). Following almost 2 years of refinement and evaluation, Alterative D was formally presented within the context of the Draft LAX Master Plan Addendum and the Supplement to the LAX Master Plan Improvements Draft EIS/EIR, both published in July 2003.

Alternative D was designed and evaluated in a manner similar to that of the other build alternatives, identifying a comprehensive set of improvements comprising a Master Plan to serve LAX. As Master Plan alternatives, the overall characteristics of each alternative were addressed and compared, along with those of the No Action/No Project Alternative. An evaluation and comparison of the impacts associated with only specific elements of each alternative or possible combinations of elements of each alternative was not conducted because such an approach is unnecessary and inappropriate at a master plan level of planning. In accordance with NEPA requirements and FAA policies and procedures pertaining to the implementation of NEPA, the FAA analyzed the entirety of the proposed action in the Final EIS.

FPC00004-13

Comment:

NEPA versus CEQA differences and the multiple Addendums biased.

Although we have previously provided detailed comments to the common element responses, many of the detailed questions remain either unaddressed or inadequately addressed by reference to a generic response that doesn't answer the specific issues. The generic responses prepared for the EIS/EIR draft review failed to address numerous issues related to noise, health, traffic, and other environmental mitigation questions. Local stakeholders in the long standing LAX Advisory Committee, Westchester Neighbors Association, several Los Angeles Neighborhood Councils and the LAX-Community Noise Roundtable have expressed disappointment with the lack of specific responses.

Response:

This comment lacks sufficient specificity for FAA to substantively address the concerns raised. Part II of the Final EIS, as supplemented by Appendix AD-A of the September 2004 Addendum to the Final EIR, includes responses to all comments received on the Draft EIS/EIR and the Supplement to the Draft EIS/EIR. FAA took very seriously its mandate to provide meaningful responses to public comments. Responses to over 19,000 discrete comments were prepared. The comments and responses fill eleven volumes and a total of 7,315 pages. The responses provide technical information and clarification pertaining to substantive issues raised in the comments, including noise, health, traffic, and environmental mitigation.

FPC00004-14

Comment:

Although community leaders and airlines made numerous suggestions to alleviate shortcomings identified early in the development of Alternative D (and even created subset projects of Alternative D), none were ever seriously considered. Several iterations were conceived and at least two were presented at different hearings during the Plan development process. Sadly, LAWA and the Mayor refused to commit any resources out of the reported hundred twenty million dollars expended. Suggestions were only "filed" until after Alternative D was formalized and the Plan was approved. Addendum to the Final EIR (September 2004) referenced in Volume A presented an analysis for several community Alternative E (and E-1) plans that implied a highly detailed review, but they were rough cut at best. Conclusions were conjecture as best as analyses were based on basic layout drawings and necessarily very limited verbiage. None of the parties involved in the development of the ideas were even contacted for clarifications or further information.

Response:

During the public review period for the Supplement of the Draft EIS/EIR, a local citizens group that goes by the name "Alliance for Regional Solution to Airport Congestion" ("ARSAC") suggested a master plan for LAX with improvements different from those of Alternative D. ARSAC first presented its suggestions for consideration by LAWA at a series of public meetings sponsored by Mayor James Hahn to promote dialogue about the LAX Master Plan between citizens living near the airport and LAWA staff. ARSAC referred to that plan as "Alternative E" and formally submitted the proposal to LAWA and the FAA as part of their comments on the Supplement to the Draft EIS/EIR. ARSAC's proposal is reflected in Comment Letter SPC00133 in Part II-Volume 11 of the Final EIS. Alternative E is also discussed in Comment SPC00035-4, for which a written response describing the infeasibility of such a proposal is provided in Part II-Volume 10 of the Final EIS. Subsequent to the introduction of Alternative E, ARSAC developed a revised plan for LAX referred to as "Alternative E-1" and submitted it along with public testimony during the joint hearing of the Los Angeles Citywide Planning Commission and the Los Angeles World Airports Board of Airport Commissioners on June 14, 2004. At the same joint hearing of the Los Angeles Citywide Planning Commission and the Los Angeles World Airports Board of Airport Commissioners on June 14, 2004, Los Angeles City Councilmember Bernard Parks proposed an alternative plan for LAX that, while slightly different from ARSAC's Alternative E-1 proposal, was also referred to by Councilmember Parks as "Alternative E-1".

The feasibility of ARSAC E, ARSAC E-1, and Parks E-1, including the ability of each plan to satisfy the purpose and objectives of the LAX Master Plan, was analyzed and environmental considerations associated with the main components of each plan were also analyzed and compared to Alternative D, where appropriate. The feasibility of these three variations of Alternative E was addressed in Chapter 4, Feasibility Analysis of the Three "Alternative E" Proposals, in the September 2004 Addendum to the Final EIR. After careful consideration of all three variations of Alternative E, including ARSAC E, ARSAC E-1, and Parks E-1, it was concluded that these proposals are infeasible and fail to meet the purpose and objectives of the LAX Master Plan. Thus, in accordance with 40 CFR § 1502.14(a), the three variations of Alternative E were eliminated from detailed study in the Final EIS based on the reasons presented in Chapter 4 of the September 2004 Addendum to the Final EIR.

Also, please note that FAA's statutory mission is to ensure the safe and efficient use of navigable airspace in the United States. This includes the safe and efficient development of public use/publicly owned airports. Airports in the United States are locally owned and operated. The decision to develop an airport is the responsibility of the airport sponsor. FAA does not direct the timing or nature of development at the nation's airports. Similarly, under the Airline Deregulation Act of 1978, the FAA does not regulate rates, routes, and services of air carriers or cargo operators. Airline managements are free to decide which airports to serve based on market forces. Nonetheless, Alternative D has been designed by LAWA to use physical constraints to encourage airlines to use other regional airports.

FPC00004-15

Comment:

Another issue previously identified, but not adequately addressed is the study of air quality. Studies conducted to determine PM2.5 levels were not done, the locations where test specimens were taken

(off airport at 120th Street and at the West LA Veterans Administration rather than in areas directly around LAX or along the flight paths), adequacy and frequency of tests, the ability to differentiate stationary sources from aircraft, and much more. Will these health impacts and additional tests be addressed?

Response:

Please see Response to Comment FAL00001-28 regarding analysis of PM2.5. It is unclear as to what tests and test specimens the commentor is referring. For purposes of the LAX Master Plan Draft EIS/EIR, an air quality monitoring study was conducted under the flight path of the south runways. The Final EIS addressed air quality in Section 4.6, Air Quality (Part I), and Section A.2.3, Air Quality (Volume A). Supporting technical data and analyses were provided in Appendix G, Technical Report 4, Appendix S-E, Technical Report S-4, Appendix F-B, Appendix A-2a, and Appendix A-2b.

FPC00004-16

Comment:

Endangered and threatened species/Coastal Zone issues include impacts on flora and fauna that are not mitigated. When promises ere made to ensure mitigations in the future, how will the federal government ensure that promises are followed up?

Response:

The Final EIS fully discloses the impacts to federally listed threatened and endangered species. Further, mitigation has been identified to address the impacts associated with the proposed development as described in the Final EIS. Section A.2.4, Endangered and Threatened Species of Flora and Fauna, and Section A.2.5, Coastal Zone Management and Coastal Barriers, of Volume A of the Final EIS provide a discussion of impacts to flora and fauna and describe mitigation measures to compensate for those impacts. Please refer to subsection A.2.5.4.4, Refinements to Conclusions of EIS, of Volume A of the Final EIS, for a discussion of mitigation measures related to biological resources that were refined to reflect coordination undertaken by the FAA and LAWA with the California Coastal Commission in support of the California Coastal Commission's concurrence with the Alternative D Consistency Certification and Consistency Determination (Mitigation Measures MM-BC-1, MM-BC-2, MM-BC-9, MM-BC-13 and MM-ET-4). All other mitigation measures remain unmodified and are discussed in Section 4.10, Biotic Communities, Section 4.11, Endangered and Threatened Species of Flora and Fauna, and Section 4.12, Wetlands, in Part I of the Final EIS.

As described in the above-mentioned mitigation measures, the FAA is responsible for conservation measures related to the relocation of navigational aids, while LAWA is responsible for all other conservation measures. The mitigation measures to address significant impacts identified by the NEPA analysis are conditions of approval of the ROD and are located in Appendix A of this ROD. In accordance with 40 CFR 1505.3, the FAA will take appropriate steps, through Federal funding grant assurances and conditions, airport layout plan approvals, and contract plans and specifications, to ensure that the mitigation actions identified in Appendix A are implemented during project development, and will monitor the implementation of these mitigation actions as necessary to assure that representations made in the Final EIS with respect to mitigation are carried out. The approvals contained in the ROD are specifically conditioned upon full implementation of the mitigation measures identified therein. These mitigation actions will be made the subject of special conditions included in future Federal airport grants to the City of Los Angeles.

Pursuant to Section 21081.6(a) of CEQA, a mitigation monitoring and reporting program (MMRP) for the LAX Master Plan - Alternative D has been prepared and adopted which specifies the timing of and monitoring responsibility for implementation of adopted mitigation measures. The MMRP is a program by which compliance with the proposed mitigation measures identified in the Final EIR is ensured. Specifically for threatened and endangered species, as well as for special status flora and fauna, the FAA and LAWA will report to the following resource agencies: U.S. Fish and Wildlife Service, the California Department of Fish and Game and the California Coastal Commission.

FPC00004-17

Comment:

Also, has anyone looked into the illegal refilling of the immense hole in Continental City property owned by LAWA during June-August 2004 time frame with unknown origin fill? During that time period, before the Miscikowski City Council Office staff became advocates for Mayor Hahn's plan, the level of the hole was raised at least ten feet with hundreds of loads of dirt. The Council Office verbally told us that no permit had been issued and that it was eventually stopped by LA City Building and Safety. We have no written reports on that activity.

Response:

This is not a comment on the contents of the Final EIS.

FPC00004-18

Comment:

As mentioned earlier, noise health issues have not been fully addressed either. Single event noise, autonomic response health impacts, areas not "designated" that are adjacent to the 65 CNEL impacted areas that receive extensive noise but not necessarily the "average" high value are not federally "impacted" but recent health studies are showing that these people are still damaged to a significant extent. The assumptions of flight tracks followed, aircraft quantity and mix, low frequency noise levels that are not currently measured or tracked, effects of topography, and many more issues are unaddressed. When and how will the federal government address these? In calculating CNEL impacts for sound proofing a certain number of days of eastern take offs are assumed, but what about "abnormal" years like this one when there has been an inordinate number of days of eastern take offs that changes the locations of 65 CNEL on a "temporary" basis?

Response:

Please see Response to Comment AL00017-52 in Part II-Volume 2 of the Final EIS regarding the health effects of aircraft noise. As indicated in that response, the type of analysis requested by the commentor is not appropriate, as it would be based on speculation, lacking reliability and failing to provide useful information to the public or the decision maker, which is the goal of NEPA.

As discussed in Section 4.1, Noise, in Part I of the Final EIS, single-event noise impacts were addressed in the Final EIR for CEQA purposes only. Federal standards for aircraft noise evaluation, as formalized in FAA Order 5050.4A, Airport Environmental Handbook, do not include any federal standards or criteria for single-event aircraft noise evaluations, nor is an evaluation of single event aircraft noise effects required under these Federal standards.

The flight track assumptions, aircraft quantity and mix were provided in Appendix D, Aircraft Noise Technical Report, for the 1996 baseline, No Action/No Project and Alternatives A, B, and C scenarios. Appendix SC-1, Supplemental Aircraft Noise Technical Report, provided the information for Year 2000 and Alternative D conditions. Low frequency noise is incorporated, as is noise in all other frequencies, into the computations of the average annual noise levels provided by the Integrated Noise Model in the CNEL metric. The effects of topography are inconsequential and of no perceivable effect in the area within the contours of significant aircraft noise.

The computation of CNEL contours for future alternatives utilized an easterly operations level of nearly 6 percent, in accordance with standard planning practices used in the development of capacity evaluations for the master plan. The recent operating history at LAX has indicated easterly operations less than 2% of the time. Consequently, the projections of noise for future years is made conservative by potentially overestimating the noise levels east of the airport. Further, soundproofing boundaries, as described in Section 4.2, Land Use, of Part I of the Final EIS are based on noise contours prepared for the 1992 Fourth Quarter Quarterly Report submitted by LAWA to Caltrans in accordance with California Title 21. These contours reflect noise levels measured in 1992 and are substantially larger than the contours produced by the INM for any of the EIS scenarios. Where the EIS alternatives produced shifts that fell outside the 1992 contour boundary, the land use mitigation program recommended the sound proofing boundary be expanded to include any new areas falling within the 65 CNEL contour.

FPC00004-19

Comment:

Also, recent studies show a disproportionate impact on youth from air contaminations. When will this be included?

Response:

Issues regarding health risks associated with toxic air pollutants (TAPs) were addressed by LAWA in Section 4.24.1, Human Health Risk Assessment (HHRA), of the Final EIR. The HHRA is an element of the CEQA analysis that is mandated under California law, and does not relate to NEPA requirements. There are no federal standards regarding exposure to toxic air pollutants (TAPs). Furthermore, at this time, the relationship between TAPs and human health are not well understood. As a result, the data necessary to make conclusive statements about the relationship between TAPs and health, and children's particular risk, if any, is not available. For these reasons, as clearly indicated in Section 4.24.1.1 in Part I-Volume 4 of the Final EIS, as well as in Section A.2.2.4 (page A.2-88) in Volume A of the Final EIS, the HHRA is not being relied on by the FAA in evaluating the choice among alternatives presented in the Final EIS. The information, analyses, and conclusions reached in the CEQA HHRA analysis were reproduced in the Final EIS for informational purposes only, are not relied upon in the FAA's Record of Decision, and do not constitute a part of the Final EIS for purposes of NEPA compliance.

FPC00004-20

Comment:

Conclusion.

Although Volume A attempts to bring organization to the tens of thousands of pages of conflicting, inconsistent documentation it is insufficient to overcome the Plan and environmental impact assessment fatal flaws. Mitigations are proposed, but not guaranteed - with some relying on promises made for other governmental agencies that have not included them in their financial plans.

Response:

Comment noted. Please see Responses to Comments above. In particular, please see Response to Comment FPC00004-11 regarding the monitoring program and funding for mitigation measures.

In accordance with 40 CFR 1505.3, the FAA will take appropriate steps, through Federal funding grant assurances and conditions, airport layout plan approvals, and contract plans and specifications, to ensure that the mitigation actions identified in Appendix A of this ROD are implemented during project development, and will monitor the implementation of these mitigation actions as necessary to assure that representations made in the Final EIS with respect to mitigation are carried out. The approvals contained in this ROD are specifically conditioned upon full implementation of these mitigation measures. These mitigation actions will be made the subject of special conditions included in future Federal airport grants to the City of Los Angeles. The mitigation measures are fully enforceable under Cal. Pub. Res. Code Section 21081.6.

FPC00004-21

Comment:

Everyone agrees that LAX needs improvements to become safe, secure, and more efficient but none of the options presented do this.

Less can be more. A smaller plan, without the most objectionable elements, could (and should) have been achieved by further analysis and real, open discussion. Give-and-take is required, not hundreds of meetings to tell people what is going to be done.

To prop up a faltering Plan, Councilwoman Miscikowski prepared, in 2004, a politically generated list of "consensus" items - many of which actually enjoy general stakeholder acceptance. Several of the elements of Alternative D, however, continue to be almost universally opposed.

Physical design and placement of even the "consensus" elements remains at issue in addition to the ability to mitigate impacts (and their timing). Despite this opposition, Alternative D implementation plans were approved by the City of Los Angeles and are moving forward with scheduling of ALL projects for construction (see Master Plan section 2.10).

Response:

Comment noted. Please see Topical Response TR-ALT-1 in Part II-Volume 1 of the Final EIS regarding the range of alternatives analyzed in the Final EIS. It should be noted that, at the time of the publication of the Notice of Intent, all of the project alternatives under consideration included five or six runways. In response to public input received during the scoping process, LAWA developed a lower capacity alternative, Alternative C. Later, in response to public comment on the Draft EIS/EIR, LAWA developed an even more reduced capacity alternative, Alternative D, which would serve a level of future (2015) airport activity comparable to that of the No Action/No Project Alternative. Please also see Response to Comment FPC00006-20.

FPC00004-22

Comment:

We, like the multiple Congressmen, County Supervisors, local State Representatives and various elected officials of surrounding cities would like to see the comment period extended so that more detailed comments can be submitted and a new plan established. A rush to approve this plan should be avoided despite the extended time period and massive financial expenditures.

Response:

In accordance with 40 CFR 1506.10(b)(2), FAA did not make a decision on the proposed action for a minimum 30-day period following publication of the Final EIS. Although it is not required that public comments be allowed during this timeframe, FAA decided to permit public comment in accordance with 40 CFR 1503.1(b). Regarding requests for an extension of time to comment on the Final EIS, FAA carefully considered such requests and determined that, based on the fact that comments were requested on only a limited portion of the Final EIS, specifically Volume A and associated appendices, the time allotted was sufficient without need for extensions of the comment period. Furthermore, in evaluating requests for extensions of the comment period, FAA took into account the fact that much of the information in Volume A was made available to the public prior to the publication of the Final EIS. More specifically, this includes FAA's Coastal Zone Management Act Consistency Determination and the City of Los Angeles' Coastal Zone Management Act Consistency Certification. The Los Angeles/El Segundo Dunes Habitat Restoration Plan and the California Coastal Commission's Staff Report were also available to the public prior to release of the Final EIS.

FAA made the Final EIS available to the public on January 13, 2005. This was one week before publication of the Notice of Availability of the Final EIS in the Federal Register. Thus, the comment period ran for five weeks.

FPC00004-23

Comment:

We urge the FAA to take the lead in protecting the health of the large population surrounding LAX, the airlines' economic viability, and to avoid risking harm to the general economy any incident might bring. Reject each of the alternatives and force development of a new, more effective alternative.

Response:

Comment noted.

FPC00005 Parks, Bernard City of Los Angeles 2/22/2005

FPC00005-1

Comment:

I send this letter with much disappointment and frustration over The Federal Aviation Administration's (FAA) lack of response to genuine concern and request to extend the comment deadline from February 22, 2005 - March 21, 2005. The said document took the well-funded and specialized agencies, FAA and Los Angeles World Airport (LAWA) several months to complete yet today, smaller agencies, citizen groups and concerned neighbors of the airport are required to read and comment within one month. That is simply unacceptable.

Response:

In accordance with 40 CFR 1506.10(b)(2), FAA did not make a decision on the proposed action for a minimum 30-day period following publication of the Final EIS. Although it is not required that public comments be allowed during this timeframe, FAA decided to permit public comment in accordance with 40 CFR 1503.1(b). Regarding requests for an extension of time to comment on the Final EIS, FAA carefully considered such requests and determined that, based on the fact that comments were requested on only a limited portion of the Final EIS, specifically Volume A and associated appendices, the time allotted was sufficient without need for extensions of the comment period. Furthermore, in evaluating requests for extensions of the comment period, FAA took into account the fact that much of the information in Volume A was made available to the public prior to the publication of the Final EIS. More specifically, this includes FAA's Coastal Zone Management Act Consistency Determination and the City of Los Angeles' Coastal Zone Management Act Consistency Certification. The Los Angeles/El Segundo Dunes Habitat Restoration Plan and the California Coastal Commission's Staff Report were also available to the public prior to release of the Final EIS.

FAA made the Final EIS available to the public on January 13, 2005. This was one week before publication of the Notice of Availability of the Final EIS in the Federal Register. Thus, the comment period ran for five weeks.

FPC00005-2

Comment:

My brief review of the material did not offer much of a difference. Instead, my superior Plan E was belittled without any interview or meeting with my staff and me. I have therefore decided to offer comments while also explaining my plan in very simple yet somewhat detailed way.

Response:

Comment noted. Please see Responses to Comments below.

FPC00005-3

Comment:

Introduction

The Consensus Plan for LAX is an exorbitantly expensive proposal that lacks common sense and community support. It is time to rethink the entire master planning process and make a fresh start. Los Angeles World Airports should go back to the drawing board and craft a sensible, cost-effective plan for LAX that makes the most of scarce transportation dollars and benefits the entire region.

It is clear that LAX, one of the crown jewels of Southern California's economy, needs to be modernized. Many of its facilities are outmoded and inadequate for handling a new generation of 21st-century aircraft. The aviation world changed after September 11, 2001, and new security challenges need to be met. Although LAX passenger and aircraft traffic plummeted after 9/11, it has rebounded and is almost

back to pre-9/11 levels. Runway and taxiway improvements are needed to address runway incursion problems that plague the airfield, to ensure the safety of the traveling public.

However, the LAX Consensus Plan is a misguided approach to modernization. It is based on the premise that car or truck bombs are the primary threat to the security of passengers and the functioning of LAX. To address this threat, it would build major new off-airport facilities such as the proposed Ground Transportation Center to separate passengers and vehicles from a new Central Terminal Area. Still; there would be risks associated with concentrating passengers in those facilities, and the Automated People Mover System that would connect them would also be vulnerable to attack. Building these new facilities would be enormously expensive, comprising a major part of the $11 billion price tag for the plan. It is questionable that making such costly, irreversible changes at LAX to address a single threat scenario is a prudent use of limited airport funds. Better information is needed to assess and compare the coat-effective of a variety of security alternatives at LAX before making irreversible commitments.

Response:

Comment noted. The FAA agrees with the Councilmember's assessment of the clearly demonstrated purpose and need for the improvements suggested for LAX.

This comment does not raise or pertain to any environmental issues that are subject to NEPA review requirements. Notwithstanding, Alternative D, the Enhanced Safety and Security Plan, has been designed to serve a level of future (2015) airport activity comparable to that of the No Action/No Project Alternative, will improve airfield safety and improve convenience and efficiency. A task force of local, state, and federal law enforcement agencies evaluated existing conditions at LAX with respect to security and vulnerability to terrorist attack. The consensus of this task force was that security risks existed and could be improved. LAWA has proposed Alternative D to address important risks identified by that task force. For more information, please see Topical Response TR-SEC-1 in Part II-Volume 1 of the Final EIS which addresses the most frequently raised security-related issues pertaining to the design and ability of Alternative D to enhance existing safety and security at LAX. Also, please see Responses to Comments AL00051-93 in Part II-Volume 3, PC01881-31 in Part II-Volume 6, and PC02131-5 in Part II-Volume 7 of the Final EIS.

FPC00005-4

Comment:

It also questionable whether the "hassle factor" at LAX that has recently driven so many passengers to alternate airports in the region would be less with the new master plan. Most passengers would need to first park, take the people mover or a shuttle to the Ground Transportation Center for initial screening, and then take another two mile trip on the people mover to the new Central Terminal Area for a final security check. This circuitous journey could increase the perceived "hassle factor" for many LAX passengers.

Response:

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

FPC00005-5

Comment:

The Consensus Plan would also create an entirely new set of airport ground access problems. Passengers currently access LAX from a variety of directions (Lincoln, Sepulveda, Century, La Tijera, etc.). Under the new proposal, passenger access would be concentrated near the San Diego Freeway, which would increase congestion and traffic backups on that highly congested facility. The alternative would also increase congestion on local streets in communities around the Manchester Square area where the Ground Transportation Center is being proposed. A number of ground access improvements are being proposed to mitigate these potential problems, including a new interchange at Lennox

Boulevard at the San Diego Freeway. It is unclear how much these improvements would cost, or how they would be paid for.

Response:

Figure S6 in Technical Report S-2b, Off-Airport Surface Transportation, shows the changes to total traffic volumes due to the addition of the interchanges on the I-405 and I-105 freeways in the PM peak hour in 2015 for Alternative D. The traffic model results indicate the proposed Lennox Boulevard Interchange will encourage airport traffic to use the freeway over the surface streets. As airport related traffic increases on the I-405 Freeway, non-airport related traffic shifts to the parallel surface streets. However, the impact of these interchanges on the surface streets is limited to a small area. Alternative D calls for widening surface streets in the vicinity of the GTC and ITC, including Aviation Boulevard, La Cienega Boulevard, Arbor Vitae Street and 111th Street to improve the movement of traffic on surface streets. Traffic mitigations would also include significant improvements to Century Boulevard east of Aviation Boulevard and Imperial Highway at the I-105 ramps east of Aviation Boulevard. Alternative D also includes several new lane-miles of on-airport roadways connecting the GTC and ITC with the surface streets and the freeway system to prevent queuing of airport traffic onto the existing transportation network.

There are no requirements under NEPA or CEQA that funding sources for mitigation measures be specified. A specific funding plan has not yet been prepared for the LAX Master Plan; however, it is anticipated that a joint funding effort will be pursued, involving Federal and State grants and other efforts. Much of the project will likely be funded with airport-generated revenues such as concession fees, landing fees, revenue bonds, and passenger facility charges. It is not anticipated that any local tax revenue would be used for this project. Moreover, any federal funds for these improvements would not come from the general fund of the United States Treasury.

FPC00005-6

Comment:

The estimated $11 billion dollar cost of the Consensus Plan would place an enormous financial burden an airport tenants and users at LAX. It is more than twice the cost of planning and constructing Denver International ($4.2 billion). It is almost twice the cost of the $5 billion needed to modernize San Francisco International (SFO). Airport costs per passenger at SFO are now three times that of LAX ($18 vs. $6) because of new fees needed to fund its modernization. This drove cost-conscious airlines and passengers to less expensive airports in the Bay Area, particularly Oakland International. In combination with the events of September 11, 2001 and the SARS crisis, passenger traffic at SFO plummeted. The airport's bond ratings have been lowered twice, and it recently lowered its fees to $12 per passenger to regain the lost service.

Other major airports have also experienced negative repercussions from expensive development or redevelopment projects. Miami International Airport is in the middle of a $4.8 billion terminal and runway expansion project, and has recently lost 4 million passenger a year, mainly due to its high landing fees and discount carriers moving to the cheaper Fort Lauderdale International Airport as a result. Escalating expansion bills have driven costs higher, raising the cost per passenger even more at Miami International and driving away more discount service in a downward spiral.

At Indianapolis Airport, there is great concern that airlines will cut routes or leave the airport altogether because of the airline fee hikes from $7 per passenger to $10 per passenger needed to fund the airport's new $1 billion terminal.

Because of the very high landing fees at Narita and Kansai airports, airlines that used to fly to Japan are now flying directly to less expensive airports in South Korea or Taiwan.

LAX will become a similarly high-priced airport if it goes ahead with implementing the Consensus Plan. At $5.85 per enplaning passenger, LAX currently has one of the lowest landing fees in the country. However, it was estimated by the LA Times that fees would have to almost quadruple to $22 per passenger to fund a $9 billion Consensus Plan (past estimate). Fees per passenger would have to be even higher to fund a $11 billion Consensus Plan (current estimate), and greater still to support a plan with escalating, unanticipated costs, which are likely for a "mega project" such as this. In addition, the Consensus Plan proposes runway relocations (one of the "Yellow Light" projects) that would require the elimination of passenger terminals 1, 2 and 3. These terminals provide low-cost, short-haul flights by airlines such as Southwest. Alternative short-haul airports including Bob Hope, Long Beach and John

Wayne all are capacity-constrained, and have limited potential to make up for this loss of short-haul service.

The Consensus Plan would be a tremendously costly upgrade of a major international airport that would not produce any increase in capacity. Its primary impact will be to make LAX much more expensive for airline tenants who will be asked to foot the bill for the improvements. This would inevitable translate into higher airfares for the traveling public. Economically, airlines are in dire straits, and even the low-cost discount carriers are struggling to absorb soaring fuel costs. Carriers are moving to low-cost airports to ensure their economic survival Even international air service is increasingly being taken over by low-cost discount carriers that avoid expensive airports with high landing fees. Flying a new generation of longer-range aircraft, international carriers can now fly over the region to alternative airports like Phoenix Sky Harbor and Las Vegas McCarron. With high landing fees (and/or increased Passenger Facility Charges) needed to fund the Consensus Plan, only the most expensive carriers would remain at LAX, offering premium service at high fares. A jump in lease rates for all airport tenants would also be expected, and air travelers would face higher prices for goods bought in airport stores and restaurants. By so markedly increasing its costs to airport users, LAX would be an airport that turns its back on airlines and other tenants interested in providing affordable air service to the traveling public. Full implementation of the Consensus Plan would make LAX a very expensive and exclusive airport that would have to cater to the "traveling elite" that could afford its high airfares and costs.

Response:

The comments regarding the Consensus Plan are noted. It should be noted that the Consensus Plan to which the commentor is referring is the implementation process outlined in the LAX Specific Plan. The LAX Specific Plan is a local implementation mechanism that was adopted by the Los Angeles City Council. The LAX Specific Plan is not a Federal plan and is unrelated to the Final EIS. The LAX Master Plan is a plan that will guide the growth of LAX through 2015. It is FAA's understanding that LAWA intends to construct all components of Alternative D.

As discussed in Section 2.8, Funding, of the Final EIS, the proposed funding includes a combination of FAA Airport Improvement Fund grants, passenger facility charges, general airport revenue bonds, airline fees, and other state/federal grants. No Los Angeles General Fund dollars will be used to pay for any of the proposed improvements. Any federal funds for these improvements will not come from the general fund of the United States Treasury. LAWA believes the airlines will be charged cost-beneficial rates to improve the safety and security of the airport, reduce traffic congestion, change the airfield and terminal airside to accommodate new aircraft, improve the efficiency of terminal operations, and eliminate the remote aircraft parking.

It is very difficult to compare master plans among several airports. The goals of the master plan, existing facilities, proposed facilities, and timelines are different for each airport. The landing fees and terminal rentals at a given airport typically represent between 4 and 6 percent of an airline's cost to operate at that airport. Differential pricing between airports in a region would be a minor factor among the many that an airline would consider when deciding whether to provide service to a given airport. Please see Topical Response TR-RC-1 in Part II-Volume 1 of the Final EIS regarding the Master Plan's role in a regional approach to meeting demand, TR-MP-2 regarding LAWA's efforts to ensure compatibility between the LAX Master Plan and the SCAG RTP, TR-RC-5, which discusses multi-airport markets, airline economics and passenger choice, and TR-RC-2 regarding the role of deregulation in aviation planning and for a discussion of airline responses to market demand, deregulation, and airport pricing models.

FPC00005-7

Comment:

A new smart and sensible LAX master plan should be developed that maximizes airport dollars and enhances the ability of Los Angeles World Airport to implement a truly regional vision. A "strategic planning" approach should be pursued, that implements the most critically needed improvements in the short term, and has the flexibility to adjust to changing events and circumstances over time. Cost effective security alternatives to the proposed Ground Transportation Center should be evaluated These could include installing bomb resistant glazing and barriers in terminal buildings, increased inspection and surveillance of vehicles using state-of-the-art technology, and prohibition of some high-risk vehicles from entering the Central Terminal Area. Most importantly, the master plan should be part of an

integrated master plan for all airports run by Los Angeles World Airports, which emphasizes strategies for decentralizing air service to Palmdale, Ontario, and other airports in the region.

The exorbitant expense of the Consensus Plan would saddle Los Angeles World Airports with an enormous debt to be serviced for years to come, which would hamstring its ability to carry out a true regional aviation vision. This would greatly limit the ability of the organization to fund worthy projects at other airports it runs, such as making ground access and other facility improvement at Palmdale Airport, and planning for high-speed rail access to both Palmdale and Ontario airports. These and other projects will be needed to extend the market reach of these airfields so that they can become viable options for many Southern California passengers that currently use LAX.

Response:

Comment noted. Alternative D, Enhanced Safety and Security Plan, has been designed to serve a level of future (2015) airport activity comparable to that of the No Action/No Project Alternative. Alternative D is consistent with the policy framework of the SCAG 2001 RTP and Draft 2004 RTP, which call for no expansion of LAX and, instead, shifting the accommodation of future aviation demand to other airports in the region. The comment suggests that the Master Plan for LAX should be abandoned and a new master planning process be undertaken jointly for all airports under LAWA's control. This proposal is not within FAA's authority, as improvement of the nation's airports are initiated and carried out by airport owners and operators. FAA's role is to provide review and approval of such proposals as appropriate.

Please see Response to Comment FPC00005-6 regarding the proposed funding of Alternative D.

Also, please see Part II-Volume 1 of the Final EIS for Topical Response TR-RC-1 regarding the Master Plan's role in a regional approach to meeting demand, Topical Response TR-RC-5 that discusses multi-airport markets, airline economics and passenger choice, and Topical Response TR-RC-2 regarding the role of deregulation in aviation planning for a discussion of airline response to market demand, deregulation, and airport pricing models. Also, please refer to Topical Response TR-MP-2 In Part II-Volume 1 of the Final EIS regarding LAWA's efforts to ensure compatibility between the LAX Master Plan and the SCAG RTP. The commentor's statements about the effectiveness of various approaches to enhancing security does not pertain to the adequacy of analysis contained in the FAA's Final EIS. Nevertheless please see Topical Response TR-SEC-1 in Part II-Volume 1 of the Final EIS, which addresses the most frequently raised security-related issues pertaining to the design and ability of Alternative D to enhance existing safety and security at LAX.

FPC00005-8

Comment:

Since the Consensus Plan is fundamentally flawed and lacks community support, it will certainly face legal challenges in the future. Its phased approach is ambiguous and leaves too many questions to be answered at a later date, likely through future litigation. These questions include whether the controversial "Yellow Light" projects serve as mitigation measures for the entire plan, and whether the entire Consensus Plan would retain its integrity if these measures were not implemented. Also, future litigation will address the question of whether the environmental impact report for the plan, that has old information dating to 1996, is still relevant.

The Consensus Plan implies that the controversial "Yellow Light" projects may not be implemented because they would have to go through a greater degree of scrutiny than the "Green Light" projects. However, the plan is misleading in that it makes no provisions for the possibility for not implementing these projects, by offering alternative measures that would attain results similar to that of the "Yellow Light" projects, but at much less expense and impact on surrounding communities. These results would include reducing aircraft runway incursions, reducing traffic in the central terminal area, and achieving security for the traveling public. Further, it is questionable whether the "Yellow Light" projects will have all of the positive benefits that have been attributed to them, particularly the Ground Transportation Center. More study is needed to determine the exact level security that it would afford compared to alternative safeguards. Its traffic impacts also warrants further study, particularly since it will concentrate passenger access off an already highly congested I-405 Freeway.

Response:

The comments regarding the Consensus Plan are noted. In December 2004, the City Council of the City of Los Angeles adopted the Final LAX Master Plan (Alternative D), the LAX Plan, and the

ordinance establishing the LAX Specific Plan. The LAX Plan and LAX Specific Plan together comprise what is often referred to as the "Consensus Plan." The LAX Specific Plan is not a Federal plan and is unrelated to the Final EIS. These three documents - LAX Master Plan, LAX Plan, and LAX Specific Plan - serve different purposes but work in concert with one another.

The Master Plan presents the essential elements of Alternative D (the "Master Plan Projects"), serves as a broad policy statement regarding the conceptual design framework of future improvements at LAX, and will act as a guide to be consulted by LAWA as it formulates and processes these Projects. The LAX Plan provides a land use policy framework for the future development of LAX and the LAX Specific Plan provides zoning and development regulations, all of which are consistent with the vision established in the Master Plan. Moreover, the LAX Specific Plan is the principle mechanism by which Master Plan Projects will be implemented.

The LAX Plan and LAX Specific Plan do not change the elements or the conceptual design framework of the Master Plan, nor do they preclude the future implementation of any Master Plan Project; rather, they ensure that Master Plan Projects are implemented in a responsible and responsive manner. The Specific Plan also ensures that certain procedures are followed by the City prior to issuance of permits for, or construction of, Master Plan Projects.

Under the approved LAX Plan and LAX Specific Plan, all Master Plan Projects can be implemented, both those referred to by the commentor as "green light" projects and those referred to by the commentor as "yellow light" projects. All Projects are subject to one tier of review called LAX Plan Compliance Review. An additional tier of review, called an LAX Specific Plan Amendment Study, was created for those Master Plan Projects that the City Council considered in need of more rigorous and comprehensive analysis. It is these Master Plan Projects that are the so-called "yellow light" projects. It is important to note that the terms "green light" and "yellow light" are never actually used in the Specific Plan. Rather, the Specific Plan identifies the Projects which require a LAX Specific Plan Amendment Study. It is envisioned that LAWA will move forward with the requisite LAX Plan Compliance Review and/or LAX Specific Plan Amendment Study as necessary to facilitate full implementation of the Master Plan.

The City Council approved Alternative D in its entirety and it is FAA's understanding that LAWA intends to construct all components of Alternative D. Accordingly, the environmental documents evaluate the whole of the action for each alternative.

Comments regarding the appropriateness of the 1996 "baseline" used in the Final EIR do not pertain to the NEPA requirements or the Final EIS. CEQA uses the "baseline" concept for purposes of determining the significance of impacts of a proposal. NEPA does not employ this approach. Nevertheless, please see Topical Response TR-GEN-1 in Part II-Volume 1 of the Final EIS regarding the use of baseline data from 1996.

Regarding the need for additional study of the Ground Transportation Center (GTC), in accordance with the LAX Specific Plan, LAWA will be required to undertake additional study of this project, including study of traffic impacts and security considerations. It should be noted that RAND is currently analyzing the security aspects of Alternative D. Please see Response to Comment FAL00003-16 regarding the status of this study.

FPC00005-9

Comment:

Fortunately, there is an LAX master plan alternative to the Consensus Plan that not only removes the uncertainties that are certain to trigger litigation, but promises to be much more cost-effective as well. It would also serve a broader spectrum of the traveling public while minimizing impacts an surrounding communities. That master plan alternative is called Alternative E-1, which eliminates the controversial "Yellow Light" projects that have generated so much opposition and concern among impacted communities. This superior master plan alternative is described in further detail below.

Primary Characteristics of Alternative E-1

The "Green Light" projects in the Consensus Plan that are retained in Alternative E-1 include the following:

-Security enhancements to existing facilities within the Airport Airside and/or Airport Landside areas

- Improvements to the South Airfield, including runways and taxiways

- Expansion of satellite terminal/FlyAway bus systems

- West face improvements to the Tom Bradley International Terminal

- Construction of employee parking facilities

- Construction of the Intermodal Transportation Center (ITC)

- Construction of the Consolidated Rental Car Facility (RAC)

- Construction of the Automated People Mover System (APM)

The primary differences in these projects between Alternative E-1 and the Consensus Plan as described include the following:

- More comprehensive security enhancements to existing airside facilities would be implemented by Alternative E-1. The most cost-effective strategies recommended by the ongoing RAND study of LAX would be implemented. The study has recently completed a report on short-term options for improving security at LAX, and will complete a study of long-term options by early 2005. Cost effective security measures could include limiting density of people in unsecured areas, increasing inspection and surveillance of vehicles catering the Central Terminal Area, enhancing screening of airport personnel, and increasing the security of passengers in terminal buildings by installing bomb resistant glazing and barriers.

- Alternatives to the proposed improvements to the South Airfield that would reduce the risk of runway incursions, such as the peripheral taxiway being discussed in the proposed agreement between the City of El Segundo and the Los Angeles Board of Airport Commissioners, should be explored. A Special Study should be conducted that would address this issue, including methods of also reducing the risk of runway incursions in the North Airfield. These methods could include the installation of state-of-the-art Airport Surface Detection Equipment (ASDE) at the airport (recently initiated by the FAA), and the installation of better visual aids including signs and lighting.

- The proposed FlyAway facility in Inglewood should be eliminated from the five that are currently proposed, because of its low probability of being cost-effective being so close to the airport. A Special Study should be conducted of the other proposed facilities, including potential ridership, access to local and regional transit feeder networks, and access to regional high-occupancy vehicle (HOV) networks. The study should also evaluate the potential of these facilities to provide remote ticketing and baggage check-in services.

- New gates that are required to accommodate new, vary large A-380 aircraft should be constructed on the ends and on the west side of the Bradley International Terminal. This could require the relocation of a number of facilities including north/south taxiways, aircraft maintenance facilities, a commuter aircraft facility, flight kitchen facilities, and airfield command post, and an Aircraft Rescue and Fire Fighting (ARFF) Station. A Special Study should be conducted that would determine specific facility relocation requirements and costs.

- (Note: Alternative E-1 recommends that the Consolidated Rental Car Facility- RAC- not be located at Lot "C," but located at the intersection of Imperial and Aviation instead, at the site of the ITC proposed in the Consensus Plan. It is questionable whether this is good idea, given the high level of existing congestion at the intersection and the substantial traffic at this intersection, which is close to residential neighborhoods. Unless connected to an Automated People Mover (APM), rental car users would have to be shuttled or bused to the CTA from this location. Also, the proposal in Alternative E-1 to construct multi-story rental car parking and reconstruct Aviation Blvd. below grade along LAX would be very costly, which would contradict the intent of Alternative E-1 to be a cost- effective alternative to the Consensus Plan. Also, it is unlikely that there is enough space at this location for rental car

maintenance and fueling facilities, and long-term vehicle storage. It is therefore recommended that the RAC be retained at Lot C as in the Consensus Plan, and the loss of parking space there be made up at other locations, such as in Manchester Square. It is also recommended that the ITC be retained at the intersection of Imperial and Aviation as in the Consensus Plan, with a APM connection to the CTA and a pedestrian bridge connection to the Green Line station).

- The APM would need to be reconfigured since it would no longer need to access the GTC.

-An aircraft reduction and management strategy would need to be implemented in order to hold LAX to a capacity of 78.9 million air passengers (MAP). Such a strategy is currently part of a proposed agreement between the City of El Segundo and the Los Angeles Board of Airport Commissioners that is in the final stages of negotiation. When finalized, it will become incorporated into Alternative E-1.

Alternative E-1 is also distinguished by the fact that it eliminates all of the highly controversial "Yellow Light" projects. These projects include:

- Construction of the Ground Transportation Center (GTC)

- North Runway realignment and centerline taxiway construction

- Demolition and reconstruction of terminals 1, 2 and 3

- Construction of Western Satellite Terminal

The primary reasons for eliminating these projects include the following:

- The exorbitant costs of these projects, which would make LAX less competitive with other international gateway airports, can be avoided. This would eliminate the need for LAX to cater to a narrower spectrum of air passengers and income groups to pay these costs, by serving primary the "traveling elite."

- By avoiding the burdensome debt that would be incurred in funding these questionable projects, Los Angeles World Airports would not be hampered in implementing a true regional vision at the other LAWA-run airports.

- By not constructing the Ground Transportation Center (GTC), which would concentrate ground access traffic off the higher congested I-405 freeway, the worsening of congestion on that freeway, as well as on surface streets in communities surrounding the GTC, can be avoided.

- The preservation of Terminals 1, 2 and 3 would preserve service by the short-haul, discount airlines that operate gates in those terminals, which would help maintain a wide range of service provided by the airport.

- Alternative E-1 is much more transparent and straightforward than the Consensus Plan. It clearly eliminates the highly controversial Yellow Light projects instead of giving them an ambiguous "maybe/maybe not" status, which has caused much consternation and anxiety in local communities.

Response:

During the public review period for the Supplement of the Draft EIS/EIR, a local citizens group that goes by the name "Alliance for Regional Solution to Airport Congestion" ("ARSAC") suggested a master plan for LAX with improvements different from those of Alternative D. ARSAC first presented its suggestions for consideration by LAWA at a series of public meetings sponsored by Mayor James Hahn to promote dialogue about the LAX Master Plan between citizens living near the airport and LAWA staff. ARSAC referred to that plan as "Alternative E" and formally submitted the proposal to LAWA and the FAA as part of their comments on the Supplement to the Draft EIS/EIR. ARSAC's proposal is reflected in Comment Letter SPC00133 in Part II-Volume 11 of the Final EIS. Alternative E is also discussed in Comment SPC00035-4, for which a written response describing the infeasibility of such a proposal is provided in Part II-Volume 10 of the Final EIS. Subsequent to the introduction of Alternative E, ARSAC developed a revised plan for LAX referred to as "Alternative E-1" and submitted it along with public testimony during the joint hearing of the Los Angeles Citywide Planning Commission and the Los Angeles World Airports Board of Airport Commissioners on June 14, 2004. At the same joint hearing of the Los Angeles Citywide Planning Commission and the Los Angeles World Airports Board of Airport Commissioners on June 14, 2004, Los Angeles City Councilmember Bernard Parks proposed an

alternative plan for LAX that, while slightly different from ARSAC's Alternative E-1 proposal, was also referred to by Councilmember Parks as "Alternative E-1".

The feasibility of ARSAC E, ARSAC E-1, and Parks E-1, including the ability of each plan to satisfy the purpose and objectives of the LAX Master Plan, was analyzed and environmental considerations associated with the main components of each plan were also analyzed and compared to Alternative D, where appropriate. The feasibility of these three variations of Alternative E was addressed in Chapter 4, Feasibility Analysis of the Three "Alternative E" Proposals, in the September 2004 Addendum to the Final EIR. After careful consideration of all three variations of Alternative E, including ARSAC E, ARSAC E-1, and Parks E-1, it was concluded that these proposals are infeasible and fail to meet the purpose and objectives of the LAX Master Plan. Thus, in accordance with 40 CFR § 1502.14(a), the three variations of Alternative E were eliminated from detailed study in the Final EIS based on the reasons presented in Chapter 4 of the September 2004 Addendum to the Final EIR.

Also, please note that FAA's statutory mission is to ensure the safe and efficient use of navigable airspace in the United States. This includes the safe and efficient development of public use/publicly owned airports. Airports in the United States are locally owned and operated. The decision to develop an airport is the responsibility of the airport sponsor. FAA does not direct the timing or nature of development at the nation's airports. Similarly, under the Airline Deregulation Act of 1978, the FAA does not regulate rates, routes, and services of air carriers or cargo operators. Airline managements are free to decide which airports to serve based on market forces. Alternative D has been designed by LAWA to use physical constraints to encourage airlines to use other regional airports. The Final EIS presents a wide range of action alternatives for improving LAX. The Final EIS appropriately considers and rejects the "Alternative E" alternatives offered after publication of the Supplement to the Draft EIS, in July 2003 and as late as June 14, 2004.

FPC00005-10

Comment:

Ground Access Improvements

Ground access improvements required to mitigate congestion impacts in Alternative E-1 will be fewer and less expensive than in the Consensus Plan. This is because Alternative E-1 makes fewer changes to existing traffic patterns, and will still benefit from the trip reduction capabilities of the ITC in combination with the new FlyAway Facilities. The Consensus Plan proposes a number of ground access improvement to mitigate ground access impacts, including a new interchange at Lennox Blvd. and I-405, new ramps off I-105 and between La Cienega and Aviation, and various intersection and arterial improvements to local roadways. The highly expensive new interchange at Lennox and I-405 would no longer be needed with Alternative E-1 because of the elimination of the GTC and its and its attendant impacts on congestion on the I-405. Also, funding availability for this major improvement is questionable; it is not programmed in either SCAG's 2004 Regional Transportation Plan (RTP) or Regional Transportation Improvement Program (RTIP). The proposed new ramps off the I-105 will still be needed because of the retention of the ITC in Alternative E-1. All other improvements will need to be reassessed because of the different distribution of traffic in Alternative E-1 compared to the Consensus Plan. Ground access improvements that are identified consistent with Alternative E-1 would be coordinated with airport ground access planning conducted by SCAG, to ensure that needed improvements are included in the 2007 RTP and RTIP.

Response:

Please see Response to Comment FPC00005-8 regarding the relationship between the LAX Master Plan and the Consensus Plan referred to by the Commentor.

The traffic assessment of Parks Alternative E-1 plan is included in Chapter 4, Feasibility Analysis of the Three "Alternative E" Proposals, in the September 2004 Addendum to the Final EIR. The Parks Alternative E-1 plan proposed by Bernard Parks at that time neither showed nor described any roadway system improvements. It also offered no solution to address the bottleneck at the existing Century Boulevard and Sepulveda Boulevard interchange as traffic enters the CTA roadways.

LAWA did not consider it appropriate to request that SCAG include the Lennox Boulevard Interchange or other transportation improvements proposed under Alternative D in their Regional Transportation Plan or Regional Transportation Improvement Plan while the Final EIS was still under review. FAA is requiring implementation of certain traffic mitigation measures as a condition of approval of the ROD.

Upon issuance of the Record of Decision, it is FAA's understanding that LAWA will request that transportation improvements proposed under the approved LAX Master Plan and included as conditions of approval of the ROD be included in the Regional Transportation Plans by SCAG and the Los Angeles County Metropolitan Transportation Authority. Please refer to Appendix A of the ROD for the specific traffic mitigation measures being required as a condition of approval.

The proposed Lennox Boulevard interchange on the I-405 freeway is a mitigation measure that will require NEPA analysis and approval from the Federal Highway Administration (FHWA). At this time no decision (i.e., FHWA and Caltrans review and approval) has been made to implement this specific mitigation measure. There is an alternative traffic mitigation plan proposed for Alternative D in the event that the Lennox Boulevard interchange is not approved. This alternative traffic mitigation plan is described in subsection A.2.1.2.4.3 of Section A.2.1, Off-Airport Surface Transportation, of Volume A of the Final EIS.

FPC00005-11

Comment:

Green Line Extension

(Note: the proposed Green Line extension along Aviation and Florence to Union Station in Alternative E-1, with below grade construction along LAX is a very costly proposition that contradicts the intent of Alternative E-1 to be a cost-effective alternative to the Consensus Plan. It would also duplicate service provided by the proposed SCAG MagLev line that would run from Union Station to West Los Angeles and eventually to LAX, and be much faster and more efficient than the Green Line service. Further, Federal Aviation Law prohibits airport revenues from being diverted to fund off-airport ground access projects, except for segments that directly access the airport. It is therefore likely that most of the proposed Green Line extension in Alternative E-1 would have to be funded by the MTA, and that future funding availability for this project is highly uncertain. The proposed location of the ITC in Alternative E-1 at the northwest corner of Century and Aviation is contingent upon this highly problematic extension to have a light rail connection. It is therefore recommended that the proposed Green Line extension should be deleted from Alternative E-1, and that the ITC should be maintained as proposed in the Consensus Plan).

Response:

As discussed in detail in Chapter 4 of the Addendum to the Final EIR, published in September 2004, during the public review period for the Supplement to the Draft EIS/EIR, three Alternative E proposals were presented to LAWA as alternatives to the LAX Master Plan. Two of the three plans were prepared by a local citizens group who called themselves "Alliance for Regional Solution to Airport Congestion" or "ARSAC." The third plan was prepared by the commentor, Los Angeles City Councilmember Bernard Parks. These three proposals were evaluated in the Addendum referenced above and each proposal was determined to be infeasible and fail to meet the purpose and objectives of the LAX Master Plan.

The commentor is now recommending a change to the Parks Alternative E-1 proposal; specifically, the elimination of the proposed northerly extension of the Green Line light rail system on that plan. Since the extension of the Green Line to the north is not proposed in any of the LAX Master Plan build alternatives A through D, this is not considered to be a comment on the Final EIS.

FPC00005-12

Comment:

Regional Strategy of Alternative E-1

The long-term, regional strategy of Alternative E-1 plays an important role in placing the LAX master plan in a regional context, so that demand that cannot be served at LAX constrained to 78.9 MAP can be served by other airports in the region. The strategy is consistent with the adopted aviation strategy in SCAG's 2004 RTP.

The first step in the long-term strategy will be the development of an "Integrated Metropolitan Airport System Plan" by Los Angeles World Airports (LAWA). This plan will integrate the master plans of the three air carrier airports LAWA operates - LAX, Ontario and Palmdale - into an integrated action plan.

The plan will detail how projects will be phased and funded over time at each airport, and will specify how these airports will coordinate and interface with each other and with other airports in the region to meet forecast regional aviation demand. The other non-LAWA airport of greatest interest are those with capacity to meet future demand, including March Inland Port, San Bernardino International and Southern California Logistics airports.

The Integrated Metropolitan Airport System Plan will contain a financial element that will determine how new projects at all three airports, including ground access projects, will be funded. It will also specify how LAWA will provide needed financial support to Palmdale and Ontario airports to construct new facilities and establish long haul and international service through attractive pricing arrangements and other inducements. These inducements could include substantially lower landing and other fees at Palmdale and Ontario compared to LAX, made possible by including all three airports under the same cost center and providing needed financial cross-subsidization. Fees could be tied at least partially to community environmental impacts instead of just aircraft weight, so that the greater level of community impacts at LAX are taken into account in the fee structures. Attractive packages including low landing fees and lease rates could be offered to start-up carriers to induce them to pioneer initial service at these airports. Other airline inducements could include airport marketing programs, low cost parking, and free or low-cost shuttle service from major activity centers and transit nodes.

The plan will also specify how LAWA will broker cooperation from airlines to provide mare robust flight portfolios at Palmdale and Ontario, including long haul and international service. Besides attractive financial packages, inducements could include construction of common use/shared facilities to keep costs low, and flexible lease and operating agreements. Airlines would be encouraged to cooperate to the extent possible to make the moat efficient use of shared-use facilities, including sharing staff, to spread costs among themselves. For example, airlines could share check-in staff at common use terminal counters, as well as baggage handlers.

Response:

Councilmember Parks reiterates the regional components of his Alternative E-1. Please see the Response to Comment FPC00005-9 which addresses the feasibility of "Parks E-1." Further discussion regarding the LAX Master Plan role in the regional approach to meeting demand was addressed in Topical Response TR-RC-1 in Part II-Volume 1 of the Final EIS.

FPC00005-13

Comment:

Airline cooperation would also include making the most efficient use of the planned regional MagLev system that is planned to interconnect all of the LAWA airports. LAWA should broker cooperative agreements between airlines, travel agents and web-based travel reservation systems to integrate airfares with MagLev fares. Also, full information should be provided to air passengers about airport and service alternatives on all web-based travel reservation system. For example, if an international flight with the desired time, destination and price is not available at LAX, an air passenger or travel agent would automatically be directed to available flights at Ontario Airport or Palmdale, with the MagLev fare for traveling to that airport included in his airfare.

It is envisioned that a MagLev Joint Powers Authority (JPA) will be formed that will guide the planning, funding, development and operation of the regional MagLev system. As a member of the MagLev JPA, LAWA should assume a prominent leadership role to ensure that the future regional MagLev system efficiently connects with and serves all LAWA air carrier airports.

Response:

Please see Topical Response TR-RC-3 in Part II-Volume I of the Final EIS, regarding the proposed Maglev System. In the 2004 Regional Transportation Plan for Southern California, SCAG anticipates that the initial operating system connecting West Los Angeles to Ontario will not be operational until 2018. Maglev would not connect LAX to Ontario Airport until 2020, and would not connect LAX to Palmdale Airport until 2024. Therefore, LAX operations would not be impacted by the proposed Maglev system throughout the 2015 forecast horizon year for the LAX Master Plan.

Comment noted regarding LAWA's leadership role as a member of the Maglev Joint Powers Authority.

FPC00005-14

Comment:

The last element of the Regional Strategy for Alternative E-1 is the development of agreements between LAWA and non-LAWA airports such as March Inland Port, San Bernardino International and Southern California Logistics, to promote further decentralization of the regional aviation system. This would include not only the decentralization of air passenger service, but air cargo service as well, since several of these airports are concentrating on serving air cargo in the short-term, and can make up for air cargo processing constraints at LAX. Different roles and market niches for all of the airports will be defined, so as to reduce competition and increase cooperation and coordination between them, and maximize utilization of available airport capacities in the region. The agreements will establish a common framework for a regional "Airport Consortium" that will coordinate all airport master planning and facility construction consistent with an adopted Regional Aviation Plan. The Regional Airport Consortium will coordinate with the MagLev Joint Powers Authority to ensure seamless MagLev connections to airports, and increase air passenger ridership via MagLev through integrated fares and other market tools.

Response:

Comment noted. Please see Response to Comment FPC00005-9 regarding the feasibility of "Parks E-1." Also, please see Part II-Volume 1 of the Final EIS for Topical Responses TR-MP-2 regarding the SCAG Regional Transportation Plan (RTP), TR-RC-1 regarding the LAX Master Plan role in the regional approach to meeting demand, TR-RC-3 for a discussion of the potential for High Speed Rail (HSR) to accommodate future LAX demand, and TR-ST-5 regarding the rail/transit plan.

FPC00006 Waters, Maxine U.S. House of Representatives 2/22/2005

FPC00006-1

Comment:

The diligence undertaken by you and your staff in preparing the Final Environmental Impact Statement (FEIS) is readily apparent. I can appreciate the monumental task involved the preparation of such a significant document.

Below you will find my comments to the information and analysis contained in Volume A to the FEIS, including that presented in the related appendices. I look forward to your responses.

Response:

Comment noted. Please see Responses to Comments below.

FPC00006-2

Comment:

Capacity - Gates - Passenger Activity

I have reason to believe that the 78.9 MAP forecast for Alternative D is meaningless, utterly meaningless. The FEIS states,

"It is important to understand that the levels of passengers that each alternative is designed to accommodate are not finite limits where the airport would somehow be closed or where aircraft would be redirected to some other facility when this number is reached. These levels are an indication of the number of passengers that can be accommodated at a reasonable level of service. The airport can accommodate additional aircraft and passengers beyond these limits; however, the result is a degraded level of service." (FEIS, Part I, vol. 1, p. 3-57 (emphasis added).)

Thus, the question is not whether Alternative D accommodates more than 78.9 MAP. It does. The question is how many millions more passengers it accommodates. I would be grateful if you could address the following questions regarding the 78.9 MAP forecast.

1. How is "reasonable level of service" defined?

2. How is "degraded level of service" defined?

3. Does the FAA believe that LAX is currently operating at a degraded level of service? Why or why not?

4. What is a reasonable level of service for the current configuration of the airport? What are the number of passengers that LAX can accommodate at a reasonable level of service under the No Action/No Plan alternative?

5. Under Alternative D, how many aircraft can LAX accommodate at a degraded level of service?

6. Under Alternative D, how many passengers can be accommodated at a degraded level of service?

7. What legal methods are available to enforce a cap of 78.9 MAP under Alternative D?

8. The unconstrained 2015 demand forecast for LAX is 97.9 MAP. What physical constraints of Alternative D prevent LAX from handling 97.9 MAP, albeit at a degraded level of service?

9. The number of LAX passengers directly affects amounts of noise, traffic, and air pollution around the airport. The greater the number, the worse the impacts. Would you agree that accurate passenger activity forecasts are essential to assessing an alternative's environmental impacts?

Response:

The comment states, "the question is not whether Alternative D accommodates more than 78.9 MAP. It does. The question is how many millions more passengers it accommodates." FAA respectfully disagrees with this conclusion. Please see Response to Comment FAL00003-2 regarding capacity and other Master Plan issues raised in this comment. Also, please see Response to Comment FAL00003-64 regarding inter-gate time assumptions and analysis used in the LAX Master Plan, Response to Comment FAL00003-86 regarding proper use of design day to annual factors for passengers and aircraft operations, and Response to Comment FAL00003-87 regarding the aircraft load factor and peak hour load factor forecasts and their proper use in the LAX Master Plan. Also, please see Response to Comment FAL00003-63 regarding issues associated with the phasing of gates and construction-related congestion associated with the implementation of Alternative D improvements at LAX.

Regarding commentor's question 1, reasonable level of service is, of course, a subjective concept. Generally, however, this notion would include that an airport is reliably working as it should. Indications that it is working as intended would include the ability of a passenger to reach the airport without undue road delay, the availability of a parking spot or curb front to reach the terminal, the availability of a ticket counter, the lack of unduly long security lines, the lack of an unduly long walk to the gate, the departure of the passenger's airplane as scheduled and an uneventful flight. In practice, level of service is usually expressed as a relationship between demand and capacity of a particular system component such as the airfield or roadways in a relevant unit of time such as an hour or less. The level of delay experienced in aircraft operations is also of critical importance when measuring capacity. For example, the FAA suggests that airports should begin planning new airfield capacity when average operational delays are in the range of four to six minutes. This is the level of delay assumed in the LAX Master Plan unconstrained concept development. Constrained alternatives included in the Final EIS would develop airfield facilities with average delays between 10 and 15 minutes. This level of delay was chosen for LAX because above this level, delays increase exponentially for each additional hourly aircraft operation.

Regarding commentor's question 2, degraded level of service is similarly difficult to define except in subjective terms. In general, these terms would include the degraded state of the qualities suggested for a "reasonable level of service." Another subjective way to view degraded service would be when airlines and/or passengers view the airport as unreliable as Southwest Airlines did when they chose to abandon service to San Francisco International Airport in March 2001 and concentrated all of its San Francisco Bay Area service at Oakland and San Jose Airports (Los Angeles Times, Southwest's SFO Departure A Sign of the Not-on-Times, Christopher Reynolds, February 11, 2001). As Southwest

determined in the case of San Francisco, one unreliable airport in their system can throw the rest of their operation out of synch due to delayed aircraft and delayed crews.

Most people who regularly use LAX would agree that it is not operating at an acceptable level of service, particularly during peak travel times of the day, the week and during peak travel seasons. Congestion is apparent on the airport roadways, at the terminal curb fronts, as people wait in line to check in with their baggage, as people wait in line to go through security and as aircraft line up at the end of the runway for departure (See PowerPoint presentation at the May 24, 2004 joint hearing of the Board of Airport Commissioners, City Planning Commission and Advisory Agency, given by Jim Ritchie, Deputy Executive Director of Long Range Planning and Environmental Management, Los Angeles World Airports). Less apparent but just as real is the air traffic flow delay that people experience on the ground in other cities waiting to takeoff because coastal fog at LAX is reducing the airport's arrival rate below the rate scheduled by the airlines. These are the basic reasons why improvements are necessary at LAX (See Section 2.3, Consequences of Not Improving LAX, in Chapter 2 of Part I of the Final EIS).

Regarding commentor's question 3, in the general terms described above, LAX is operating at a degraded level of service. The indications of this state are that aircraft delays are increasing, passenger delays are increasing, relatively small disruptions in service build quickly into long delays, relatively small surges in activity build quickly into long delays, airport roads and curb fronts are congested during peak hours, terminal ticket lobbies are very crowded most days, security lines are long (often out the door of several key terminals), gates are busy, aircraft are backed up on the taxiways and arriving and departing aircraft are delayed during busy hours and poor weather (See 5 U.S. airports to avoid, if you can, By Christopher Elliott, Microsoft Small Business Center web site, http://www.microsoft.com/smallbusiness/issues/finance/business_travel/5_us_airports_to_avoid_if_you_can.mspx).

There is not a simple or definitive answer to the questions raised in commentor's questions 4, 5 and 6. The LAX Master Plan and Final EIS has reported on historical and current levels of activity and delay for passengers, cargo and aircraft operations. The Master Plan and Final EIS have also developed forecasts for future activity based on certain facility improvements and a certain level of aircraft delay to establish the practical capacity of each alternative. These constrained forecasts were developed by studying the specific source of a particular impact within the right time period of occurrence. As a result, although the questions posed in the comment presuppose that a definitive answer can be given, this is a faulty assumption. In fact, the level of passengers or aircraft operations that would equate to a reasonable or degraded level of service may vary widely, depending upon the specific component of the airport system that one considers. For example, one can consider airport vehicle traffic. This analysis uses origin and destination (O&D) passenger (as opposed to total passengers), airport employees and forecasts of background community traffic. This traffic is assessed when it is most problematic for people trying to use the airport and for people trying to get to and from work (i.e., the morning and evening commuter peak hours and the airport peak hours). It would be inaccurate to say that there is a certain number of annual passengers or aircraft operations below which LAX would have a reasonable level of service and above which would no longer be acceptable. In the end, local decision makers have to choose among a series of difficult tradeoffs to decide what is "reasonable" or "degraded" level of service for LAX.

With respect to question 7, the FAA and LAWA have never defined Alternative D as a "cap" and it has been clearly indicated throughout the Master Plan process that there is no intent to set up a "legally enforceable" cap. Rather, LAWA has considered the overall demand for aviation in Southern California and decided to address future demand by designing LAX in a manner that permits LAX and the City of Los Angeles to continue to serve as an international gateway while encouraging airlines to use other regional airports for domestic service in the future. In proposing airport improvements at LAX, LAWA concluded that the most readily available option for LAWA as a multi-airport proprietor to influence future activity levels at LAX is to create the conditions that encourage airlines to go to other airports, particularly those owned and operated by LAWA in the region. By providing adequate facilities at Ontario Airport as LAWA is currently doing, the airlines have options other than LAX when considering additional service in Southern California. As described in Topical Response TR-GEN-3, the ability of airport operators to control airline activities (i.e., establish a "cap" at airports) was clarified by the federal Airport Noise and Capacity Act (ANCA) of 1990. Those limitations are spelled out more clearly in FAA regulations at 14 C.F.R. Part 161, "Notice and Approval of Airport Noise and Access Restrictions." These regulations establish requirements regarding proposed airport noise and access restrictions. Under Part 161, restrictions could include nighttime or early morning curfews, the prohibition of certain types of aircraft, or other limiting measures. The requirements of Part 161 regulations include a rigorous analysis of the aviation impacts of the restrictions, and are subject to multiple levels of scrutiny.

As to Stage 3 aircraft operations, such restrictions are subject to FAA approval. In addition, relative to the FAA's ability to establish an airport "cap" at the federal level, Congress recently enacted legislation to supplement FAA's authority that included a mechanism to help reduce delays and improve the movement of air traffic at congested airports. 49 U.S.C. §41722. Under this authority, the FAA may encourage voluntary agreements and undertake rulemaking to address persistent flight delays related to over-scheduling; however past FAA actions indicate that the Agency is not likely to do so absent a severe and extraordinary level of delay and effect on the National Airport System. FAA-imposed operational limits or caps on aircraft operations are not preferred as a matter of policy to solve delay problems at airports where other physical means to reduce delays are available and proposed. Even where operational limits have been considered, such as in the case of Chicago O'Hare International Airport,1 these measures are considered an interim measure to manage congestion and delay pending implementation of permanent solutions through capacity improvements. Regardless, in the case of LAX, there is not a level of flight delay anywhere near that of Chicago O'Hare International Airport that constitutes such a severe and unique circumstance as to warrant FAA's consideration of possibly imposing operational limits at LAX. It should be noted that FAA's action toward establishing operational limits is specific to resolving an aircraft/airfield operational problem that affects the National Airport System, and is not designed or intended to establish a passenger activity cap as being requested by the commentor. In light of the types of considerations described above relative to establishing a "cap" at LAX, LAWA proposed Alternative D to create conditions that encourage airlines with domestic arrivals and departures to use other airports in the region such as Ontario. Please see Response to Comment FAL00003-2 regarding capacity and other Master Plan issues raised in this comment.

In response to question 8, as amply documented in the Final EIS and the LAX Master Plan, LAWA's proposed design for LAX under Alternative D includes several physical components that inhibit, if not prevent, LAX's ability to handle 97.9 MAP in 2015, most particularly the four-runway system, and the lack of necessary "contact" gates. However, as noted above, the environmental documents have never defined Alternative D as a capacity "cap." It is, instead, LAWA's proposal based on their conclusion that physical constraints at LAX are the most reasonable and available option for encouraging air traffic to shift to other airports in the region. Furthermore, this comment assumes that airlines and airport users would be willing to provide service to/patronize LAX regardless of the level of delay, cancellations, and inconvenience that would be associated with an annual passenger level of 97.9 MAP under Alternative D, even assuming Alternative D could accommodate that level of activity. These assumptions are contrary to FAA and LAWA's considerable aviation planning experience, as well as to real world examples of how airlines and airport users respond to such delay and inconvenience.

Finally, with regard to the commentor's question in item 9, it would be inaccurate to state that one factor alone can be considered the primary or essential factor in determining environmental impacts of a project. Accurate passenger activity levels certainly play an important role in evaluating the airport's impacts. However, it is only one of many essential factors that collectively determine the impact of a particular development proposal. Other essential factors include aircraft operations, ground vehicles and various activities on the airport to accommodate each. The Final EIS evaluated all pertinent sources of information related to environmental impacts for each of the alternatives evaluated. FAA is confident in the forecasting that has occurred in conjunction with the LAX Master Plan and that it was properly considered in determining environmental impacts.

1 FAA considered exercising its jurisdiction under 49 U.S.C. §41722 in the case of Chicago O'Hare International Airport. There, the Secretary of Transportation and the FAA Administrator determined in August 2004 that a schedule reduction meeting was necessary to address persistent flight delays related to over-scheduling at O'Hare. Earlier in 2004, DOT worked with United and American on voluntary schedule reduction agreements, however, delays continued, due in part to the fact that some airlines that were not party to the agreements continued to add flights. Based on the August 2004 schedule reduction meeting, the FAA issued a comprehensive order limiting arrivals by domestic carriers to 88 during most hours of the day. The order is proposed to extend through October 2005. On March 25, 2005, the FAA issued a notice of proposed rulemaking, "Congestion and Delay Reduction at Chicago O'Hare International Airport," 70 Fed. Reg. 15520-01. The proposed rule, which would replace the August 2004 order, is intended to serve as an interim measure because the FAA anticipates that the rule will yield to longer term solutions to traffic congestion at O'Hare Airport. Such solutions include an application by the City of Chicago that, if approved, would modernize the airport and reduce levels of delay, both in the medium term and long term. For this reason, the proposed rule sunsets in 2008. Outside the context of the proposed rule, the FAA and the Office of the Secretary are also considering various administrative and market-based mechanisms that may improve on prior methods of allocating available capacity at an airport where capacity is not able to meet aviation demand. Market-based

mechanisms being researched for New York's LaGuardia Airport are among several measures that could be implemented at O'Hare, if capacity improvements are inadequate to achieve delay reduction.

FPC00006-3

Comment:

The FEIS compares apples and oranges because it compares alternatives at different levels of service. The No Action/No Project ("NA/NP") alternative assumes degraded level of service. The NA/NP maximum capability is 78.7 MAP, "but only under extremely congested and inconvenient conditions." (Arguably, these conditions exist today.) (FEIS, Part I, Vol. 1, p. 2-7 ("Existing capacity constraints at LAX").) (FEIS, Vol. A, p. A.1-21.)

By contrast, the Alternative D forecast assumes a reasonable level of service. That prediction is given as 78.9 MAP in 2015. (FEIS, Table AES-2, p. A-6.)

Thus, the proper comparisons are Alternative D and NA/NP under the same conditions. The alternatives should both be measured under either "reasonable" or "extremely congested and inconvenient conditions." To use contrasting conditions, distorts the burdens and advantages of the two alternatives.

Response:

The differences in levels of service between the two scenarios reflect the basic fact that under one scenario (the No Action/No Project Alternative) there are essentially no improvements to LAX and under the other scenario (Alternative D) there are improvements. Thus, it would be inaccurate and misleading to treat these two alternatives as though operating conditions are the same in light of the substantially different facilities that would exist in 2015 under these alternatives. The future activity levels for each of the five alternatives addressed in the Final EIS were determined by a number of factors, including design-day forecasts. Details regarding how those activity level estimates were determined are provided in the Draft LAX Master Plan, Draft LAX Master Plan Addendum, and related appendices. The levels of service presented in the Final EIS relative to the No Action/No Project Alternative and Alternative D describe the anticipated levels of service based on the physical and operational characteristics predicted to occur in 2015 for each scenario. It is important to note that the year 2015 is the planning horizon year applied consistently throughout the Final EIS relative to all five alternatives. The planning horizon year 2015 represents a planning period point in time where the FAA can reasonably rely on projected forecasts of future activity levels, thereby enabling the EIS to address reasonably foreseeable conditions. Nothing in NEPA requires the FAA to speculate about conditions into the future beyond the planning period.

In the case of the No Action/No Project Alternative, the indication of "extremely congested and inconvenient conditions" is simply a description of the conditions projected to occur in 2015 if no substantial improvements are made at LAX, due primarily to insufficient curbside area and terminal facilities. In the case of Alternative D, the description of providing a "reasonable level of service" simply reflects what passengers are likely to experience in 2015 based on the design-day forecasts and other factors evaluated in conjunction with determining the maximum number of aircraft gates for Alternative D. While the conditions described for the No Action/No Project Alternative assume that the current operations at LAX continue into the future with no notable improvements to the airport, which would eventually lead to very degraded levels of service by 2015, the conditions described for Alternative D reflect conditions based on specific improvements proposed for LAX with particular operational characteristics in mind. The design characteristics of Alternative D, which include a reduction in the existing number of gates, are anticipated to provide for a reasonable level of service in planning horizon year of 2015. It would be inappropriate and misleading to attempt within the Final EIS an analysis that ignores the improvements planned under Alternative D and assumes a scenario for some undefined future point in time beyond 2015 where the passenger level of service is characterized as being extremely congested and inconvenient similar to that of the No Action/No Project Alternative. It would be equally inappropriate and misleading to ignore the lack of improvements at LAX under the No Action/No Project Alternative and assume a reasonable level of service in 2015.

FPC00006-4

Comment:

Gates

I also have questions concerning the number and configuration of gates under Alternative D. "The most constraining component of an airport defines the practical capacity." (FEIS, Part 1, vol. 1, p. 3-58.) The passenger activity that would be expected in 2015 with Alternative D was determined based on the design of the Alternative D gate facilities ..." (FEIS, Part 1, vol. 1, p. 3-62.)

1. Under Alternative D, would increasing the number of gates (or narrow body equivalent gates) improve the airport's ability to accept more arriving flights?

2. Under Alternative D, would increasing the number of gates (or narrow body equivalent gates) permit the airport to accommodate more passengers?

3. Military and government aircraft (e.g., Air Force One) currently use the remote gates. Under Alternative D, will all of the remote gates be removed? If so, by when? If so, please identify where this commitment is located. If all of the remote gates are scheduled to be demolished, where will military and government aircraft park at LAX?

4. Under Alternative D, what physical impediments exist, if any, to passengers boarding aircraft at cargo facilities?

5. Under Alternative D, what physical impediments exist, if any, to the construction of remote gates after 2015?

6. Under Alternative D, what physical impediments exist to the discharge and boarding of passengers on the tarmac, as is the case in many airports around the world?

Response:

Comment noted. Under the commentor's questions 1 and 2, the described facility scenarios are not consistent with the definition of Alternative D in the LAX Master Plan as intended, described or analyzed. Thus, the circumstances described in these questions would not arise under Alternative D and essentially represents a new alternative. Although it is not necessary under NEPA to answer questions requiring the analysis of hypothetical scenarios and conjectural impacts, it is likely that increasing the number of gates would improve the airport's ability to accept more arriving flights and permit the airport to accommodate more passengers.

With regard to commentor's questions in item 3, the west remote pads would not be completely displaced by the improvements to the LAX north airfield associated with Alternative D, proposed to be completed by 2015; a portion of the west remote pad area would remain even after the completion of the north airfield improvements and, generally speaking, aircraft such as Air Force One would likely continue to use this area for parking under Alternative D. This area would be limited to specialized uses such as the one identified in the comment, particularly where security concerns are unique, such as those associated with the arrival of the president at the airport. Other limited uses of this area of the airport could include emergency situations. Under Alternative D, all passenger loading and unloading would occur at contact gates at the terminal areas, and the remote pads would not be used for this purpose. This limitation is noted in the FAA's ROD.

While the commentor's question 4 is regarded as introducing a hypothetical variation to an existing alternative, there are inefficiencies and logistical impediments, rather than physical constraints, that would dissuade LAWA from using cargo areas to load and unload passengers. It is important to note that the cargo areas at LAX are in high demand for cargo aircraft parking, loading and unloading and will be in increasing demand over time without additional cargo facilities as is described under Alterative D. It is further important to note that FAA's ROD relies upon the limitation described in the Final EIS which indicates that passenger loading and unloading would occur only at contact gates in the terminal area (See page 3-75 in Chapter 3 of Part I of the Final EIS).

While the commentor's question 5 is regarded here as hypothetical and is beyond the reasonably foreseeable time frame of the LAX Master Plan forecast, it is important to note that existing remote gate

areas at LAX would be developed as other uses under the implementation of Alternative D. Specifically, the United Airlines remote commuter terminal is intended as a ground run-up enclosure to help mitigate the noise impacts associated with regular aircraft engine maintenance and testing. The American Eagle remote commuter terminal is located in the area of the proposed West Satellite Concourse and taxiways. And as noted in the response to question item 3 above, the west remote pads would only be partially displaced by improvements to the north airfield and the remainder would be used for aircraft holding and remain over night (RON) operations.

The commentor's question 6 is regarded here as hypothetical and is not contemplated in the implementation of Alternative D. However, as described above with respect to questions raised in item 3, under Alternative D, all passenger loading and unloading would occur at contact gates at the terminal areas, and the remote pads would not be used for this purpose. This limitation is noted in the FAA's ROD.

FPC00006-5

Comment:

Traffic - Off-Airport Surface Transportation

Please, consider the following comments under both (1) the "Off-Airport Surface Transportation" section and (2) the "Environmental Justice (NEPA Analysis)" discussion of surface transportation of Volume A of the FEIS.

The FEIS analysis of traffic impacts is based on the assumption that LAX will accommodate 78.9 MAP under Alternative D. If passenger activity exceeds that prediction for any reason, the environmental associated impacts will be greater. Where in the FEIS are Alternative D traffic impacts analyzed for levels greater than 78.9 MAP?

Response:

The Final EIS and the LAX Master Plan, including appendices, indicate how the 2015 activity level forecast for each alternative was determined. The operational characteristics associated with the activity level forecast for each alternative were accounted for in the technical analyses completed for each alternative, as presented in the Final EIS. Relative to off-airport surface transportation, the pertinent operational considerations include, but are not limited to, design day schedule and the related aircraft operation and passenger activity profiles (particularly as related to Origin and Destination [O&D] travel versus connecting flights, which affects surface transportation trip generation), cargo operations, collateral development, circulation system design and improvements, and the locations of Master Plan facilities that involve surface transportation trips. These and other factors related to operations influence the volume of trips generated and the distribution of those trips onto the surrounding roadway system. The traffic impacts to specific roadways and intersections nearby are, therefore, specific to the characteristics of each alternative. The traffic analysis completed for the Final EIS addressed impacts based on the facts, assumptions, and methodology described in detail in Section 4.3.2, Off-Airport Surface Transportation, in Part I and the related technical reports.

NEPA requires agencies to consider reasonably foreseeable environmental impacts of alternatives considered in detail in the NEPA document. Here, the FAA and LAWA, utilizing their collective expertise in matters involving airports, have made a reasonable forecast of passenger activity for each of the build alternatives, and evaluated the reasonably foreseeable impacts of those alternatives in the Final EIS. NEPA does not require more. Therefore, the Final EIS and this response to comment do not speculate as to possible impacts based on the hypothetical scenario described in the comment.

FPC00006-6

Comment:

The FEIS takes into account the predicted reduction of traffic from the proposed Playa Vista Phase II (the Village). To what extent did the traffic analysis take into account increased traffic since the baseline year to the roadway system brought about by numerous new residential projects in the LAX vicinity?

Specifically, were Alternative D traffic impacts analyzed for the addition of 4,525 newly built homes and apartments and 2,939 new homes and apartments that are currently under construction in the LAX vicinity?

Did the traffic analysis take into account the following:

1. 354 new Archstone apartments on Manchester Avenue and Pershing Drive?
2. 539 new apartments in the Decron Furama project at Manchester Avenue and Lincoln Boulevard?
3. 300 new apartments (approx.) in the project on the south east comer of Manchester Avenue near Falmouth Avenue?
4. 600 new apartments (approx.) approved for the Howard Hughes Center on Howard Hughes Parkway by 405?
5. 50 new apartments (approx.) on the north side of Manchester Avenue near Park Hill Drive?
6. 35 new Sea Glass residential units planned for Toes Beach in Playa del Rey?
7. 96 new units in the five-story Alexan Fontaine on the west side of Glencoe Avenue?
8. 43 town homes planned to replace the Kentwood Apartments on Arizona Avenue?
9. unknown number of condominiums planned to replace the temple on Manchester Avenue?
10. 508 new apartments in Chateau Marina on Lincoln Boulevard?
11. 99 new apartments in Panay Marina on Panay Way?
12. 102 new apartments on the east side of Glencoe Avenue?
13. 138 new condominiums in the 18-story Cove Tower on Marina Pointe Drive?
14. 310 new units in Ocean Walk on Lincoln Blvd?
15. 526 new apartments in Legacy Residential on Marquesas Way?
16. 292 new apartments in the Waterfront an Admiralty Way?
17. 125 new apartments in the Waterfront on Palawan Way?
18. 179 new apartments in the Admiralty Apartments on Admiralty Way and Palawan Way?
19. 176 new hotel rooms in the 20-story Woodfin Suite Hotel on Via Marina?
20. 108 new time share units in the 20-story Woodfin Suite Hotel?
21. 147 new hotel rooms in the Residence Inn in Marina del Rey?

Response:

Please see Response to Comment FPC00004-5 regarding how background (non-airport) projects were accounted for in the ground access traffic model used in the Final EIS. As described therein, the cumulative impacts analysis completed for the Final EIS was based on applicable planning documents designed to evaluate regional and area-wide conditions, as well as an assessment of 182 separate projects expected to occur in the LAX vicinity through 2015. This list of approved development projects was developed with the assistance of the County of Los Angeles and the cities of Culver City, El Segundo, Inglewood, Los Angeles, Manhattan Beach, and Santa Monica. These projects are listed on Table 3S, Planned Development Projects Added to Background Assumptions, of Technical Report S-2b of the Final EIS. In addition to the 182 projects in this table, which was originally prepared as part of the January 2001 Draft EIS/EIR traffic analysis, additional projects were also considered when the July 2003 Supplement to the Draft EIS/EIR was prepared. These projects included the El Segundo Corporate Campus/Media Center, a 2,200 unit residential development near Long Beach Airport and a new hotel in Marina del Rey.

The list of projects presented by the commentor does not coincide with the lists of projects used in the traffic analyses for the January 2001 Draft EIS/EIR and the July 2003 Supplement to the Draft EIS/EIR. Although the source and basis of the list of projects presented by the commentor are not stated, the fact that there are now additional development projects proposed in west Los Angeles is not unusual or unexpected. Given the dynamic nature of development within highly urbanized areas, there will always be new development proposals introduced over time. It is important to note that such "new" development is more typically a redevelopment, or recycling, of older existing uses which were already contributing to the traffic on the surrounding street system.

As indicated in Section 4.3.2, Off-Airport Surface Transportation, of Part I of the Final EIS, and further described in Response to Comment FPC00004-5, the traffic analysis accounted for ongoing regional growth, such as that described above, by using growth forecasts developed by the Southern California Association of Governments (SCAG). The SCAG growth forecasts are comprehensive for the region and are used in the traffic model to account for anticipated background development. These SCAG forecasts would typically exceed the expected trips created from individual projects now under construction or planned to be built by 2015. As such, the fact that the commentor has identified several individual projects not included in lists used in the Final EIS traffic analysis would not result in any material change in the basic conclusions of the Final EIS.

FPC00006-7

Comment:

Alternative D moves passenger entry east of the existing central terminal area to a location closer to the 405 Freeway. Heavy concentrations of minority and low-income people are located to the east of the airport and the 405. Does the dislocation of surface traffic to the 405 create a disproportionate impact on minority and low-income communities relative to surface transportation?

Response:

Volume A of the Final EIS addressed surface transportation impacts under Alternative D that have the potential to create a disproportionate impact on minority and low-income communities on pages A.2-94 through A.2-105 of Section A.2.2, Environmental Justice (NEPA Analysis). As stated therein and based on the original traffic analysis included in Section 4.3.2, Off-Airport Surface Transportation, in Part I of the Final EIS, because less than half (44 percent) of the impacted intersections fall within minority and/or low-income communities, and because mitigation is identified to address all impacted intersections within these communities, implementation of Alternative D would not have a disproportionately high and adverse effect on minority and/or low-income communities. Mitigation measures proposed under Alternative D would encourage traffic to stay on the freeway system, instead of using adjacent surface streets as alternative routes. Appendix A of the ROD identifies the mitigation measures related to traffic impacts that are included as conditions of approval of the ROD.

The environmental justice analysis of surface transportation impacts under Alternative D presented in Section A.2.2 also considered the reduction in background traffic associated with the reduction in the development intensity of the Playa Vista Project. Based on this analysis, the number of impacted intersections within minority and/or low-income communities would increase to 68 percent prior to mitigation. After implementation of mitigation measures, two intersections would remain impacted. Because one of these impacted intersections is located in a non-minority and/or non-low-income community and one is located in a minority and/or low-income community, when considering reductions in background traffic associated with Playa Vista, Alternative D would not result in a disproportionately high and adverse effect on minority and/or low-income communities.

FPC00006-8

Comment:

Environmental Justice - Relocation

I have previously objected to the elimination of affordable housing and relocation of residents under Alternative D. LAWA's response has been that the housing destruction and relocation are not part of Alternative D, but part of a separate "voluntary acquisition" program. I am not wholly satisfied with this answer. The "voluntary" program is essentially complete, and will in short order be followed by a very involuntary program.

It is my understanding that all of the willing sellers have sold. All or nearly all of the single family homes in Manchester Square have been acquired. However, thousands of renters continue to reside in numerous multi-unit apartment buildings in that area. It is my understanding that these owners are not inclined to sell because they are unable to match the excellent returns available to them as owners of these buildings.

In order for the Ground Transportation Center to be constructed, all of the apartments must be acquired through compulsory methods (such as inverse condemnation) and the residents of Manchester Square evicted. If Alterative D is not implemented, these low-income and minority residents will not be displaced. Thus it is not accurate to state that Alternative D will not eliminate low-income housing. Alternative D will have a significant and adverse impact on thousands of units of low-income housing.

Does the voluntary residential acquisition program ensure that Manchester Square will be vacated of all residents (including renters) by a date certain in order to permit the construction of the ground transportation center?

What course of action is provided for under Alternative D if residents refuse or decline to accept the voluntary acquisition and relocation offer?

For owners and residents who decline the voluntary acquisition and relocation program, what steps does Alternative D provide?

Response:

A description of the Voluntary Residential Acquisition/Relocation Program for the Manchester Square and Belford areas is provided on page 4-144, in Section 4.2, Land Use, in Part I of the Final EIS and Topical Response TR-MP-3 in Part II-Volume 1 of the Final EIS. Manchester Square was initially comprised of 280 single-family units and 1,705 multi-family units and the Belford area was comprised of 583 multi-family units. This Program was initiated by residents of the Manchester Square and Belford areas due to high noise levels in the area. During the July 1997 public scoping meeting for the EIS/EIR, the residents requested that LAWA purchase their properties and provide relocation assistance in lieu of soundproofing.1 Thus, the relocation efforts with respect to residents in the Manchester Square and Belford areas were initiated by the residents themselves and were motivated by those resident's desire to discontinue their own non-compatible land uses within the 65 CNEL noise contour. The recycling of these properties to a more compatible land use is being implemented under LAWA's current ANMP and will continue to occur independent of the LAX Master Plan. The impact of this independent program and the associated loss of housing units were addressed in the Initial Study/Mitigated Negative Declaration prepared for the Manchester Square and Airport Belford Area Voluntary Acquisition Program.2 Please also see Topical Response TR-MP-3 in Part II-Volume 1 of the Final EIS regarding residential acquisition and relocation issues, including affordable housing.

Since acquisition of both single- and multi-family units is still underway in the Manchester Square area, contrary to the assumption in the comment, the potential for, and number of, unwilling sellers is not known. As of April 4, 2005, 253 of the 280 single-family units (or approximately 90 percent) and 809 of the 1705 multi-family units (or approximately 47 percent) within Manchester Square have been acquired by LAWA.3 In addition, in an effort to preserve existing housing stock and provide reasonable housing for displaced tenants, approximately 37 residential structures (30 single-family residences and six duplexes within Manchester Square and one 6-unit apartment building within the Belford area) have been relocated under LAWA's Move On Housing Program.4

Since substantial progress has been made under the existing Voluntary Acquisition Program and construction of the GTC is not scheduled to begin until 2007 for a two-year duration, it is speculative to assume that involuntary acquisition, with the need to relocate thousands of residents, will be required. This is particularly true as there are only a few apartment building owners, controlling approximately 800 units, with whom negotiations are open who have not entered into purchase agreements. It should be noted that the question of voluntary versus involuntary acquisition of multifamily units within Manchester Square is somewhat irrelevant to the affected tenants who do not own and have no role in negotiations. Notwithstanding, as stated on page 4-295, in Section 4.2, Land Use (subsection 4.2.6.5), of Part I of the Final EIS: "If ANMP land acquisition for Manchester Square cannot be completed by the time the Master Plan is approved, the City of Los Angeles will use the most appropriate and practical measures available (e.g., voluntary acquisition, leasing, and/or public condemnation) to ensure that the designated areas are vacated consistent with the Construction Sequencing Plan. These measures would be available to pursue any needed acquisition that cannot be obtained through negotiations." As required by law, all relocation activities would comply with the provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (Uniform Act). The Uniform Act requires timely and orderly relocation of residents into comparable, decent, safe, and sanitary replacement housing within their financial means. With fulfillment of these requirements and the finding in the Initial Study/Mitigated Negative Declaration prepared for the Manchester Square and Airport Belford Area Voluntary Acquisition Program that sufficient replacement housing will be available for all relocated residents, such relocations effects would not be considered adverse.

1 A survey of Manchester Square property owners conducted by the Manchester Square Neighborhood Watch MSAC in June 1997 found that 83 percent of survey respondents were interested in participating in a buy-out of the entire Manchester Square area.

2 City of Los Angeles, Los Angeles World Airports, Residential Acquisition Bureau, Final Initial Study/Mitigated Negative Declaration No. AD 094-00, Manchester Square and Airport/Belford Area Voluntary Acquisition Project, prepared by Dames and Moore, June 2000.

3 LAWA Residential Acquisition Division.

4 Number of structures relocated as of April 11, 2005.

FPC00006-9

Comment:

Pollution - Air Quality

The alternatives would affect air quality by changing the amount of emissions released by sources at or near LAX. (FEIS, Vol. A, Main Document, p. A.1-30; p. A.2-121.) In general, the greater the aircraft and passenger activity, the greater the amount of aircraft emissions. Alternative D emissions are posited to be lower than Alternatives A, B, and C due to lower passenger levels and fewer aircraft operations. (FEIS, Vol. A, Main Document, p. A.1-32.) If the activity forecast for Alternative D is exceeded, how will Alternative D CO, VOC, NOx, SO2 emissions compare to Alternatives A, B, and C?

What are the levels of unmitigated VOC emissions under Alternative D assuming 78.9 MAP? What are the levels of unmitigated VOC emissions under Alternative D if the level of passenger activity reaches 89.6 MAP? At 97.9 MAP? Assuming activity of 89.6 MAP and 97.9 MAP, are the unmitigated VOC emissions under Alternative D higher or lower than the No Action/No Project Alternative?

What are the amounts of mitigated VOC emissions under alternative D if activity reaches 89.6 MAP? 97.9 MAP? Assuming activity of 89.6 MAP and 97.9 MAP, are the mitigated VOC emissions under Alternative D higher or lower than the No Action/No Project Alternative?

What are the amounts of mitigated criteria pollutants under alternative D if activity reaches 89.6 MAP? 97.9 MAP? Assuming activity of 89.6 MAP and 97.9 MAP, are the mitigated criteria pollutants emissions under Alternative D higher or lower than the No Action/No Project Alternative?

What are the predicted ambient air pollutant concentrations under Alternative D if and when passenger activity exceeds 78.9 MAP? Please describe the level of ambient air pollutant concentrations under Alternative D if passenger activity reaches 89.6 MAP? 97.9 MAP?

Response:

The Final EIS and the LAX Master Plan, including appendices, indicate how the 2015 activity level forecast for each alternative was determined. The operational characteristics associated with the activity level forecast for each alternative were accounted for in the technical analyses completed for each alternative, as presented in the Final EIS. Relative to air quality, the pertinent operational considerations include, but are not limited to, the fleet mix, design day schedule, ground service equipment operations, stationary sources, and surface transportation. These and other factors related to operations were carefully considered for each alternative. Notwithstanding that NEPA does not require evaluation of purely speculative scenarios, it is not possible to estimate the air pollutant emissions associated with Alternative D based solely on different theoretical activity levels, as requested in the comment. As indicated above, the estimates of air pollutant associated with each alternative are based on numerous specific factors and not simply activity levels. The various tables presented throughout Section 4.6, Air Quality, in Part I of the Final EIS indicate unmitigated and mitigated air pollutant emissions associated with each of the five alternatives. To the extent that these alternatives have projected 2015 activity levels similar to those of interest to the commentor (i.e., No Action/No Project Alternative at 78.7 million annual passengers [MAP], Alternatives A and B at 97.9 MAP, and Alternative C at 89.6 MAP), a review of those tables can provide a general comparison of emission levels associated with each scenario. It is important to note, however, that the emissions associated with those different MAP levels are not transferable to Alternative D, based on the fact that each different MAP level is based on fundamentally different project characteristics.

FPC00006-10

Comment:

What data collection studies of air pollutants have been performed in communities to the north, east, and south of the airport since 1996, the baseline condition year?

Do studies or measurements exist establishing the levels and sources of hazardous air pollutants in the communities north, east, and south of LAX?

Response:

Regarding data collection studies of air pollutants in communities surrounding LAX, SCAQMD maintains a network of air quality monitoring stations throughout the South Coast Air Basin. The monitoring station nearest to LAX is Station No. 094, Southwest Coastal Los Angeles County, located in Hawthorne, roughly 2.4 miles southeast of the LAX Theme Building and 0.60 mile south of the LAX southeast property line. In addition, SCAQMD has conducted several air quality studies in the LAX area since 1996, including:

- Air Quality Monitoring Study at Los Angeles International Airport (Report No. SM98001, November 1998), which provided CO, PM10, and VOC (including several toxic air contaminants) concentrations in the LAX Central Terminal Area;

- Air Monitoring Study in the Area of Los Angeles International Airport (April 2000), which provided several toxic air contaminant concentrations at locations to the north, east, and south of LAX, as well as CO and toxic air contaminant concentrations in the Central Terminal Area;

- Inglewood Particulate Fallout Study Under and Near the Flight Path to Los Angeles International Airport (September 2000), which provided particulate mass fallout values to the east of LAX; and

- Air Monitoring Study at Felton and Lloyde Schools (September 2001), which provided toxic air contaminant concentrations at two schools where one (Felton) is due east of LAX and the 405 Freeway, while the other is due east of the 405 Freeway, but several miles south of LAX.

In addition, studies and/or reports of toxic air pollutants in the SCAB include the Multiple Air Toxics Exposure Study in the South Coast Air Basin (MATES-II), completed by SCAQMD in November 1999, and the National Air Toxics Assessment completed by USEPA in 2002.

FPC00006-11

Comment:

To what extent does the relocation of the airport's point of entry, and the associated realignment of vehicular traffic, to Manchester Square decrease the air quality of and exacerbate adverse human health effects in Westchester, Inglewood, and minority populations east of the 405?

Response:

Impacts from relocation of the airport's point of entry and other proposed changes to ground access were not analyzed in isolation from the remainder of the proposed project. Changes to ground access and surface transportation were evaluated as part of the comprehensive air quality analysis conducted for the EIS. The Final EIS addressed air quality in Section 4.6, Air Quality (Part I), and Section A.2.3, Air Quality (Volume A). Supporting technical data and analyses were provided in Appendix G, Technical Report 4, Appendix S-E, Technical Report S-4, Appendix F-B, Appendix A-2a, and Appendix A-2b. The Final EIS addressed potential impacts to low-income and/or minority communities in Section A.2.2, Environmental Justice (NEPA Analysis), of Volume A. Included in the environmental justice discussion in Volume A of the Final EIS was a summary of and reproduction of the Human Health Risk Assessment (HHRA), which is an element of the CEQA analysis that is mandated under California law. The HHRA does not relate to NEPA requirements and was not relied upon by FAA in evaluating the choice among alternatives presented in the Final EIS, as indicated in Section 4.24.1.1 in Part I - Volume 4 of the Final EIS, as well as in Section A.2.2.4 (page A.2-88) in Volume A of the Final EIS. Although the information was reproduced only for informational purposes and was not relied upon or necessary to address NEPA requirements, the analysis and conclusions reached in the CEQA HHRA analysis were provided in the environmental justice section of the Final EIS.

FPC00006-12

Comment:

Endangered Species

Implementation of Alternative D will result in direct impacts to two listed species, the Riverside fairy shrimp and El Segundo blue butterfly. Purportedly, the plan does not threaten the continued existence on this planet of these irreplaceable organisms. (FEIS, Vol. A1, p. A.2-140.) It is reported that the U.S. Fish and Wildlife Service agrees with this conclusion based, in part, on the creation of off-site vernal pool habitat at the former Marine Corps Air Station at El Toro.

The government, however, has recently completed the sale of the former El Toro Marine Corps Air Station in Irvine. (See, "Builder Sweeps El Toro Auction," Los Angeles Times, Feb. 17, 2005.) This development would appear to impede the plan to relocate the shrimp to El Toro.

How does the El Toro sale and buyer's plans for 3,400 new homes in the heart of Orange County affect the relocation plan?

Assuming that El Toro is no longer viable, is there a plan that specifically identifies a new off-site habitat area for the fairy shrimp?

Where will fairy shrimp cysts be relocated?

Is it appropriate to continue with the implementation of Alternative D insofar as there appears to be no home currently identified to transplant the shrimp?

The ratio to replace destroyed sensitive habitat with man-made habitat is 3:1. I do not believe that this is adequate or in keeping with the spirit of helping sensitive species thrive and be removed from the endangered list. A more ambitious ratio than 3:1 should be examined.

Response:

Twelve conservation measures were described in the April 20, 2004 Biological Opinion issued by the U.S. Fish and Wildlife Service (USFWS) for Alternative D and provided in Appendix F-E, Biological Opinion From United States Fish and Wildlife Service (USFWS), of the Final EIS. The conclusion of the Biological Opinion is that the proposed action, Alternative D, will not jeopardize the continued existence of the Riverside fairy shrimp. Conservation Measure #5 stipulates the creation of habitat suitable to support the Riverside fairy shrimp within Federal Aviation Administration (FAA)-owned property designated as a Habitat Preserve (905 acres) at the former Marine Corps Air Station at El Toro (El Toro) or other site as approved by the Carlsbad Fish and Wildlife Office (CFWO). The Habitat Preserve is managed by the USFWS. The El Toro site is a viable mitigation site and LAWA and FAA are currently moving forward with implementation of this conservation measure. The USFWS has determined that a creation to impact ratio of 3:1 is an appropriate mitigation ratio as described in Conservation Measure #5 of the April 20, 2004 Biological Opinion. The USFWS based the mitigation ratio for the April 20, 2004 Biological Opinion on standard conservation measures used in other wetland mitigation projects and consideration of existing conditions at LAX.1 The USFWS deemed a 3:1 mitigation ratio more than adequate considering the severely degraded conditions at LAX, where the Riverside fairy shrimp is unable to complete its life cycle. Additionally, based on the fact that mitigation would occur at the FAA-owned property at El Toro, which is a highly-protected federal preserve, the USFWS determined this mitigation ratio would adequately mitigate for the loss of degraded habitat at LAX while meeting the conservation goals of the USFWS. Furthermore, conservation Measure #6 stipulates that relocation of soils bearing Riverside fairy Shrimp cysts only take place once success criteria for the created pools have been met. This measure assures that adequate habitat be present prior to inoculation of the created pools with Riverside fairy shrimp cysts.

The operational closure of Marine Corps Air Station (MCAS) at El Toro took place in July 1999 pursuant to the federal 1993 Base Realignment and Closure process. The FAA-owned 905 acre property located northeast of Irvine Boulevard was not part of the base disposal action. Therefore, the sale of the former MCAS El Toro by the Department of the Navy to permit a non-aviation reuse will not affect LAWA and FAA's ability to relocate the Riverside fairy shrimp to FAA's property.

1 Bianchi, Mike, Personal Communication, April 25, 2005. Contact: U.S. Fish and Wildlife Service, Ecological Services, Carlsbad Fish and Wildlife Office, 6010 Hidden Valley Road, Carlsbad, CA 92009.

FPC00006-13

Comment:

Coastal Zone Resources - Consistency with the California Coastal Act

There is no dispute that Alternative D will have coastal impacts. Although the north runway project would disturb the environmentally sensitive habitat area ("ESHA") and the endangered El Segundo blue butterfly, consistency conclusions by LAWA and the FAA allow the project to proceed. The FEIS contends that the navigation aids in the northern part of the ESHA are consistent with the Coastal Act to the maximum extent practicable. Yet, the decision to reconfigure the north runways (which triggers the new navigation aids) is a discretionary one.

Does the FAA or the federal government require LAWA to reconfigure Runway 24L/6R?

Does the FAA or the federal government require LAWA to extend Runway 24R/6L?

If LAWA is not compelled or mandated by federal law or action to extend or reconfigure Runways 24L and 24R as part of its Master Plan project, in what sense are the north runway improvements consistent to the maximum extent practicable with the environmentally sensitive habitat policy of the Coastal Act?

Response:

The Coastal Zone Management Act, 16 U.S.C. § 1456, requires that Federal activities within or outside the coastal zone that affect any land or water use or natural resource of the coastal zone shall be carried out in a manner which is consistent to the maximum extent practicable with the enforceable policies of approved State management programs. As is clear from the language of the statute, the CZMA does not outright require federal actions to be fully consistent with every element of a coastal management program. Rather, it requires those actions to be consistent to the maximum extent practicable. Nor does the statutory language limit practicability to actions that are non-discretionary. The phrase "consistent to the maximum extent practicable" cannot reasonably be read as a requirement that consistency be found only in those situations where a federal agency proposes taking an action that it is mandated by law to take. Rather, the statute is addressing both discretionary and non-discretionary actions, and requires that both types of action be consistent to the maximum extent practicable with the enforceable policies of an approved state management program. Implicit in this language is the acknowledgement that protection of this resource is not the only public interest that may be considered when determining consistency of federal actions.

Here, the proposed improvements under Alternative D themselves serve a public interest. The design and location of certain airside improvements under Alternative D, which occur outside of the coastal zone such as the reconfiguration and extension of Runway 24R/6L, mandate improvements to the navigational aids within the coastal zone for safe operation of the airport. Under Alternative D, the safety of certain airport operations will quite literally depend upon the navigational aid improvements occurring within the coastal zone. The Runway 24R/6L improvements that provide the impetus for relocating existing navigational aids located within the coastal zone are proposed in light of FAA design standards and policy guidance that promote the safe and efficient use of navigable airspace, which is consistent with FAA's basic mission and clearly serves the public interest. Additionally, it should also be noted that the proposed navigational aid improvements occurring within the coastal zone involve the relocation and upgrading of existing navigational aids situated in a diverse setting that includes barren areas that have been, and currently remain, highly disturbed from the former residential community that once occupied the subject coastal area, as well as areas where a combination of native and non-native species have become established. The siting of the proposed navigational aids improvements has, to the extent practical while also meeting the FAA safety requirements, included use of the existing disturbed areas, and minimization of any new disturbance followed by revegetation of disturbed areas. As determined by the FAA and concurred with by the California Coastal Commission, the impacts

occurring within the coastal zone from the proposed navigational aids relocation and improvements will be fully mitigated. For more information on the basis and requirements for the navigational aid improvements, please refer to pages 6 through 14 of the FAA's Coastal Zone Management Act (CZMA) Consistency Determination (see Appendix A-3a in Volume A of the Final EIS), as reiterated on pages 10 through 20 of the Coastal Commission staff report for the November 17, 2004 hearing (see Appendix A-3d in Volume A of the Final EIS). The factors presented in those discussions were specifically taken into account in the findings relative to the navigational aids improvements and relocation being, with mitigation, consistent to the maximum extent practicable with the California Coastal Act (including Section 30240). This conclusion was also concurred with by the California Coastal Commission.

FPC00006-14

Comment:

Safety and Security

The security of LAX is not only of vital local concern, but a matter of national security. There has been no objective analysis as to whether Alternative D will enhance the security of the airport and its passengers and employees. The comprehensive cost-benefit analysis of Alternative D security that was promised last year has not been initiated. I believe that in this vacuum of objective analysis, it is imprudent to move forward on the Alternative D Master Plan, whose centerpiece is the ground transportation center in Manchester Square.

Response:

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

FPC00006-15

Comment:

Do you have any reliable information as to whether the proposed Automated People Movers, ground transportation center, and Intermodal Transportation Center would become the targets of terrorist attack?

The ground transportation center is designed as the primary passenger access point to LAX. How many people are projected to use the Ground Transportation Center during the design day? In what ways are passengers safer in the Ground Transportation Center than they are in terminals in the existing central terminal area?

How many more law enforcement personnel would be needed to secure the four major new facilities conceived by Alternative D (GTC, ITC, RAC, APM)? What would be the personnel and associated cost of such security?

Response:

Portions of this comment do not raise or pertain to any environmental issues that are subject to NEPA review requirements. Notwithstanding, please see Topical Response TR-SEC-1 in Part II-Volume 1 of the Final EIS which addresses the most frequently raised security-related issues pertaining to the design and ability of Alternative D to enhance existing safety and security at LAX. Also, please Table F4.26.2-2 on Page 4-1550 of Section 4.26.2, Law Enforcement, of Part I of the Final EIS regarding additional staffing for Alternative D including the GTC, ITC, RAC, and APM.

The Final EIS addressed on-airport transportation in Section 4.3.1, On-Airport Surface Transportation of Part I. Please see Table 4.3.1-15, On-Airport Ground Transportation Forecasts (Vehicles) Alternative D, on Page 4-397 of Part I of the Final EIS for the AM Peak Hour, Airport Peak Hour, and PM Peak Hour forecasts for the GTC. As described on pages 1 and 2 of Technical Report S-2c, the landside APM system's CTA-GTC passenger flows are expected to be about 50 percent of the total peak design peak hour APM users, but these riders would have more baggage, so they represent about 62 percent

of the capacity requirements. In the total design day the GTC will serve approximately 94,000 origin and destination (O&D) passengers. Riders on the APM would include:

- Arriving and departing air passengers who park, are dropped off/picked up by a third party, or use commercial transportation at the GTC;

- Meeters/greeters and well-wishers who park at the GTC and ride to/from the CTA with their air passengers. This would be during periods of normal security in heightened security times the landside APM could be restricted to air passengers only;

- Other airport visitors, also only during normal security periods; and

- Airport and airline employees who work in the CTA and GTC and need to travel between work stations.

It is important to note that users of the GTC will experience several key security benefits as compared to the current situation in the existing central terminal area. These benefits include:

1. Protection against large car/truck bombs by design. Blast protection will be built into the GTC from the ground up and the construction of this protection will be in a new location that will not interrupt ongoing airport operations during construction.

2. On-Airport roadway capacity to screen all automobiles against large car/truck bombs before they reach the curb without stopping all surface traffic in the airport vicinity. When cars and trucks are stopped at the existing temporary check points entering the CTA, only a limited number of the total vehicles entering the airport are actually screened. Even with this low number of screened vehicles, through traffic on Century and Sepulveda Boulevards is impacted.

3. Lower average crowd densities because the GTC is not a destination. People using the GTC will do so to access the terminals that remain in the CTA so they will not be waiting in large, unprotected groups for long periods of time waiting to check in or claim their baggage.

4. Lower density of people overall because O&D passengers will access the CTA from the GTC, the Intermodal Transportation Center (ITC), the Consolidated Rental Car Center (RAC) and via FlyAway buses. Without the GTC or the other improvements included in Alternative D, all O&D passengers would have to continue accessing the CTA via private automobiles, buses, shuttle vans, taxis and limousines.

FPC00006-16

Comment:

Noise

The FEIS analysis of traffic and noise impacts is based on the assumption that the maximum number of passengers that Alternative D can accommodate is 78.9 MAP. If for any reason, the passenger activity cap is exceeded, then the associated impacts will also be greater.

Under Alternative D, what are the forecast 65 CNEL noise contours for 89 MAP? For 97.9 MAP?

Has an analysis been performed to determine whether any sensitive land uses (residences, schools, etc.) will be affected under Alternative D if and when activity levels exceed 78.9 MAP?

Can it be reliably stated that if activity levels under an implemented Alternative D exceed 78.9 MAP, that Alternative D has fewer impacts than the No Action/No Plan Alternative?

Response:

The Final EIS and the LAX Master Plan, including appendices, indicate how the 2015 activity level forecast for each alternative was determined. The operational characteristics associated with the activity level forecast for each alternative were accounted for in the technical analyses completed for each alternative, as presented in the Final EIS. Relative to aircraft noise, the pertinent operational considerations include, but are not limited to, the fleet mix, design day schedule including a breakdown of which flights get assigned to which runways, and the alignments of runways. These and other factors

related to operations were carefully considered for each alternative. Notwithstanding that NEPA does not require evaluation of purely speculative scenarios, it is not possible to estimate the changes in noise impacts based solely on different theoretical activity levels, as requested in the comment. As indicated above, the determination of noise level impacts associated with each alternative is based on numerous specific factors and not simply activity levels.

It is important to note that Alternative D, as well as any of the other alternatives, does not set a "passenger activity cap" as suggested in the comment, inasmuch as the establishment of such a cap is prohibited by federal law. Please see Topical Response TR-GEN-3 regarding passenger activity levels and how the ability of airport operators and local jurisdictions to control airline activities (i.e., establish a "cap" at airports) was clarified by the federal Airport Noise and Capacity Act (ANCA) of 1990. Please also see Response to Comment FAL00003-2 regarding the fact that the 78.9 MAP projected for Alternative D represents the reasonably foreseeable future (2015) passenger activity level based on a careful analysis of the practical capacity of Alternative D, as utilized in the NEPA analysis for determining reasonably foreseeable environmental impacts, and is not contingent upon, or require, assurances that 78.9 MAP will not be exceeded in the future. Please also note that Response to Comment FPC00006-2 provides additional discussion regarding the issue of airport caps, as does also Topical Response TR-GEN-3.

FPC00006-17

Comment:

Phasing

How long will the Master Plan program take to be fully implemented after construction begins? At what date can the Master Plan be reasonably expected to be completed?

It appears from the illustrations submitted, that the majority of the existing remote gates need not be removed to reconfigure the north runways. How many, if any, of the remote gates must be razed to reconfigure the north runways?

Does the so-called consensus plan alter the three-stage phasing of the Alternative D Master Plan?

Response:

Figure F3-20, 2015 Alternative D Conceptual Summary Schedule, on page 3-84 in Part I of the Final EIS presents a conceptual construction schedule for Alternative D. The schedule shows the general phasing and estimated construction durations for the various elements of Alternative D. It is estimated that construction of Alternative D will be completed by the end of the fourth quarter of 2014. As stated in Chapter 3, Alternatives, on page 3-81 in Part I of the Final EIS, and as indicated by the commentor, Alternative D is planned to be implemented in three phases. The Consensus Plan to which the commentor is referring is the implementation process outlined in the LAX Specific Plan. The LAX Specific Plan is a local implementation mechanism that was adopted by the Los Angeles City Council. The LAX Specific Plan is not a Federal plan and is unrelated to the Final EIS. It is FAA's understanding that LAWA intends to construct all components of Alternative D. The LAX Specific Plan does not appear to be inconsistent with the general approach of implementing Alternative D in three phases.

As described on page 3-75 in Chapter 3 of Part I of the Final EIS, the existing remote gates at the west pad facility would be eliminated in Alternative D and this area would be prohibited from use as a remote passenger boarding location. The remote gates are being demolished to accommodate not just the relocation of Runway 6R/24L and Taxiways D, E, S and Q, but also the associated runway and taxiway safety areas in order to meet FAA Airport Design Standards. The north portion of the existing west pad would be demolished to make room for relocated Runway 6R/24L, Taxiways D and E. This includes seven of the nine existing remote gates. However, the two remaining remote gates would also be demolished, as the west pad would be used in the future for aircraft holding, remain over night (RON) positions and maintenance. The demolition of the remote gates is a component of Alternative D that would serve to encourage continued development of aviation infrastructure at the other airports that serve aviation demand in the Los Angeles region. The Alternative D Master Plan was designed by LAWA to provide a restricted number and type of gate facilities thus limiting the Airport's capacity so that it will comfortably serve approximately the same aviation activity levels identified in the No Action/No Project Alternative.

The proposed west satellite concourse and relocated Taxiways S and Q would be constructed on the existing site of American Eagle's remote commuter gates eliminating these positions from future use. United Express' existing commuter gates would be replaced by a ground run-up enclosure (GRE) facility eliminating these remote gates from future use.

FPC00006-18

Comment:

Historical Resources

Under Alternative D, what is the fate of the historic Proud Bird restaurant located on Aviation Boulevard?

Response:

As shown on Figure F3-14 in Part I of the Final EIS, no changes are proposed to the Proud Bird Restaurant under Alternative D and the restaurant would remain as an existing commercial use.

The Proud Bird Restaurant, though in operation since 1961, was found to lack substantial historical and architectural significance to merit National Register, California Register, or City of Los Angeles Historic-Cultural Monument eligibility as part of the Section 106 compliance survey for the LAX Master Plan under the requirements of the National Historic Preservation Act. No important historical events in American history, State history, or City of Los Angeles history were identified with this property. Additionally, no notable individuals associated directly with the Proud Bird Restaurant were identified. The property also lacked any historical significance for its physical design or construction, including architecture and engineering, to warrant recognition as a historic property embodying distinctive characteristics of a type, period, or method of construction, or representing the work of a master architect, builder, or craftsman.

Further, under the historic resources survey assessment, the static displays of aircraft situated outside of the Proud Bird building were not considered historically significant, for the purposes of Section 106 compliance, because they were neither categorized as structures or objects, as defined by National Register Bulletin: How to Apply the National Register Criteria for Evaluation. Whether real or recreated, the aircraft have been placed on display at the Proud Bird Restaurant as museum show pieces, which under the property classifications defined by the National Register Bulletin referenced above, are inappropriate for designation. Additionally, as defined under "Criteria Consideration B: Moved Properties" in the National Register Bulletin: How to Apply the National Register Criteria for Evaluation, the aircrafts' location at the Proud Bird Restaurant is incompatible with their original function, setting, and context. Hence, they would not be eligible for the National Register even if they were categorized appropriately because of compromised integrity issues. Additionally, the static displays were not considered eligible commemorative properties, as defined under "Criteria Consideration F: Commemorative Properties" in the National Register Bulletin. Eligible commemorative properties are designed or constructed after the occurrence of an important historic event. They are not directly associated with an event, but serve as evidence of a later generation's assessment of the past. Therefore, a commemorative property must be significant based on its own value, not on the value of the event being memorialized.

FPC00006-19

Comment:

Community-Based Agreements

Which of the benefits identified in the community-based agreements reached between LAWA and the LAX Coalition for Economic, Environmental, and Educational Justice are commitments which were previously promised by LAWA (for example, pledges contained in the MMRP, Master Plan commitments, and memoranda of understanding)? Which of the commitments are new commitments that were not previously promised by LAWA?

Which of the benefits identified in the community-based agreements are restatements of existing LAWA policy or practices? Which of the benefits are not?

Which of the benefits under the community-based agreements are dependent for funding upon FAA approval? Which of the benefits are not so dependent?

Response:

The Community Benefits Agreement (CBA) is not a component of the LAX Master Plan or the Final EIS. The CBA is an agreement between LAWA and a coalition of organizations (LAX Coalition) that is separate from the NEPA process. FAA has not been a party to the CBA and furthermore has expressed no opinion about the contents of the CBA. To the extent that the commentor has questions regarding the provisions of the CBA, those questions are appropriately addressed to LAWA.

FPC00006-20

Comment:

Alternative Not Considered

During public testimony in 2004, especially in the context of the so-called consensus plan, I urged that the Manchester Square project (the ground Transportation Center) and other "yellow-light" projects be deleted from the Master Plan.

This "green and red light" approach is a viable alternative to airport modernization that allows the enhancement of safety and amenities and mitigation to off-airport surface transportation. This alternative should not entail undue delay since the "build" projects under this alternative (for example, the ITC) are already described in the EIS and EIR. My "red light" alternative could be implemented at a significant savings over Alternative D, since it does not implement such costly and dubious projects as the billion dollar luggage tunnel. It also has the virtue of eliminating the projects that do not enjoy widespread support.

Unfortunately, this alternative was not analyzed in the EIR or EIS. Thus, by its failure to analyze this alternative, the "Final" EIS and EIR are incomplete. No Record of Decision should issue until the "red light" alternative is prepared.

Response:

Comment noted. Please see Topical Response TR-ALT-1 in Part II-Volume 1 of the Final EIS regarding the range of alternatives analyzed in the Final EIS. As indicated in the topical response, a reasonable range of alternatives was evaluated in the Final EIS. An alternative is considered to be a reasonable alternative if it satisfies the purpose and need of the proposal and is substantially different than existing proposals such that it warrants independent evaluation in a NEPA document. To the extent that a proposal is substantially similar to an existing alternative, and/or its impacts clearly fall within the range of impacts disclosed for an existing fully evaluated alternative, there is no need to evaluate the new proposal independently in the NEPA document. Similarly, if a proposal does not satisfy the purpose and need of a project, it does not warrant detailed analysis in a NEPA document. The approach suggested in this comment, which is being introduced to the FAA for the first time in this comment on the Final EIS, does not appear to satisfy the criteria warranting full evaluation as a new alternative in the EIS.

FPC00007 Gordon, Mike California State Assembly 2/22/2005

FPC00007-1

Comment:

Following are comments on the Final Environmental Impact Statement for Los Angeles International Airport per the Notice of Availability published in the Federal Register, Vol. 70. No. 13, Friday, January 21, 2005.

1. The FEIS Improperly Relies Upon Outdated Data in Analyzing Environmental Impacts.

The environmental impact analysis contained in the FEIR and relied upon by the FEIS is based on old and outdated data that has been piecemealed together at the whim and pleasure of the leadership of the City of Los Angeles since the beginning of the Master Plan process in l997. Such outdated data

cannot be relied upon as a reasonable basis for the analysis of potential environmental impacts for any project alternative contained in the LAX Master Plan nor can any conclusions as to the level of significance of any environmental consequence resulting from any project alternative in the Master Plan be relied upon as a reasonable assessment.

Response:

Due to the general nature of this comment, and absent specific allegations regarding which data in the Final EIS are considered by the commentor to be "old and outdated," FAA is unable to provide a substantive response to the concerns expressed in the comment. To the extent that the commentor references the information used to prepare the environmental baseline, a concept unique to CEQA and not pertinent to the NEPA analysis, general information and explanation of the CEQA baseline can be found in Topical Response TR-GEN-1 in Part II-Volume 1 of the Final EIS.

FPC00007-2

Comment:

2. The FEIS Improperly Relies Upon Inaccurate Description and Analysis of the No Project Alternative.

The FEIS uses the No Project Alternative as the basis for comparison of the environmental impacts of Alternatives A, B, C and D. However, the No Project Alternative in the Final EIS/EIR is fundamentally flawed in both its description and analysis and therefore, is not a reasonable basis for comparison to the build alternatives.

Both the Draft EIS/EIR and the Final EIS/EIR appear to have exaggerated the No Project Alternative in order to make the Build Alternatives appear more benign by comparison. During the development of the LAX Master Plan, Los Angeles World Airports inexplicably increased its estimation of the number of passengers and cargo tonnage that could be served under the No Project Alternative. LAWA abruptly increased the passenger estimate from 70 MAP to 79 MAP by 2015 and increased the cargo estimate from 2.5 MAT to 3 1 MAT by 2015.

Overstating the passenger and cargo handling capacity of the No Project Alternative inflates the environmental impacts of the No Project Alternative and inappropriately makes the impacts of the Build Alternatives appear less severe by comparison.

Response:

Please see Response to Comment AL00033-42 in Part II-Volume 3 of the Final EIS. Please also see Topical Response TR-GEN-2 in Part II-Volume 1 of the Final EIS regarding No Action/No Project Alternative assumptions. As indicated in those responses, revisions to the CEQA Guidelines in 1998 clarified that, where the project that is being evaluated is an existing land use or regulatory plan, policy, or ongoing operation, the No Project Alternative will be the continuation of the existing plan, policy or operation into the future. Accordingly, the No Project Alternative was redefined to include additional projects and actions, consistent with the existing 1981 interim LAX Master Plan, that would reasonably be expected to occur in the foreseeable future if the LAX Master Plan is not approved and/or that are predictable responses to increasing congestion at LAX that would be implemented without any FAA action. Previously, LAWA had taken a conservative approach to the No Project Alternative under CEQA, and only included within the alternative actions that had previously been approved and for which CEQA documentation had been prepared. Under the expanded definition of the No Project Alternative, greater passenger levels and cargo activity could be accommodated.

The clarification in the CEQA Guidelines is consistent with NEPA guidance concerning the No Action Alternative (Question 3, NEPA's Forty Most Asked Questions). Under NEPA, "an action such as updating a land management plan where ongoing programs initiated under existing legislation and regulations will continue, 'no action' is 'no change' from current management direction or level of management intensity . . . [T]he 'no action' alternative may be thought of in terms of continuing with the present course of action until that action is changed."

Prior to the clarification in the CEQA Guidelines, it was assumed that the narrower interpretation of the No Project Alternative under CEQA would prevail. That is, if CEQA prevented LAWA from pursuing projects that would be consistent with the existing interim LAX Master Plan (1981) but for which local approval had not yet been received, then the No Action Alternative under NEPA would also be limited.

Once the CEQA Guidelines were revised, however, the No Action/No Project Alternative was redefined. This redefinition was consistent with both CEQA and NEPA.

FPC00007-3

Comment:

3. The FEIS Improperly Relies Upon a Passenger Capacity Estimate of 79 MAP for Alternative D.

Alternative D proposes to limit LAX to approximately 79 MAP by limiting the total number and size of gate positions to a level lower than Alternatives A, B, and C, and below the current values. However, LAWA performed no analysis of the actual capacity of the number and size of gate positions and, instead, relies upon a market analysis based on assumptions about the reactions of airlines and passengers to the gate configuration proposed in Alternative D as the basis for the capacity estimate. Independent analysis of the capacity of the number and size of gates proposed in Alternative D by UC Berkeley Professor Adib Kanafani reveals a capacity of approximately 87 MAP.

Response:

Please see Response to Comment FAL00003-2 regarding capacity and other Master Plan issues raised in this comment. Also, please see Response to Comment FAL00003-64 regarding inter-gate time assumptions and analysis used in the LAX Master Plan, Response to Comment FAL00003-86 regarding proper use of design day to annual factors for passengers and aircraft operations, and Response to Comment FAL00003-87 regarding the aircraft load factor and peak hour load factor forecasts and their proper use in the LAX Master Plan.

For more information on the topics discussed above and in the Responses to Comments cited above, please see the Final LAX Master Plan in which all existing conditions, aviation forecasts (both unconstrained and constrained), demand/capacity simulation analyses, facility requirements and alternatives for meeting these requirements have been prepared, reviewed and presented along with all associated methodology and assumptions. In particular, see Appendices A through I of the Final LAX Master Plan for substantial technical update and analyses of existing airport conditions and future demand/capacity simulation results associated with Alternative D. Please see Chapter 2 in Part I of the Final EIS in which this airport planning process has also presented the results and conclusions of this process in context with the demonstrated purpose and need for the plan. Please see Chapter 4 of Part I of the Final EIS and Chapter A.2 of the Final EIS for the environmental impacts associated with each of the LAX Master Plan alternatives, including Alternative D. Please see Response to Comment SAL00015-11 in Part II-Volume 10 of the Final EIS regarding the commentor's consultant analysis and Responses to Comments SAL00015-312 and SAL00015-333 in Part II-Volume 10 of the Final EIS regarding capacity issues. Also please see Part II-Volume 1 of the Final EIS for Topical Responses TR-GEN-3 regarding projected versus actual capacity levels at LAX and TR-MP-1 regarding air cargo activity and demand.

FPC00007-4

Comment:

4. The FEIS Improperly Fails to Identify and Measure the Impacts of Alternative D Beyond the 79 MAP Threshold.

As stated above, the FEIS improperly relies upon a passenger capacity estimate of 79 MAP for Alternative D although LAWA performed no true capacity analysis of Alternative D and the Master Plan offers no assurances that Alternative D will be held to a 79 MAP threshold. In limiting its analysis to impacts at the 79 MAP level, the FEIS fails to properly identify and measure the environmental impacts, including noise, traffic and pollution, of activity levels beyond 79 MAP. In doing so, the FEIS understates the potential adverse environmental impacts of Alternative D.

Response:

As indicated above in Response to Comment FPC00007-3, both the Final LAX Master Plan and the Final EIS provide complete descriptions of the characteristics of Alternative D and how the future activity levels for Alternative D, based on those characteristics, were determined. Specifically, the Final LAX Master Plan describes how all existing conditions, aviation forecasts (both unconstrained and

constrained), demand/capacity simulation analyses, facility requirements and alternatives for meeting these requirements have been prepared, reviewed and presented along with all associated methodology and assumptions. In particular, Appendices A through I of the Final LAX Master Plan provides a substantial technical update and analyses of existing airport conditions and future demand/capacity simulation results associated with Alternative D. Chapter 2 in Part I of the Final EIS presents the airport planning process applied to Alternative D and the results and conclusions of this process in context with the demonstrated purpose and need for the plan. Chapter 4 of Part I of the Final EIS and Chapter A.2 of the Final EIS address the environmental impacts associated with each of the LAX Master Plan alternatives, including Alternative D.

The 78.9 million annual passenger (MAP) activity level projected for Alternative D in 2015 is based on the assumptions and factors that are well-documented in the materials referenced above. In a similar manner, future MAP activity levels associated with each of the other four alternatives (i.e., the No Action/No Project Alternative and Alternatives A, B, and C) were also projected for 2015 using the same basic approach, thereby providing a consistent approach and equal basis of comparison between all alternatives. The formulation and evaluation of Alternative D are not based on an absolute maximum capacity threshold that could be reached at some undefined future point in time, as being requested by the commentor, but rather on reasonable and appropriate projections of a future activity level estimated for the 2015. This approach was applied to all alternatives addressed in the Final EIS, as documented therein. Please see Response to Comment FAL00003-2 for additional discussion regarding how future activity levels for Alternative D were determined based on projected market demand considerations versus a theoretical maximum design capacity.

The comment requests proof of assurances that Alternative D will be held to a 79 MAP threshold. Please see Topical Response TR-GEN-3 regarding passenger activity levels and how the ability of airport operators and local jurisdictions to control airline activities (i.e., establish a "cap" at airports) was clarified by the federal Airport Noise and Capacity Act (ANCA) of 1990.

FPC00007-5

Comment:

5. The FEIS Fails to Reconcile Conflicts in the Methodology of Analysis and Assessment of Impacts Between the FEIS and the FEIR.

The FEIS acknowledges a conflict in the basis of comparison of impacts and conclusions of significance for certain impact categories. The FEIS uses the No Project Alternative as the basis of comparison of impacts with the Build Alternatives where the FEIR uses the 1996 baseline. The conflict is most apparent in the areas of Environmental Justice relative to noise, air quality and human health risk

Where the FEIR finds disproportionately high impacts from noise and pollution on minority and/or low-income communities under Alternative D, the FEIS finds no significant impacts and, in fact, concludes that noise impacts on these communities would be reduced under Alternative D.

The FEIS fails to provide a basis, methodology or rationale to reconcile the stark conflicts in the assessment of noise and pollution impacts on minority and/or low-income communities under Alternative D.

Response:

This comment does not pertain to the adequacy of the Final EIS, but rather is a comment on the fact that different conclusions are reached when evaluating various impact categories under CEQA as compared to NEPA. The EIS and EIR have made clear throughout the environmental process that CEQA and NEPA have different statutory frameworks and methodologies. The Final EIS was prepared by the FAA for NEPA purposes based on federal laws, regulations, and standards, and the analysis prepared by LAWA in the Final EIR was conducted for purposes of CEQA using a different baseline with consideration of state laws, regulations, and standards. In large part, the difference in conclusions is due to CEQA's use of the "environmental baseline" as a point of comparison for purposes of determining environmental impacts, whereas NEPA uses the No Action scenario as a basis of comparison to so-called "action" alternatives. Although both the Final EIR and Final EIS rely on the same underlying data, predictable differences in conclusions result due to the differences in the statutory frameworks of NEPA and CEQA. This does not in any way undermine the adequacy of either document for purposes of compliance with the law under these two distinct statutory schemes.

Please see Response to Comment FAL00001-6 and Topical Response TR-EJ-4 in Appendix A-1 of Volume A of the Final EIS regarding the differences in methodology and assessment of impacts between the Final EIR and Final EIS. While the analysis and findings differ, they intentionally and independently address different requirements and are therefore not in conflict. The environmental justice findings in the Final EIS do not alter LAWA's environmental justice findings in the Final EIR or LAWA's Environmental Justice Program.

FPC00007-6

Comment:

6. The FEIS Improperly Accepts the FEIR's Inadequate Commitments to Attainable or Enforceable Mitigation Measures.

The FEIS improperly accepts the FEIR's mitigation measures and "LAX Commitments" that are sufficiently vague in both description and feasibility as to be virtually meaningless. The FEIS/FEIR should formulate and recommend specific enforceable mitigation measures (whether referred to as "mitigation measures" or "LAX Commitments") and identify and commit to appropriate funding to attain such mitigation measures and commitments.

Response:

Part I of the Final EIS identifies adverse impacts associated with implementation of the LAX Master Plan and provides a comprehensive set of Master Plan commitments and mitigation measures identified by LAWA and/or FAA to address such effects as identified under the CEQA analysis, the NEPA analysis, or both. (Specifically, these are presented in Chapter 5 of the September 2004 Addendum to the Final EIR and further refined by the Second and Third Addenda to the Final EIR.) Pursuant to Section 21081.6(a) of CEQA, a mitigation monitoring and reporting program (MMRP) for the LAX Master Plan - Alternative D has been prepared and adopted which specifies the timing of and monitoring responsibility for implementation of adopted mitigation measures.

A subset of the Master Plan commitments and mitigation measures has been identified in this ROD to address significant impacts identified by the NEPA analysis. These measures are conditions of approval of this ROD and are located in Appendix A of this ROD. In accordance with 40 CFR 1505.3, the FAA will take appropriate steps, through Federal funding grant assurances and conditions, airport layout plan approvals, and contract plans and specifications, to ensure that the mitigation actions identified in Appendix A are implemented during project development, and will monitor the implementation of these mitigation actions as necessary to assure that representations made in the Final EIS with respect to mitigation are carried out. The approvals contained in this ROD are specifically conditioned upon full implementation of these mitigation measures. These mitigation actions will be made the subject of special conditions included in future Federal airport grants to the City of Los Angeles.

The Final EIS is considered a project level environmental analysis for purposes of NEPA and will support the unconditional approval of all aspects of Alternative D except for LAX Northside (as described in detail in the ROD). However, for purposes of CEQA, the LAX Master Plan and EIR were considered to be completed at a program-level of analysis. As individual projects of the Master Plan are advanced for implementation, additional environmental evaluation will occur for purposes of CEQA, and additional details of mitigation will be provided, as appropriate.

There are no requirements under NEPA or CEQA that funding sources for mitigation measures be specified. A specific funding plan has not yet been prepared for the LAX Master Plan; however, it is anticipated that a joint funding effort would be pursued, involving Federal and State grants and other efforts. Much of the project would likely be funded with airport-generated revenues, such as concession fees, landing fees, revenue bonds, leases, and passenger facility charges (PFCs). It is not anticipated that any local tax revenue would be used for this project. Any federal funds for these improvements would not come from the general fund of the United States Treasury.

FPC00007-7

Comment:

In light of the above comments, I urge you to reject the FEIS/FEIR in favor of developing an LAX Master Plan that meets safety, security objectives while limiting LAX to 78 Map to facilitate the development of a regional airport system to meet future projected demand in the region.

Response:

Comment noted. Please see Responses to Comments above. Please also see Part II-Volume 1 of the Final EIS for Topical Response TR-SAF-1 regarding aviation safety, Topical Response TR-SEC-1 regarding security issues, Topical Response TR-GEN-3 regarding ability to limit capacity, and Topical Response TR-RC-1 regarding the LAX Master Plan role in the regional approach to meeting demand.

FPC00008 Sambrano, Diane None Provided 2/21/2005

FPC00008-1

Comment:

When consideration for approval of the Final Environmental Impact Study of Los Angeles International Airport is deliberated it is imperative that the following be taken into account.

Representatives from surrounding cities (Redondo Beach, Torrance, Hermosa Beach, Manhattan Beach, Palos Verdes, Rancho Palos Verdes, Rolling Hills, El Segundo, Inglewood Culver City, the Southbay Cities of Government, the Surrounding area Los Angeles Neighborhood Councils, Congress Members Jane Harman and Maxine Waters, Los Angeles County Supervisors community groups, ARSAC, and LAXEN as well as a host of individual community members have spoken, written, and appeared before public hearings regarding the Alternative D and other LAX expansion plans. At most even though highly technical responses were given to significant problems created by the expansion the LAX greatest response to query or complications was not resolve but rather "Comment Noted". One can easily visualize the short skirted, gum-chewing, nail-polishing cartoon respondent. It is not only distressing but insulting that the "Comment Noted" response to serious concerns of air quality, vehicle traffic congestion, crowded skies, greater risk of incursions, sleep interruption, noise impacts, carcinogen increases is so swiftly dismissed. While it was requested that an extension of time be granted to respond the EIS it is not surprising that disregard for the impacted was again demand a quick to move on attitude.

Response:

Comment noted. Responses to comments on the Draft EIS/EIR and the Supplement to the Draft EIS/EIR were prepared in accordance with the Council of Environmental Quality NEPA Regulations (40 CFR 1503.4) and the State CEQA Guidelines (California Code of Regulations Section 15088) and focused on the disposition of significant environmental issues raised. Detailed, technical responses were provided where warranted by the comment. In some instances, comments received represent expressions of opinion and perception of the project, or narrative that does not permit a substantive response. In these instances, the FAA acknowledged the provision of the comment by indicating the comment is noted.

In accordance with 40 CFR 1506.10(b)(2), FAA did not make a decision on the proposal for a minimum 30-day period following publication of the Final EIS. Although it is not required that public comments be allowed during this timeframe, FAA decided to permit public comment in accordance with 40 CFR 1503.1(b). Regarding requests for an extension of time to comment on the Final EIS, FAA carefully considered such requests and determined that, based on the limited amount of new information provided in the Final EIS Volume A, and the fact that much of the information in Volume A was made available to the public prior to the publication of the Final EIS through publication of addenda to the Final EIR, additional time was not warranted. More specifically, the comment period referenced in this comment is only for a limited portion of the Final EIS, specifically Volume A and associated appendices. Volume A addresses Federal laws and regulations that differ from the requirements of the California Environmental Quality Act, under which Los Angeles World Airports prepared the Final Environmental

Impact Report (EIR). However, despite differences in applicable laws, the Final EIS does not present underlying data different from that disclosed in the Final EIR.

FAA also considers the allotted time for comments adequate because a portion of the material has already been available for public review for some time. This material is presented in the appendices to Volume A. This includes FAA's Coastal Zone Management Act Consistency Determination and the City of Los Angeles' Coastal Zone Management Act Consistency Certification. The Los Angeles/El Segundo Dunes Habitat Restoration Plan and the California Coastal Commission's Staff Report were also available to the public prior to release of the Final EIS.

FAA made the Final EIS available to the public on January 13, 2005. This was one week before publication of the Notice of Availability of the Final EIS in the Federal Register.

FPC00008-2

Comment:

It has been suggested that expansion must be rushed in response to the terrorist attack of 911. Logic would suggest the best solution would be to create multiple targets by establishing regional options rather than making one really easily to cause significant impact target or one even greater negative impact target. There is no debate that special interests groups are absolutely comfortable and pleased to disregard the safety and quality of life issues of the less economically advantaged. However, it is the role of government to provide regulation over the negative impacts of corporations whether they are city owned and operated or under private ownership.

Response:

This comment does not raise or pertain to any environmental issues that are subject to NEPA review requirements. Notwithstanding, please see Topical Response TR-SEC-1 in Part II-Volume 1 of the Final EIS which addresses the most frequently raised security-related issues pertaining to the design and ability of Alternative D to enhance existing safety and security at LAX. Also, please see Response to Comment AL00051-93 in Part II-Volume 3, PC01881-31 in Part II-Volume 6, and PC02131-5 in Part II-Volume 7 of the Final EIS.

FPC00008-3

Comment:

The "economic growth" of one city should never out weigh the rights of individuals impacted in the areas surrounding that economic entity. The humans surrounding the airport should be granted the same right to environmental justice as those who fly first class. The very foundations of this country are set in the principles that all men are created equal. That those who established their homes prior to the advent of the jet age and discount frequent flights are to be dislocated or subjected to carcinogens is not consistent with the concept of environmental justice. It is an even greater insult that it is a "City owned and operated property" that plans to cause such impacts on the constituency of other cities and a portion of her own residents as well.

Response:

Comment noted. This comment does not address the adequacy of the information disclosed in Volume A of the Final EIS.

FPC00008-4

Comment:

The recently voted on "Community Benefits Agreement" touted as the biggest, best, and first wonder agreement is an insult on a host of levels to those of the affected area. How is it the genuine community has never been granted binding agreement negotiation table talks with the Board of Airport Commissioners who chose to negotiate withthe self-proclaimed leaders. Daniel Tabor (Coalition Spokesperson) had run for Mayor of Inglewood and received only 3,666 votes in a community of 112,000 residents and a registered voter list of 40,000. Obviously the Inglewood community at large did

not choose him as their representative. The Labor organization seeking temporary jobs at the permanent expense of permanent residents made up another of the "Coalition" members. As for the Religious Leadership-since when do buildings used one day a week deserve priority consideration over homes where people dwell seven days per week. Temporary union jobs receiving priority over local homeowners seems counterproductive to the HUD goal of creating more homeownership.

Response:

The Community Benefits Agreement (CBA) is not a component of the LAX Master Plan or the Final EIS. The CBA is an agreement between LAWA and a coalition of organizations (LAX Coalition) that is separate from the NEPA process. FAA is not a party to the CBA.

FPC00008-5

Comment:

Since the Fall of Holy Roman Empire great societies decline typically not from outward invasion but of inward decay. When the principals of concern for economic growth overshadow the quality of life of her constituency that society has failed her people even if the selected few prosper in the short term. Those of us living in the area surrounding Los Angeles International Airport are no less-worthy of sleep, clean air, and home ownership than those whose only contact with an airplane is the occasional business trip or family vacation. No society should put the temporary convenience of tourist above the quality of life of her residents.

Response:

The Final EIS addressed air quality in Section 4.6, Air Quality (Part I), and Section A.2.3, Air Quality (Volume A), and noise impacts in Section 4.1, Noise (Part I), and Section 4.2, Land Use (Part I). Supporting technical data and analyses were provided in Appendix D, Appendix G, Technical Reports 1 and 4, Appendix S-C, Appendix S-E, Technical Reports S-1 and S-4, Appendix F-B, Appendix A-2a, and Appendix A-2b. Mitigation measures and Master Plan commitments to address noise impacts are presented in subjections 4.1.5, 4.1.8, and 4.2.8 in Part I of the Final EIS, as revised by Appendix AD(2)-B of the Second Addendum to the Final EIR. Mitigation measures that address air quality impacts are described in subsection 4.6.8 in Part I of the Final EIS, as amended by Appendix AD-B of the September 2004 Addendum to the Final EIR. A subset of mitigation measures and Master Plan commitments have been identified in this ROD to address significant impacts identified by the NEPA analysis. These measures that are required as a condition of approval of this ROD are identified in Appendix A of this ROD. Also, please see Topical Response TR-LU-1 in Part II-Volume 1 of the Final EIS regarding impacts on quality of life.

FPC00008-6

Comment:

While these words may seem random and passionate without scientific point consider the prior presentations dealing with studies, improper placement of monitors, misrepresentations of over-flights, chemical analysis, traffic patterns and misstated conclusions. Those prior statements however well studied annotated and presented were met with "Comment Noted" as if never read, and simply an exercise in allowing because the law demands though does not require genuine interest. It is my hope perhaps those previous comments will be considered by those whose goal is serious concern about impacts rather than simply adding to the cash flow at LAX.

Response:

FAA takes its responsibility for evaluating the potential impacts of proposed airport development in accordance with NEPA and its implementing regulations very seriously. Responses to comments concerning overflights, criteria and toxic air pollution, traffic patterns, and other substantive environmental issues were addressed in Volumes 2 through 12 of Part II of the Final EIS and Appendix AD-A of the September 2004 Addendum to the Final EIR (which is included as part of the Final EIS). As indicated in Response to Comment FPC00008-1, responses to comments on the Draft EIS/EIR and the Supplement to the Draft EIS/EIR were prepared in accordance with the Council of Environmental Quality NEPA Regulations (40 CFR 1503.4) and the State CEQA Guidelines (California Code of

Regulations Section 15088) and focused on the disposition of significant environmental issues raised. Detailed, technical responses were provided where warranted by the comment.

FPC00009 Carpio, Cecil None Provided 2/22/2005

FPC00009-1

Comment:

Citing FAA Order 5050.4A, Airport Environmental Handbook

CHAPTER 9. ENVIRONMENTAL IMPACT STATEMENT PROCESSING

94. PREPARATION AND REVIEW OF FINAL ENVIRONMENTAL IMPACT STATEMENTS.

2) For actions involving an airport location, runway location, or major runway extension pursuant to section 509(b)(5) of the 1982 Airport Act and found to have a significant adverse effect, there shall be evidence to support a conclusion that:

(a) There is no feasible and prudent alternative

LAX can already accommodate the New Large Aircraft. Reconfiguration of the north runway complex is not needed. A regional solution to air passenger and air freight traffic is a saner, safer, and more secure alternative than supporting LAX expansion through runway extensions and relocation. The public and the economy must be protected by the FAA. In these days of threatened terrorism, as well as the ever-present threat of natural disasters, allowing LAX to expand allows this economic engine to become A Bigger Target.

Response:

Comment noted. FAA's statutory mission is to ensure the safe and efficient use of navigable airspace in the United States. This includes the safe and efficient development of public use/publicly owned airports. Airports in the United States are locally owned and operated. The decision to develop an airport is the responsibility of the airport sponsor. FAA does not direct the timing or nature of development at the nation's airports. Similarly, under the Airline Deregulation Act of 1978, the FAA does not regulate rates, routes, and services of air carriers or cargo operators. Airline managements are free to decide which airports to serve based on market forces. Nonetheless, Alternative D has been designed by LAWA to use physical constraints to encourage airlines to use other regional airports.

Although one runway can currently accommodate the NLA, without the proposed airfield improvements LAX would face additional operational restrictions to accommodate NLAs. Alternative D airfield improvements would allow operation with little or no disruption to other aircraft on the airport, while improving safety and efficiency. Please see Chapter 2, Purpose and Need, Sections 2.3.7 and 2.3.8 of Part I of the Final EIS, for a more detailed discussion of the need for airfield improvements. In addition, please see Chapter 3, Alternatives, pages 3-67 through 3-75 of Part I of the Final EIS for a discussion on how the Alternative D airfield modifications would enhance the operation of the airport, including providing a physical solution to reducing the risk of runway incursions. Also, please see Topical Response TR-SAF-1 in Part II-Volume 1 of the Final EIS regarding aviation safety.

In addition, please see Topical Response TR-RC-1 in Part II-Volume 1 of the Final EIS regarding the LAX Master Plan role in the regional approach to meeting demand and Topical Response TR-SEC-1 in Part II-Volume 1 of the Final EIS regarding security issues.

FPC00010 Carpio, Cecil None Provided 2/22/2005

FPC00010-1

Comment:

Citing FAA Order 5050.4A, Airport Environmental Handbook

CHAPTER 9. ENVIRONMENTAL IMPACT STATEMENT PROCESSING

94. PREPARATION AND REVIEW OF FINAL ENVIRONMENTAL IMPACT STATEMENTS.

2) For actions involving an airport location, runway location, or major runway extension pursuant to section 509(b)(5) of the 1982 Airport Act and found to have a significant adverse effect, there shall be evidence to support a conclusion that:

(a) There is no feasible and prudent alternative

Comment: Differential Runway Usage: As per the 2001 Caltrans Noise Variance Decision, page 7, paragraph "b":

"This rule requires, where possible, take-offs be launched from the inboard runways... There is no certainty as to how much benefit is derived from this procedure, but it is perceived as being helpful."

And, as per the 1998 Caltrans Noise Variance Proposed Decision, page 8, paragraph"b":

"This rule requires, where possible, that take-offs be launched from the inboard runways... It is not clear how beneficial this rule is. The point is to shelter the adjacent communities to the north and south of the airport property from noise. However, the bulk of the noise from jet aircraft is to the front and rear of the aircraft in flight, and not to the side. All runways are oriented (roughly) northeast to southwest. Thus, there would seem to be little to be gained from this."

Has a study been done to weigh the noise mitigation benefits of this Differential Runway Usage rule against the impact this noise mitigation rule has on airport runway incursions? Runway separation (moving the south runway complex) might not be necessary if this rule were reversed. Also, the proper staffing of the air traffic control tower (more controllers) would alleviate the number of incursion incidents.

Has this prudent alternative been studied thusly?

Response:

Comment noted. The commentor's suggested runway operating procedures (i.e., with arrival aircraft on the inboard runways and departure aircraft on the outboard runways) would substantially reduce runway capacity. Please see Response to Comment PC02204-24 in Part II-Volume 7 of the Final EIS regarding runway operating procedures at LAX. As described in subsection 3.2.9, Alternative D - Enhanced Safety and Security Plan, on page 3-75 of Part I of the Final EIS, the primary use of runways is assumed to be arrival operations on the outboard runways and departure operations on the inboard runways. Occasional departures would continue off of the outboard runways. Runway utilization assumptions for Alternative D are included in Table S8, 2015 Runway Utilization Percentages - Alternative D, in Technical Report S-C1, Supplemental Aircraft Noise Technical Report. The assumptions included in this table reflect the continuation of the Aircraft Noise Management Procedures that prioritize arrival operations on the outboard runways and departures on the inboard runways. These procedures do make a difference in the noise impact to communities north and south of LAX because of the substantial sideline noise impact of departing aircraft, as sideline noise associated with arriving aircraft tends to be less substantial.

The build alternatives propose various airfield improvements including construction of a center taxiway between the parallel runways. These improvements would reduce the congestion on the runway system. The proposed center taxiway between the runways would allow arrival aircraft to be held between the runways for runway crossing without interfering with the operations on both runways. Without the proposed center taxiway, certain large arrival aircraft that currently use LAX, such as the

Boeing 747 and the Airbus A340 could not be held between the runways for runway crossing due to insufficient separation. Wide body aircraft, such as the Boeing 747-400, would be required to land on the inboard runway, which is the departure runway; therefore, departure capacity would decrease and congestion on the runway system would increase.

Please see Response to Comment SPHF00038-3 in Part II-Volume 11 of the Final EIS regarding the potential noise impacts of moving the southernmost runway approximately 55 feet south and discussion on runway incursion at LAX and an analysis conducted by NASA Ames Research Center comparing the costs and benefits of a center parallel taxiway and "end-around" taxiway on the south airfield complex. The NASA study concluded that the end-around taxiway greatly increased taxi time and delays for arriving aircraft and thereby increased the operational costs of this option and did not give any increased safety margin. Air traffic controllers also found that the center parallel taxiway increased their operational flexibility while controlling arriving aircraft on the south airfield complex. In a separate LAWA study of these two optional taxiway improvements, the "end-around" taxiway was found to increase noise impacts on El Segundo residential land uses from taxiing aircraft.

FAA Air Traffic Control Tower staffing levels and controller training meets the FAA's guidelines for the facility. FAA has addressed individual controller issues found to be contributing factors to runway incursions.

Finally, the commentor's proposed runway operating procedures were not addressed as a separate alternative in the EIR/EIS process, as such a proposal would fail to meet even the most basic elements of the "reasonable alternative" test, particularly as it relates to purpose and need.

FPC00011 Sambrano, Dianne None Provided 2/24/2005

FPC00011-1

Comment:

When consideration for approval of the Final Environmental Impact Study of Los Angeles International Airport is deliberated it is imperative that the following be taken into account.

Representatives from surrounding cities (Redondo Beach, Torrance, Hermosa Beach, Manhattan Beach, Palos Verdes, Rancho Palos Verdes, Rolling Hills, El Segundo, Inglewood, Culver City), the Southbay Cities Council of Government, the surrounding area Los Angeles Neighborhood Councils, Congress Members Jane Harman and Maxine Waters, Los Angeles County Supervisors, community groups ARSAC, and LAXEN as well as a host of individual community members have spoken, written, and appeared before public hearings regarding the Alternative D and other LAX expansion plans. At most even though highly technical responses were given to significant problems created by the expansion the LAX, the greatest response to query or complications was not resolution but rather "Comment Noted". One can easily visualize the short skirted, gum-chewing, nail-polishing cartoon respondent. It is not only distressing but insulting that the "Comment Noted" response to serious concerns of air quality, vehicle traffic congestion, crowded skies, greater risk of incursions, sleep interruption, noise impacts, carcinogen increases is so swiftly dismissed. While it was requested that an extension of time to respond to the EIS be granted to the impacted community, it is not surprising they were disregarded with a "quick-to-move-on" attitude.

It has been suggested that expansion must be rushed in response to the terrorist attack of 911. Logic would suggest the best solution would be to create multiple targets by establishing regional options rather than making "one really easy to cause significant impact" target or "one even greater negative impact" target. There is no debate that special interests groups are absolutely comfortable and pleased to disregard the safety and quality of life issues of the less economically advantaged. However, it is the role of government to provide regulation over the negative impacts of corporations whether they are city owned and operated or under private ownership.

The "economic growth" of one city should never outweigh the rights of individuals impacted in the areas surrounding that economic entity. The humans surrounding the airport should be granted the same right to environmental justice as those who fly first class. The very foundations of this country are set in the principles that all men are created equal. That those who established their homes prior to the advent of the jet age and discount frequent flights are to be dislocated or subjected to carcinogens is not consistent with the concept of environmental justice. It is an even greater insult that it is a "City

owned and operated property" that plans to cause such impacts on the constituency of other cities and a portion of her own residents as well.

The recently voted on "Community Benefits Agreement" touted as the biggest, best, and first wonder agreement is an insult on a host of levels to those of the affected area. How is it the genuine community has never been granted binding agreement negotiation table talks with the Board of Airport Commissioners who chose to negotiate with the self-proclaimed leaders. Daniel Tabor (Coalition Spokesperson) had run for Mayor of Inglewood and received only 3,666 votes in a community of 112,0000 residents and a registered voter list of 40,000. Obviously the Inglewood community at large did not choose him as their representative. The Labor organization seeking temporary jobs at the permanent expense of permanent residents made up another of the "Coalition" members. As for the Religious Leadership-since when do buildings used one day a week deserve priority consideration over homes where people dwell seven days per week? Temporary union jobs receiving priority over local homeowners seems counterproductive to the HUD goal of creating more homeownership.

Since the Fall of the Holy Roman Empire, great societies have declined typically not from outward invasion but of inward decay. When the principals of concern for economic growth overshadow the quality of life of her constituency, that society has failed her people even if the selected few prosper in the short term. Those of us living in the area surrounding Los Angeles International Airport are no less-worthy of sleep, clean air, and home ownership than those whose only contact with an airplane is the occasional business trip or family vacation. No society should put the temporary convenience of tourist above the quality of life of her residents.

While these words may seem random and passionate without scientific point, consider the prior presentations dealing with studies, improper placement of monitors, misrepresentations of over-flights, chemical analyses, traffic patterns and misstated conclusions. Those prior statements, however well studied, annotated and presented, were met with "Comment Noted" as if never read, and simply an exercise in allowing "because the law demands though does not require genuine interest." It is my hope that perhaps those previous comments will be considered by those whose goal is serious concern about impacts rather than simply adding to the cash flow at LAX.

Response:

The content of this comment is essentially the same as comment letter FPC00008; please refer to the responses to comment letter FPC00008.

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Attachment 1

Original Comment Letters on the Final EIS

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

February 22, 2005

RECEIVED
FEB 22 2005
AIRPORTS DIVISION
AWP-610

William C. Withycombe, Regional Administrator
Western-Pacific Region
Federal Aviation Administration
Box 92007 - Worldway Postal Center
Los Angeles, California 90009

Dear Mr. Withycombe:

Subject: Final Environmental Impact Statement for the Los Angeles International Airport Proposed Master Plan Improvements, Los Angeles County, CA (CEQ# 050014)

Dear Mr. Withycombe:

The Environmental Protection Agency (EPA) has reviewed the Final Environmental Impact Statement (FEIS) for the Los Angeles International Airport Proposed Master Plan Improvements in Los Angeles County, California. This is a priority project from Executive Order 13274 (Environmental Stewardship and Transportation Infrastructure Project Reviews; February 27, 2003). Our review is pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508), and Section 309 of the Clean Air Act. Our detailed comments are attached.

EPA has a long history of coordinating with the Federal Aviation Administration (FAA) and the City of Los Angeles, Los Angeles World Airports (LAWA) to reduce environmental impacts resulting from the proposed master plan improvements at Los Angeles International Airport (LAX). We have actively participated in the NEPA process for this project since 1997. We provided scoping comments on July 31, 1997; comments on the DEIS, September 24, 2001; the preliminary draft of the Supplemental DEIS (SDEIS), May 1, 2003; the SDEIS, November 5, 2003; and the preliminary "Environmental Justice Program Package", February 12, 2004. We commend the significant efforts made by FAA and the LAWA for reducing impacts from the proposed master plan improvements, and appreciate the opportunity to provide early comments throughout the NEPA process. We are pleased that many of our comments have been addressed. EPA also organized a peer review of the *Air Quality and Source Apportionment Study of the Area Surrounding Los Angeles International Airport, Technical Workplan* (November 17, 2000) which resulted in the publication of the *Report on the Peer Review Workshop on the Los Angeles World Airports, Air Quality and Source Apportionment Study of the Area Surrounding Los Angeles International Airport* (August 8, 2003).

The FEIS identifies that the Safety and Security Alternative (Alternative D), which seeks to accommodate projected growth in air traffic, without providing additional capacity, is the preferred alternative. We note that LAWA identified the same preferred alternative upon completion of the Environmental Impact Report (EIR). Although FAA has selected the least environmentally damaging alternative as the preferred action, EPA has continuing concerns regarding potential air quality impacts resulting from this project. On January 5, 2005, the South Coast Air Basin was designated as nonattainment for particulate matter less than 2.5 microns (PM 2.5). Given the serious air quality problems in this area, and the recent PM2.5 nonattainment designation, EPA is recommending additional measures be incorporated into the Record of Decision as conditions of FAA approval for the project to further reduce emissions associated with airport operations and construction.

In addition, EPA recommends that the Record of Decision (ROD) include a commitment to complete the Air Quality and Source Apportionment Study and protocol changes recommended by EPA through the above-mentioned *Report on the Peer Review Workshop* (August 8, 2003). EPA understands that a commitment from LAWA to pursue the Study is incorporated into the Community Benefits Agreement, of which FAA is not a signatory. The Record of Decision should commit to address EPA's previous comments on this study.

In our previous comments on the SDEIS/EIR, EPA stressed the importance of reducing air quality impacts to surrounding communities. We were concerned with the issue of public participation and information sharing with low-income and minority populations in the vicinity of LAX. One of the main tenets of environmental justice is meaningful public participation, particularly with those communities that will be directly impacted by environmental decisions. We commend LAWA and the "LAX Coalition for Economic, Environmental, and Educational Justice" on the completion of a *Community Benefits Agreement*, which includes specific commitments intended to reduce environmental impacts associated with the proposed master plan improvements. The FEIS maintains that "LAWA will work in cooperation with the affected communities and appropriate regulatory agencies to support and participate in long-term studies to contribute to an understanding of these types of environmental impacts". EPA urges FAA to provide a continuing commitment and leadership to these efforts, in collaboration with the community and other agencies.

We appreciate the opportunity to review the Final EIS and trust our comments can be addressed in the Record of Decision (ROD). EPA is available to assist in further refinement of mitigation measures proposed. Please send me a copy of the ROD when it

is signed. If you have any questions, please contact me or Connell Dunning, the lead reviewer for this project. Connell can be reached at 415 947 4161 or dunning.connell@epa.gov.

Sincerely,

Enrique Manzanilla, Director
Cross Media Division

Enclosures: EPA's Detailed Comments

CC: Kim Day, Executive Director, Los Angeles World Airports, Los Angeles, CA
Barry R. Wallerstein, Executive Officer, South Coast Air Quality Management District, Diamond Bar, CA
Catherine Witherspoon, Executive Officer, California Air Resources Board, Sacramento, CA

is signed. If you have any questions, please contact me or Connell Dunning, the lead reviewer for this project. Connell can be reached at 415-947-4161 or dunning.connell@epa.gov.

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Enclosures: EPA's Detailed Comments

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Barry R. Wallerstein, Executive Officer, South Coast Air Quality Management District, Diamond Bar, CA
Catherine Witherspoon, Executive Officer, California Air Resources Board

EPA DETAILED COMMENTS ON THE FINAL ENVIRONMENTAL IMPACT STATEMENT FOR THE LOS ANGELES INTERNATIONAL AIRPORT PROPOSED MASTER PLAN IMPROVEMENTS, FEBRUARY 22, 2005

Air Quality

Airport Related Emissions

The proposed project is located within the South Coast Air Basin (SCAB), which is designated as extreme nonattainment for the National Ambient Air Quality Standard (NAAQS) for 1-hour ozone (O3), and serious nonattainment for 8-hour O3, carbon monoxide (CO), and particulate matter smaller than ten microns (PM10). In addition, on January 5, 2005, South Coast Air Basin was designated nonattainment for PM2.5, effective April 5, 2005. For 2000 through 2002, South Coast Air Basin had the highest PM2.5 annual mean concentration (29 micrograms per cubic meter (μg/m3)) in the country. The annual standard for PM2.5 is 15μg/m3. Data from 2000-2002 show that for the 24-hour PM2.5 standard, South Coast is one of two areas in the nation that violate this standard of 65 (μg/m3).

Despite data indicating that SCAB has a significant PM2.5 pollution problem, the Final Environmental Impact Statement/Final Environmental Impact Report (FEIS/EIR) only references the PM2.5 designation (FEIS/EIR General Conformity Determination, p. 4-1), but does not specifically analyze PM2.5 as part of the air quality analysis. The 2003 Air Quality Management Plan for the South Coast indicates that attainment of the PM10 standards by the 2006 deadline will still leave the area 49 percent above the 24-hour PM2.5 standard and 95 percent above the annual PM2.5 standard. Therefore, PM2.5 precursors, such as sulfur dioxide (SO2), should be considered for their impact on PM2.5 in addition to PM10 since control measures for PM10 identified in the FEIS may not be appropriate or adequate for PM2.5 in all cases. While SCAB is in attainment for SO2, projected on-airport emissions of SO2 for Alternative D represent a significant increase from the 1996 baseline emissions of SO2 of 355 tons per year (tpy) (FEIS/FEIR, Table F4.6 6). The 1996 baseline emissions inventory indicates that the bulk of these SO2 emissions are due to aircraft, auxiliary power unit (APU), and ground support equipment (GSE) sources. Of these emissions sources, aircraft is the largest (by a factor of ten). However, APU emissions of SO2 are greater than that of GSE by a factor of 1.5. (FEIS/FEIR, Table F4.6-6).

Recommendation:

Given the recent designation of the SCAB as nonattainment for PM2.5, EPA recommends the following mitigation measures to reduce airport-related emissions. All mitigation commitments should be incorporated into the Record of Decision (ROD) as conditions of FAA approval for the project:

- For all on and off airport diesel sources under FAA and/or LAWA control, use ultra low sulfur fuel (<15 parts per million by volume), use new (>1996) diesel engines, replace diesel engines with alternative clean fuel engines, use alternate fuel sources, and install particulate filters.

- Require the cleanest technology (in terms of fuel, gas electric hybrid, or electric vehicles) for all transport vehicles for airport activities, including but not limited to, shuttle buses, shared ride vehicles, terminal transport buses, public transit, taxi cabs, and delivery vehicles.

- Expedite commitments to reduce GSE use ahead of the GSE Memorandum of Understanding (MOU) commitment scheduled by EPA-FAA's Voluntary Airport Low Emissions (VALE) program and commit to specific methods to reduce emissions associated with aircraft fueling such as underground hydrant fuel systems and electric hydrant carts.

Auxiliary Power Unit Emissions

The FEIS states that, in 2015, the installation of 400-Hz electricity and preconditioned air at all of the gates is expected to reduce auxiliary power unit (APU) emissions by approximately 75 percent, or 540 tpy of CO, 310 tpy of NO_x, 20 tpy of hydrocarbons (HC), and 55 tpy of sulfur dioxide (SO2). In the response to our SDEIS/EIR comments on opportunities to reduce APU emissions, the FEIS states that Clean Air Act Section 233 preempts LAWA and FAA restrictions on APU operation at the gate. Section 233 of the Act addresses State adoption and enforcement of aircraft emission standards; it does not prohibit restrictions on APU use nor does it prohibit LAWA and FAA from offering incentives to reduce APU use. EPA's recommended additional measures for incorporation into the ROD to reduce APU emissions are included below.

Recommendation:

As previously requested in our comments on the SDEIS/EIR, EPA recommends that APU emissions be quantified to reflect specific activities and uses during aircraft operations, with a breakdown highlighting those emissions which can be reasonably reduced by using electric power grid and those where electric power grid can not be utilized effectively. In the ROD, FAA and LAWA should commit to mitigation measures to further minimize APU emissions where they can be reasonably reduced. We recommend the following mitigation measures be incorporated into the ROD as conditions of FAA approval of the project:

- Reduce APU emissions through incentives or lease agreements promoting use of gate power and preconditioned air and reduction of taxi-in/taxi-out time through aircraft on-tarmac traffic mitigation strategies. Identify appropriate early warning programs to alert pilots as to changes in departure times, which may lead to reduced APU emissions. Commit to further measures to minimize APU emissions from specific aircraft activities where emissions can be reasonably reduced.

Construction Mitigation Measures

Several potential mitigation measures to reduce construction emissions are listed in the FEIS/EIR as well as the multiple state and district requirements with which the Los Angeles International Airport (LAX) Master Plan must comply. EPA commends FAA and LAWA for incorporating multiple measures to reduce the impacts resulting from future construction associated with this project.

Recommendations:

Due to the serious nature of the PM10 and PM2.5 conditions in the SCAB, we recommend that the best available control measures for these pollutants be implemented at all times and reiterate our comment included in the SDEIS/EIR to incorporate the Construction Mitigation Plan into the ROD. We recommend that (1) all construction mitigation measures listed in the FEIS/EIR, (2) all requirements under the South Coast Air Quality Management District (SCAQMD) Rules 403 and 1186.1, and (3) the following additional measures be incorporated into a Construction Mitigation Plan. The ROD should include a commitment to implement the Construction Mitigation Plan as a condition of FAA approval of the project to minimize PM10 and PM2.5 emissions.

Fugitive Dust Source Controls:

- Stabilize open storage piles and disturbed areas by covering and/or applying water or chemical/organic dust palliative where appropriate. This applies to both inactive and active sites, during workdays, weekends, holidays, and windy conditions.
- Install wind fencing and phase grading operations where appropriate, and operate water trucks for stabilization of surfaces under windy conditions.
- When hauling material and operating non-earthmoving equipment, prevent spillage and limit speeds to15 miles per hour (mph). Limit speed of earth-moving equipment to 10 mph.

Mobile and Stationary Source Controls:

- Maintain and tune engines per manufacturer's specifications to perform at EPA certification levels and to perform at verified standards applicable to retrofit technologies. Employ periodic, unscheduled inspections to limit unnecessary idling and to ensure that construction equipment is properly maintained, tuned, and modified consistent with established specifications.
- Prohibit any tampering with engines and require continuing adherence to manufacturers recommendations
- Require that leased equipment be 1996 model or newer unless cost exceeds 110 percent or average lease cost. Require 75 percent or more of total horsepower of owned equipment to be used be 1996 or newer models.
- Use particulate traps where suitable.

Administrative controls:

- Identify where implementation of mitigation measures is rejected based on economic infeasibility.
- Prepare an inventory of all equipment prior to construction and identify the suitability of add on emission controls for each piece of equipment before groundbreaking. (Suitability of control devices is based on: whether there is reduced normal availability of the construction equipment due to increased downtime and/or power output, whether there may be significant damage caused to the construction equipment engine, or whether there may be a significant risk to nearby workers or the public.)
- Utilize cleanest available fuel engines in construction equipment and identify opportunities for electrification.
- Develop a construction traffic and parking management plan that minimizes traffic interference and maintain traffic flow
- Incorporate programs such as Leadership in Energy and Environmental Design (LEED) at LAX.

Air Quality Master Plan Commitments

Results of the supplemental human health risk assessment report suggests that acute and chronic non-cancer effects are likely to occur under the no action alternative. The non-cancer chronic hazard index (HI) ranges from 35 to 221 (average 59) and acute HI ranges from 14 to 87 (average 23). (Technical Report - LAX Master Plan Supplement to the Draft EIS/EIR, 9.a. Supplemental Health Risk Assessment Technical Report, June 2003, p. 11 and 14-15.) Although these are "baseline values" (i.e. with no action), the HI indicates risks from emissions that are attributable to the operations of the airport and the traffic into and out of the airport.

EPA has worked for many years with LAWA, consultants, and State and local air district experts to develop an air quality and source apportionment study plan. In 2003, EPA convened an expert peer review panel that reported on the existing, incomplete work plan (*Report on the Peer Review Workshop on the Los Angeles World Airports, Air Quality and Source Apportionment Study of the Area Surrounding Los Angeles International Airport* (August 8, 2003). The reviewers were quite complimentary of the existing documentation, but made many suggestions for improving the plan, starting with a complete emissions inventory for the airport. EPA acknowledges that "LAWA will conduct an air quality and source apportionment study to evaluate the contribution of on-airport aircraft emissions to off-airport pollutant concentrations."(FEIS, p. A-2 118, AQ-1) and is encouraged that the Community-Based Agreement states that this project can proceed within one year if FAA provides approval and/or funding.

EPA has provided funding to the California Air Resources Board (CARB), in collaboration with University of California at Los Angeles and University of Southern California, to conduct a limited scope air quality study at and around LAX. We understand and appreciate that LAWA will cooperate and provide necessary support for

the study which will start in April 2005. SCAQMD has also started its MATES III study and expects to complete the study in early 2006. These sources of information will aide in implementation of the Air Quality and Source Apportionment Study.

Recommendations:

We recommend that the ROD clarify the role and specific commitments of FAA in the proposed AQ-1, Air Quality and Source Apportionment Study, AQ-2, School Air Filters, and AQ-3 Mobile Health Research Lab (FEIS/EIR, p. A.2-118)

As a condition of FAA approval of the project in the ROD, EPA recommends that FAA (1) incorporate suggestions described in the peer review workshop report and pertinent findings from the CARB and MATES III studies in implementing the proposed Air Quality and Source Apportionment Study, and (2) develop a schedule to conduct the air quality and source apportionment study, including initiation of the study within one year of the FEIS/EIR being finalized. Furthermore, the Air Quality and Source Apportionment Study information should be used to validate the modeled concentrations of hazardous air pollutants, especially acrolein and 1,3-butadiene, as characterized in the FEIS/EIR, to inform future mitigation.

As a condition of FAA approval of the project in the ROD, EPA recommends that (1) air filters be installed in schools prior to the initiation of the Air Quality and Source Apportionment Study to mitigate potential adverse health effects, (2) installation of air filters be complemented with an adequate inspection and maintenance program to ensure that installation meets intended purposes, and (3) the health endpoints of the research proposed through the Mobile Health Research Lab be expanded by working with the California Environmental Health Tracking Program and the California Department of Health Services.

Transportation Conformity

The FEIS includes the completed General Conformity Clean Air Act Determination, and states that emissions associated with the proposed action could not be confirmed to have been included with those from a conforming Regional Transportation Improvement Program and a conforming Regional Transportation Plan prepared by Southern California Association of Governments. Therefore, there has not been a determination of transportation conformity for any emissions that may result from proposed roadway improvements associated with Alternative D. Because future funding and/or approval for a proposed new interchange included as a part of Alternative D may come from the Federal Highway Administration (FHWA), that portion of the project will need to be evaluated for transportation conformity.

Recommendation:

In the ROD, identify all portions of Alternative D that will require a transportation conformity determination and will need to be included in a conforming regional transportation improvement program and regional transportation plan.

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Mitigation Measures and Master Plan Commitments

Under the National Environmental Policy Act (NEPA), "all relevant, reasonable mitigation measures that could improve the project are to be identified. Mitigation measures must be considered even for impacts that by themselves would not be considered significant. Once the proposal itself is considered as a whole to have significant effects....mitigation measures must be developed where it is feasible to do so" (see Council on Environmental Quality (CEQ), 1981, "Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations"). CEQ also issued guidance on integrating pollution prevention measures in NEPA documents and NEPA decisions (1993 Memorandum on Pollution Prevention and NEPA).

The FEIS identifies a comprehensive list of 115 mitigation measures and master plan commitments proposed by both LAWA and FAA. FAA anticipates identifying 19 measures as conditions of approval for implementation in the Record of Decision (FEIS/EIR, p. A.1-41).

Recommendation:

We recommend that the FAA include in the ROD an expanded range of measures as conditions of approval of Alternative D. Specifically, Mitigation Measures MM-EJ-1, Expediting Residential Soundproofing for Qualifying Homeowners and other measures to further reduce noise impacts and Master Plan Commitment AQ-1, Air Quality and Source Apportionment Study. In the ROD, EPA recommends that FAA identify why each mitigation measure presented in the FEIS/EIR is not carried forward as a condition for approval of the project (why it is not feasible, not practicable, not appropriate, etc.)

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March 9, 2005

Mr. David B. Kessler, AICP
U.S. Department of Transportation
Federal Aviation Administration
P. O. Box 92007
Los Angeles, CA 90009-2007

RE: Final Environmental Impact Statement, Los Angeles International Airport Proposed Master Plan Improvements – SCAG No. I20050014

Dear Mr. Kessler:

We have reviewed the Final Environmental Impact Statement, Los Angeles International Airport Proposed Master Plan Improvements and determined that it is regionally significant per Areawide Clearinghouse criteria. SCAG comments on the Final EIS were appropriately considered, therefore, we have no further comments. A description of the project was published in the January 1–15, 2005 Intergovernmental Review Clearinghouse Report for public review and comment.

The project title and SCAG Clearinghouse number should be used in all correspondence with SCAG concerning this project. If you should have any questions, feel free to contact me at (213) 236-1852. Thank you.

Sincerely,

April Grayson

APRIL GRAYSON
Associate Regional Planner

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February 22, 2005

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Original sent by First Class Mail

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AWP-610

Mr. David B. Kessler, AICP
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Re: Final Environmental Impact Statement for the Proposed Master Plan Improvements at Los Angeles International Airport - Comments by the City of Inglewood, City of Culver City and County of Los Angeles

Dear Mr. Kessler:

The following are comments by the City of Inglewood ("Inglewood"), the City of Culver City ("Culver City"), and the County of Los Angeles ("County") (collectively "Commentors") concerning the "Final Environmental Impact Statement for the Proposed Master Plan Improvements at Los Angeles International Airport ("LAX")" ("FEIS") and the Clean Air Act Final Conformity Determination ("Conformity Determination") incorporated as Appendix A-2a in the FEIS. As a threshold issue, please be advised that these comments specifically address the environmental topics covered in Volume A of the FEIS, noise, air quality, and environmental justice, where new information and/or analysis supercedes that set forth in the Draft Environmental Impact Report/Environmental Impact Statement ("DEIR") and Supplemental Draft Environmental Impact Report/Environmental Impact Statement ("SEIR"), prepared jointly by Los Angeles World Airports ("LAWA") and the Federal Aviation Administration ("FAA"), and the Final Environmental Impact Report ("FEIR") prepared by LAWA pursuant to the California Environmental Quality Act, *Public Resources Code* § 21000, *et seq.*, ("CEQA").[1] These comments also address the additional issue of capacity where the use of the No Action/No

[1] The DEIR and SEIR were joint products of LAWA and the FAA, and both, along with the FEIR, provide the foundational analysis in the FEIS. Any material that is not changed from the earlier environmental documents is assumed, for purposes of these comments to be adopted in the FEIS.

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Project Alternative ("NA/NP") as the baseline for analysis materially alters the FEIS analysis from that presented in the FEIR. With respect to the other issues presented in the FEIS, Commentors hereby incorporate by reference, in full, their prior comments on the DEIR, SEIR, FEIR and Draft Conformity Determination.

With that preface, Commentors summarize their comments as follows:

The fundamental flaw that taints virtually all of the FEIS' analysis and conclusions is its unsupported assumptions about the constraints on passenger and operational capacity that characterize Alternative D. Those assumptions are: (a) although Alternative D's airfield capacity is virtually identical to that of Alternative C, the former preferred Alternative, with an acknowledged capacity of 89.6 MAP, constraints on the number of gates will effectively constrain the number of passengers passing through the airport; (b) constraints on the amounts of on-airport cargo sort space will limit the total number of operations; (c) as a consequence of these constraints, demand for air travel will "self-disburse" to other airports in the region; such that (d) ultimately, Alternative D's capacity will be virtually identical to that of the NA/NP alternative, the baseline for comparison under the National Environmental Policy Act ("NEPA"), 42 U.S.C. § 4321, *et seq.*

The FEIS' analysis based on those assumptions vastly underestimates the project's environmental impacts, by utilizing the purported constraints to artificially equate the impacts of Alternative D with those of the NA/NP baseline. They are, however, unsupported by any evidence, let alone substantial evidence, in the Record. Instead, the Record demonstrates, among other things, that: (a) Alternative D has the same airside capacity as Alternative C and far greater capacity than the NA/NP Alternative; (b) the number of contact gates, their capacity and the amount of terminal space will, far from limiting capacity, increase capacity under Alternative D, and the removal of the remote gates which purportedly limits flexibility to expand passenger capacity is not a commitment, but a chimera, allowing their replacement at any time they are needed to further increase capacity; (c) the amount of cargo sort space on-airport is irrelevant to limitation of cargo operations (let alone operations in general) because there is an abundance of warehousing available off the airport; and (d) there is no legal mechanism whereby aircraft operations can be forced to disburse to other airports, nor is there, with the demise of the planned El Toro International Airport, the lynchpin of the 2001 SCAG Regional Transportation Plan ("RTP") upon which the FEIS relies, any peripheral airport capacity to accommodate such imagined dispersion of demand throughout the region in the foreseeable future. Therefore, the Record shows that Alternative D will allow airfield capacity increases equal to or greater than Alternative C without any enforceable on-airport constraints on that blossoming of capacity.

The FEIS's environmental analysis is further distorted by the obverse analytic defect, *i.e.*, the capacity of the NA/NP Alternative is vastly overstated. Not only does the FEIS employ a baseline for analysis that flies in the face of contemporary case law, *see, e.g., American Rivers v. FERC*, 201 F.3d 1186, 1195, n. 15, 1198 (9th Cir. 1999), but also ignores the acknowledgment in the FEIS' predecessor documents which states that the improvements in the NA/NP Alternative are "minor" and that "With only the improvements anticipated under the No Action/No Project Alternative, operations at these levels (*i.e.*, 48.7 MAP and 3.1 MAP) in 2015 at LAX would be very inefficient and congested . . ." (FEIS, § A, p. A.1-11).

Because the capacity potential of Alternative D is understated and that of the NA/NP baseline dramatically overstated, the FEIS erroneously concludes that the project will not give rise to significant noise or other impacts. That conclusion is further underlain by notable evidentiary and analytic omissions. For example, the FEIS' noise analysis does not take into account the operations of the new large A-380 aircraft. Indeed, the fleet mix in the FEIS does not include the A-380 or any other New Large Aircraft ("NLA"), even though the FEIS anticipates that as many as 30 per day will access LAX in 2006, but, rather, its surrogate the 747-400, which is smaller, lighter and able to use the "over water" departure procedure (upon which the noise analysis is partially based) under less restrictive "tailwind" conditions. The FEIS explains this omission only by the offhand statement that ". . . many of these [larger] aircraft will be quieter than the aircraft they are replacing." [emphasis added] (Subtopical Response, TR-N-6.3, Topical Responses, p. 2-114).

The impacts reported in the FEIS' air quality analysis and the conclusions of the Final Conformity Determination based upon that analysis are similarly under-estimated. The FAA found the emissions from Alternative D to conform to the State Implementation Plan ("SIP"), based on a last minute determination by the SCAQMD that "the baseline aircraft inventories would serve as the emissions budget for general conformity purposes", SCAQMD letter, August 12, 2004.

SCAQMD's purported Determination was not, however, within SCAQMD's authority to make. See 40 C.F.R. § 93.158(a)(5)(i)(A). That Section requires that such a determination be made by "the State Agency primarily responsible for the applicable SIP." In California, that agency is the California Air Resources Board ("CARB"). The Record however contains no evidence that CARB ever made such a Determination. Moreover, the SCAQMD Determination was based only on the flawed assumptions concerning both baseline and Alternative D capacity that underlie the FEIS. A revised analysis using the acknowledged airfield capacity of Alternative D to accommodate 89.7 MAP (rather than the assumed equation of Alternative D and the NA/NP Alternative at the 78.9 MAP), and the attendant increase in aircraft operations, while

holding other emissions sources constant, demonstrates that, for the criteria pollutants for which the Southern California Region is in non-attainment, PM_{10} and NO_2, a realistic project description would result in exceedances of both the PM_{10} and NO_2 National Ambient Air Quality Standards ("NAAQS"), and, thus, would not conform to the SIP under the standard employed in the Conformity Determination. Moreover, even if conformity could be demonstrated, the same flaws in the air quality analysis that characterize the predecessor environmental documents, and the resulting failure to fully disclose the project's air quality impacts, render the FEIS inadequate under NEPA.

Finally, the FEIS entirely dismisses the project's environmental justice impacts. While the FEIR concluded that, when compared to the 1996 environmental baseline as many as 4,983 (SEIR, Table S5S, p. 94) persons would be newly impacted by an increase of 1.5 dB within the existing 65 CNEL contour, the standard of significance employed in the FEIS,[2] and the FEIR's Addendum No. 3 concludes that Alternative D will shift largely to minority and low income communities, the FEIS concluded that, when compared to the NA/NP baseline, the project has no significant noise, air quality or surface traffic impacts. The FEIR further concludes that Alternative D "would not result in disproportionally high and adverse noise impacts on minority and/or low-income communities" [FEIS, Vol. A-1, p. A.2-81]; and that, with respect to pollutant concentrations, "no significant impacts are expected to result in relation to Alternative D [thus] there is no potential for disproportionally high and adverse health impacts to the minority and low income populations" [FEIS, Vol. A-1, p. A.2-87]. Those findings not only defy the vast weight of the evidence in the Record, but also the purpose and intent of the environmental justice requirement itself.

In short, the FEIS' findings regarding capacity, noise, air quality and environmental justice are unsupported in the Record and insupportable under the letter and purpose of the law. Commentors strongly urge that, employing defensible data and analysis, the FAA reconsider its findings of insignificance of the project's impacts, and present effective mitigation measures, hitherto absent, to fully offset those impacts.

[2] Commentors acknowledge that the FEIS need not take into account under NEPA the minority residents that will be inside the 65 dB CNEL contour for the first time and the over 17,000 low income and minorities who will be newly awakened by single event noise in excess of 94 dB.

I. THE PROJECT'S ENVIRONMENTAL IMPACTS ARE DRAMATICALLY UNDERSTATED BY THE FALSE EQUATION OF THE NA/NP ALTERNATIVE AND ALTERNATIVE D.

The FEIS' analyses of the project's environmental impacts are predicated entirely upon the claimed equality of Alternative D's capacity enhancement potential with that of the NA/NP baseline alternative. By improperly inflating the capacity of the baseline for comparison with the project, and minimizing the capacity of the project itself, the FEIS arrives at the conclusion that the project will cause no significant environmental impacts. A simple review of applicable case law and the components of each alternative in the Record, however, reveals both the inaccuracy of the FAA's analysis and conclusions, and the intent behind them, *i.e.*, to affirmatively obscure the project's impacts.

A. The FEIS Improperly Inflates the Baseline for Environmental Review to Minimize the Project's Impacts.

1. The NA/NP Alternative Employed in the FEIS Contravenes Applicable Case Law.

For purposes of comparison with the project's impacts, the FEIS employs the NA/NP Alternative as baseline. Relying on a definition of the components of the NA/NP Alternative contained in regulatory guidance dating back to 1981, the FEIS concludes that the NA/NP Alternative should include "consequences of predictable actions by others in the absence of Federal action or approval of the project." *40 Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations*, 46 Fed.Reg. 18026 (1981). From that platform, the FEIS jumps to the conclusion that the NEPA "no action" alternative and the CEQA "no project" alternative are similar in that, as under CEQA, NEPA requires inclusion of reasonable foreseeable future projects that would occur if the subject project did not. That conclusion flies in the face not only of current applicable case law but also the very regulations cited as support in the FEIS.

First, the FEIS misstates the applicable definition of "no action". Question 3 specifically distinguishes between actions such as "updating a management plan", and actions involving "Federal decisions on proposals for projects". In the latter instance, "'no action' would mean the proposed activity would not take place." Applicable case law concurs.

> "Once a project begins, the 'preproject' environment becomes a thing of the past, thereby making evaluation of the project's effects

> on the preproject resources impossible. Without establishing the baseline conditions which exist in the vicinity of [the project] before [the project] begins, there is no way to determine what effect the [proposed project] . . . will have on the environment and, consequently, no way to comply with NEPA." *Half Moon Bay Fisherman's Marketing Assn. v. Carlucci*, 857 F.2d 505, 510 (9th Cir. 1988) (*see also, American Rivers v. FERC*, 201 F.3d 1186, 1195, n. 15, 1198 (9th Cir. 1999)) [citing *Half Moon Bay* for the same proposition]).

It is indisputable that the approval of "a project", Alternative D, is at issue here. Thus, the proper baseline is simply what would occur if Alternative D were not implemented.

Commentors do not contend that actions already taken, or to be completed, under the current 1981 Master Plan should not be taken into account in the baseline analysis, because they are part of the environment at the outset of project planning. But as set forth below, the FEIS attempts to shoehorn into this category a plethora of future events that have nothing to do with the existing Master Plan. Indeed, the FEIS expects those conditions to occur despite deficiencies in airfield facilities under the existing Master Plan, such as the entry of NLAs into the fleet, even though there are no taxiways or gates to accommodate them, and none planned in the existing Master Plan.

The FEIS also intentionally misconstrues the requirement in Question 3 that the NA/NP Alternative include "predictable actions by others" [emphasis added]. Question 3 illustrates "predictable actions by others" as a situation in which "the denial of permission to build a railroad to a facility would lead to construction of a road and increased truck traffic." Thus, Question 3, on its face, contemplates indirect results of failure to take action, not the direct intentional acts of the project proponent to enact or implement actions that will augment the baseline alternatives environmental impacts.

In short, the FEIS vastly expands, unsupported by case law or regulation, the scope of the NA/NP Alternative, for what can only be one purpose, to inflate the baseline for analysis, thus artificially minimizing the project's impacts.

2. The Record Shows that the Airfield Capacity Enhancing Potential of the NA/NP Baseline is Significantly Less than that of Alternative D.

In the recently published FEIS, the NA/NP Alternative is defined broadly, and

> "includes, but is not limited to, anticipated operational changes such as the introduction of larger aircraft, as well as airport improvements that are otherwise entitled, approved, under construction, completed between 1997 when FAA issued its Notice of Intent to prepare an EIS, and January 2001 (when FAA and the City of Los Angeles published the Draft EIS/EIR). These facilities include taxiway improvements, passenger terminal improvements, reconstruction of an on-airport auto parking structure, cargo facility improvements, demolition of facilities on acquired real estate, and collateral development. . . In addition, the No Action/No Project Alternative includes additional projects and actions that are consistent with the 1981 Los Angeles International Airport Interim Plan, and would reasonably be expected to occur in the foreseeable future, if the LAX Master Plan were not approved . . ." CIS, Volume A, § A.1.1, p. A.1-11.

The SEIR and FEIR, however, define the components of the NA/NP Alternative far more conservatively:

> ". . . [O]n airport development projects not requiring FAA approval that maximize the use of the airport property and improve airfield access, efficiency and security - including the Century cargo complex, remote aircraft parking of commuter aircraft, cargo development along Imperial Boulevard, renovation of the Tom Bradley International Terminal, and the taxiway EE project - are reasonably foreseeable projects appropriate for inclusion in the NA/NP Alternative." FEIR, Topical Response TR-GEN-2, NA/NP Alternative Assumptions, p. 2-42.[3]

The SEIR goes so far as to characterize the NA/NP Alternative as including:

[3] The NA/NP Alternative also includes the already entitled off-airport landside development of the LAX Northside Project, with 4.5 million square feet of office, hotel and retail uses, and the 3.1 million square foot hotel and retail Continental City project. SEIR, § 3.3.1, p 3-6. While both may be relevant to the air quality and traffic analyses, they are not addressed here as part of Alternative D's airside potential.

> "only minor airport improvements approved as of the publication of the DEIS/EIR in January 2001 or that were in the planning stages at the time. The improvements include minor taxiway improvements, new cargo building space, construction of at least one off-airport parking structure and reconstruction of an on-airport parking structure." SEIR, § 3.3.1, p. 3-6 [emphasis added].

In short, the FEIS is both non-specific and inconsistent about precisely what airfield projects are included in the NA/NP Alternative. The only certainty is that the scope of those improvements is "minor" relative to those included in Alternative D.

B. The Attributes of Alternative D Have a Far Greater Capacity Potential than the NA/NP Alternative.

Unlike the NA/NP Alternative, and similar to the other build Alternatives, Alternative D would admittedly implement dramatic airfield improvements, including, but not limited to, (1) relocation of runways to allow construction of parallel taxiways between runways in both the north and south complexes, extension of taxiway D, thus increasing available east/west taxi routes to taxiing aircraft from four to at least seven; reduction in the number of taxiways linking parallel runways to reduce the potential for runway incursion and traffic delays; improvement of taxiways to meet current FAA design standards for wide body aircraft thus enhancing access to contact gates designed specifically for wide body aircraft. FEIR, Topical Response TR-SAF-1. The Record further shows that the four runway configuration which characterizes both Alternatives C and D allows for a capacity of 89.6 MAP, the same as that projected for Alternative C, Master Plan Addendum, p. 3-4. The FEIR does not deny this conclusion. FEIR Response to Comment SAL00013-27.

The Record also shows that the proposed airside improvements work. The average amount of delay in 2015 with implementation of Alternative D will be 11.56 minutes per operation, while that for the NA/NP Alternative will be 13.34 minutes of delay per operation. MP Addendum, p. E-42. Similarly, Alternative D will see fewer cancelled flights than the NA/NP Alternative. Master Plan Addendum, p. E-42.[4] The Record also acknowledges that the reduced delays and cancellations are attributable to airfield improvements. Master Plan Addendum, p. E-49. Thus, it is clear on the face of the Record that the NA/NP Alternative and Alternative D are not equivalent from an operational standpoint. Less delay and cancellations

[4] Alternative D also improves on Alternative C which results in 13.82 minutes of delay per operation and 46 cancelled flights.

mean more operations pass through the airport, and with them, more environmental impacts. These differences are unanalyzed in the FEIS.

C. Gate and Cargo Warehousing Limitations Are Not Effective Constraints on Alternative D's Ultimate Capacity.

Commentors recognize that a variety of factors, not merely airfield capacity, contribute to total airport capacity, including "landside (*i.e.*, roadways, parking, curb frontage), facility (*i.e.*, terminals) and airspace." FEIR, Topical Response, TR-RC-5.2.1. Here, the FEIR (and, by extension, the FEIS) relies entirely on landside limitations to constrain Alternative D's acknowledged capacity enhancing potential. The basis of that reliance is inadequately documented, and what documentation and analysis does exist indicates that such reliance is misplaced.

1. The Only Purported Limitation on Alternative D's Aircraft Operational Capacity Arises from an Alleged Deficiency in On-Airport Cargo Sort Space.

First, the FEIR acknowledges that, while total daily operations under Alternative D are forecast to be less than Alternative C, "the difference in total operations is due to the fact that Alternative D would not be designed to accommodate the same level of cargo activity as Alternative C . . ." FEIR, § 3.2.9, Topical Response, TR-MP-1, p. 2-93. This purported limitation is based solely on the maintenance of inadequate "sort space" on the airport. However, the FEIR also acknowledges that "demand for air transportation of cargo is tied to both the level and the types of economic activity in the region", Topical Response, TR-MP-1, p. 2-92, and that "the economy in the L.A. Region relies heavily on LAX to meet air cargo demand", Topical Response, TR-MP-1, p. 2-93. Therefore, limitation of cargo operations is outside LAWA's control, because the high demand for cargo service does not need to be fully satisfied by on-airport sort space. Rather, it can easily be met by the use of private cargo warehousing and other facilities off the airport property as has historically been the case with the airport, as well as the Port of Los Angeles and the Port of Long Beach which are in close proximity.

2. The Only Purported Limitation on Alternative D Passenger Capacity is an Unsupported, Unanalyzed and Unenforceable Limitation on Gate Capacity.

Similarly, the FEIR reports that limitation on passenger capacity to the same level as the NA/NP Alternative will be achieved by "the number and type of gates available under the Alternative D design", FEIR, § 3.2.9, allegedly 153. The FEIR, then contrasts Alternative D's capacity potential to that of Alternative C, which was projected to have 168 gates "as necessary

to accommodate the projected increase in average fleet size that serves both the international and domestic markets." FEIR, § 3.2.9. That distinction, in this case, is one without a difference because the airfield capacity of Alternatives C and D is acknowledged to be virtually identical; the Record is devoid of any analysis of Alternative D's gate capacity or enforceable gate constraints; but the Record does contain evidence that the number of gates in Alternative D will be the equivalent of 165, two more than the number projected for the NA/NP Alternative and only three less than the number projected for Alternative C.

The Administrative Procedures Act ("APA"), 5 U.S.C. § 701, *et seq.*, § 706(2)[5] provides that an agency action will be set aside and found unlawful if, among other things, it is "arbitrary, capricious and abuse of discretion, or otherwise not in accordance with the law." APA § 706(2)(A). An agency action is arbitrary and capricious if

> "the agency has relied on factors which Congress had not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise." *Dioxin/Organochlorine Center v. Clarke*, 57 F.3d 1517, 1521 (9th Cir. 1995).

The FEIS' purported constraints are based on just such arbitrary and capricious conclusions.

First, neither the FEIS nor the predecessor environmental documents, nor the Administrative Record in *County of Los Angeles, et al., v. City of Los Angeles, et al.*, Los Angeles Superior Case No. BS094320 (2005), brought pursuant to CEQA by Commentors here, contains a shred of evidence to support the gate capacity conclusions contained in those documents.

Moreover, those conclusions are belied by the environmental document upon which the FEIS relies. The FEIR reveals that Alternative D will involve an increase in "airside gate frontage", increases in the number of aircraft gates and increases in aircraft gate efficiency far beyond the levels projected for the NA/NP alternative. For example, Alternative D includes an increase of nearly 3,600 linear feet of terminal frontage: Terminals 1, 2 and 3 will be replaced by the new north terminal; Tom Bradley International Terminal will be reconfigured; and a new

[5] Because NEPA does not contain an independent judicial review provision, actions for violation of NEPA are adjudicated under the APA.

West Terminal will be built. The total existing frontage of the terminals being modified is thus 7,156 feet. Following proposed modifications, the terminals will encompass 10,748 feet - an increase of 3,592 feet over current terminal frontage.

Further, the number of gates in Alternative D exceeds the number in the No Project Alternative. Table ES-2 in the Master Plan Supplement indicates that the No Project Alternative will be configured with 115 contact gates (traditional numbered gates in the terminal and a jetway to awaiting aircraft), 48 remote gates for an existing total of 163. Alternative D reflects 121 air carrier contact gates and 32 parking spaces for commuter aircraft and/or regional jets, Master Plan Supplement, Figure 2.2-4, Gate Layout and Utilization, for a total of six additional direct contact gates over and above that number included in the No Project Alternative. Moreover, six of the new contact gates will be sized to accommodate the new A380 Aircraft, which have the capacity for at least 600 passengers each, FEIR, Chapter 2, § 2.3.7, more than double the capacity of the largest aircraft in the current fleet, the 747-400. Thus, the six new contact gates projected for Alternative D provide the effective passenger pass-through capacity of 12 current gates, bringing the gate equivalent capacity under Alternative D not to 153, but to 165. While FAA may seek to quibble with the math, the proof is in the projections they have adopted from prior environmental documents. As set forth above, the projected decrease in delays and cancellations under Alternative D graphically demonstrates improvements, not contractions, in gate pass through capacity consistent with Commentors' analysis, not the FEIS' unsupported assumptions regarding gate constraints.

Finally, the increased capacity of contact gates is not the end of potential gate capacity under Alternative D. Alternative D does not make any firm commitment to implement gate constraints. ["The City could choose to limit development of additional gates at LAX in order to encourage more equitable distribution of air traffic throughout the region." FEIR, § 2.3.4 [emphasis added]]. Therefore, LAWA retains the flexibility to create remote gates in available apron space, and/or retain the eight contact gates in Terminal 8, thereby boosting the total for Alternative D to 129 contact gates, 15% more than the existing number of gates.

D. The FEIS's Assumptions About Air Service Changes Arising Out of the Purported Limiting Factors of Gate and Cargo Capacity are Similarly Unsupported in Law or History.

To reach its ultimate conclusion that Alternative D's capacity will be constrained to "87% of the unconstrained 2015 O&D [Origination and Destination] passenger demand forecasts and 82% of the 2015 international passenger demand forecast", Master Plan Addendum, p. 3-6, the FEIS adopted, in whole cloth from its predecessor environmental documents, without any

evidence in the Record of confirming analysis, "projections and expectations", Master Plan Addendum, p. 3-6, concerning air service changes at LAX resulting from the project. Those "expectations" are a graphic illustration of the hoary adage "garbage in - garbage out".

For example, the Master Plan "expects" that "high priority would be given by the airlines to accommodating O&D passengers." Master Plan Addendum, p. 3-6. No mechanism exists within the law for establishing such a priority. However, based on the following "expectation", *i.e.*, "commuter operations would likely be reduced from 1996 levels, consistent with the forecast for the No Action/No Project Alternative and Alternative C in order to maximize the number of passengers that could be served with a limited number of operations", Master Plan Addendum, p. 3-6, it is intuitively plausible that this alleged "priority" arises by default out of the use of larger aircraft.

In this assumption concerning the use of larger aircraft lies the seed of a fundamental analytic fallacy. While it is "expected", because of the alleged priority to O&D and the resulting use of larger aircraft, that the projected number of Alternative D O&D passengers as a percent of total passengers would be similar to the forecast for Alternative C, Master Plan Addendum, p. 3-6, it is also "expected" that the "projected number of connecting passengers would decrease due to the reduction in commuter flights", Master Plan, p. 3-6, thus giving rise to the ultimate conclusion that on average the number of passengers under Alternative D would be about the same as that of the NA/NP Alternative.

This "averaging" analysis obscures, among other things, the disproportionately great environmental impacts a shift to larger aircraft will have, holding the same number of passengers constant, as the FEIS purports to do between Alternative D and the NA/NP Alternative. Because they are omitted from the fleet mix entirely for purposes of environmental analysis, the even greater impact the NLAs will have on the "larger aircraft" component of the fleet mix, with the resulting increase in environmental impacts, is also ignored. In mitigation of these increased, but unacknowledged, impacts, the Master Plan merely reiterates the analytically unsupported "expectation" that "cargo operations would be equivalent to those forecast in the 2015 No Action/No Project Alternative." Master Plan Addendum, p. 3-7.

In the final analysis, the FEIS disavows the alleged constraints and the reduction in capacity purportedly resulting from them.

> "However, it is important to understand that the levels of passengers that each Alternative is designed to accommodate are not finite limits where the airport would somehow be closed or

> where aircraft would be redirected to some other facility when this number is reached. These levels are an indication of the number of passengers that can be accommodated at a reasonable level of service." FEIR, § 3.2.9.

While NEPA requires that "agencies shall make sure the purpose which is the subject of an Environmental Impact Statement is properly defined," 40 C.F.R. 1502.4(a), it is abundantly clear that: (1) despite thousands of pages of verbiage to the contrary, the only applicable constraint on capacity is a subjective concept called "reasonable level of service" which is undefined anywhere in the FEIS; (2) Alternative D is likely to vastly exceed levels of service reported in the FEIS before it exceeds a "reasonable" level of service just as the existing facility currently accommodates far more than the 40 MAP for which it was originally designed and with "minor" changes, could handle 78.9 MAP; and (3) as a result, the project description has been improperly attenuated, such that the environmental impacts of only a preliminary phase, that in which capacity reaches 78.9 MAP has been analyzed in the FEIS.

II. THE FEIS' AIR QUALITY ANALYSIS, PREDICATED ON THE FALSE BASELINE AND CONSTRAINTS ON CAPACITY IN ALTERNATIVE D IS ARBITRARY AND CAPRICIOUS.

A. The FEIS' Improper Treatment of the NA/NP Baseline and the Inaccurate Assumptions Underlying Alternative D Effect the Results of the Air Quality Analysis.

The FEIS' improper overestimation of the NA/NP Alternative's airfield components and Alternative D's reliance on airside assumptions that artificially diminish its operational impacts predictably spill over into the FEIS' air quality analysis. To provide an indication of the potential air quality impacts of these unrealistic assumptions, Commentors developed a third, hybrid alternative "Revised Alternative D", combining emissions based on the airside attributes of Alternative C, which the FEIS acknowledges is virtually identical with Alternative D, and holding construction and surface traffic emissions constant. [See Attachment 1 to this letter for a full discussion of the methodology and analysis of Revised Alternative D.]

After modeling the emissions impacts of Revised Alternative D, even with the assumptions underlying the NA/NP Alternative and its projected emissions impacts held constant, the results are startling. First, as indicated in Table 2 and Figures 1 through 6, mitigated emissions under the Revised Alternative D increase from 4% to 18% less than emissions under the NA/NP Alternative (depending on the specific emissions species considered) to as much as 8% more than emissions under the NA/NP Alternative. Only emissions of VOC

continue to be lower than emissions under the NA/NP Alternative - emissions of CO, NO_x, SO_x, and PM_{10} are all higher than those of the NA/NP Alternative. As illustrated in Figures 7 and 8 in Attachment 1, mitigated emissions under Revised Alternative D are equal to or higher than those of emissions from mitigated Alternative C for on-airport sources, and only 1% to 12% lower than mitigated Alternative C for all sources (as compared to 12% to 22% lower for Alternative D compared to Alternative C in the FEIS). Thus, the sensitivity of emissions and air quality impacts to aircraft activity levels (and the presumed gate constraints) is obvious. Note that while the Tables and Figures presented only illustrate emissions relationships in the year 2015, the same relationships would carry through to influence interim year emissions estimates and the air quality.

Pages 15 through 18 contain the following:

- Table 2. LAX Emission Estimates for 2015 (tons per year) [Page 15]
- Figure 1. On-Airport Emissions in 2015 (tons per year) [Page 16]
- Figure 2. Total Emissions in 2015 (tons per year) [Page 16]
- Figure 3. On-Airport Emissions in 2015 Relative to the NA/NP [Page 17]
- Figure 4. Total Emissions in 2015 Relative to the NA/NP [Page 17]
- Figure 5. On-Airport Mitigated Emissions in 2015 Relative to the NA/NP [Page 18]
- Figure 6. Total Mitigated Emissions in 2015 Relative to the NA/NP [Page 18]

[Text continued on Page 19]

Table 2. LAX Emission Estimates for 2015 (tons per year)

Source Type	Species	NA/NP	Unmitigated Alt. C	Mitigated Alt. C	Unmitigated Alt. D	Mitigated Alt. D	Unmitigated Hybrid C/D	Mitigated Hybrid C/D
Aircraft	VOC	1,222	1,364	1,364	1,165	1,165	1,364	1,364
	CO	6,617	7,670	7,670	6,285	6,285	7,670	7,670
	NO_x	4,850	5,535	5,533	4,865	4,865	5,535	5,533
	SOx	421	481	481	409	409	481	481
	PM-10	61	72	72	59	59	72	72
APU	VOC	9	10	10	9	9	10	10
	CO	198	212	212	189	189	212	212
	NO_x	103	103	103	102	102	103	103
	SOx	18	0	0	18	18	0	0
	PM-10	0	0	0	0	0	0	0
GSE	VOC	40	49	0	30	0	49	0
	CO	1,114	1,567	0	2,055	0	1,567	0
	NO_x	331	265	0	334	0	265	0
	SOx	1	1	0	1	0	1	0
	PM-10	12	2	0	4	0	2	0
On Airport Roadways	VOC	158	116	101	120	118	120	118
	CO	1,342	1,288	1,101	1,140	1,128	1,140	1,128
	NO_x	181	159	138	229	217	229	217
	SOx	1	1	2	1	1	1	1
	PM-10	44	49	45	50	51	50	51
Parking Lots	VOC	53	85	78	138	130	156	148
	CO	159	341	306	593	544	678	618
	NO_x	44	17	16	73	70	83	79
	SOx	0	0	0	1	1	1	1
	PM-10	9	1	1	28	28	32	32
Stationary Sources	VOC	51	96	96	51	51	51	51
	CO	120	124	124	120	120	120	120
	NO_x	220	207	207	220	220	220	220
	SOx	7	6	6	7	7	7	7
	PM-10	39	41	41	39	39	39	39
Total On-Airport	**VOC**	**1,513**	**1,738**	**1,648**	**1,511**	**1,472**	**1,750**	**1,690**
	CO	**9,451**	**11,201**	**9,412**	**10,388**	**8,266**	**11,382**	**9,748**
	NO_x	**5,729**	**6,287**	**5,999**	**5,814**	**5,474**	**6,426**	**6,155**
	SOx	**489**	**490**	**489**	**437**	**436**	**498**	**489**
	PM-10	**167**	**168**	**158**	**180**	**173**	**195**	**194**
Off-Airport	VOC	1,606	1,926	1,270	1,152	1,091	1,308	1,239
	CO	15,188	17,401	16,336	14,342	13,166	16,287	14,952
	NO_x	2,368	2,824	2,741	2,198	2,102	2,496	2,387
	SOx	27	32	30	26	24	30	27
	PM-10	1,780	2,213	2,060	1,817	1,695	2,063	1,880
Construction	VOC	0	43	40	0	0	0	0
	CO	0	330	320	0	0	0	0
	NO_x	0	576	449	0	0	0	0
	SOx	0	2	2	0	0	0	0
	PM-10	0	181	174	0	0	0	0
Grand Total	VOC	3,119	3,807	2,958	2,663	2,563	3,058	2,929
	CO	24,639	28,932	26,068	24,732	21,432	27,669	24,699
	NO_x	8,097	9,687	9,189	8,012	7,576	8,922	8,542
	SOx	476	524	521	463	460	519	516
	PM-10	1,947	2,559	2,342	1,997	1,895	2,259	2,077

Note: Aircraft VOC emissions for Alt. C differ from those presented in the FEIR/FEIS by approximately 9 percent as the FEIR/FEIS failed to convert TIC to VOC. This conversion was done in the FEIR/FEIS for both the NA/NP and Alt. D.

Figure 1. On-Airport Emissions in 2015 (tons per year)

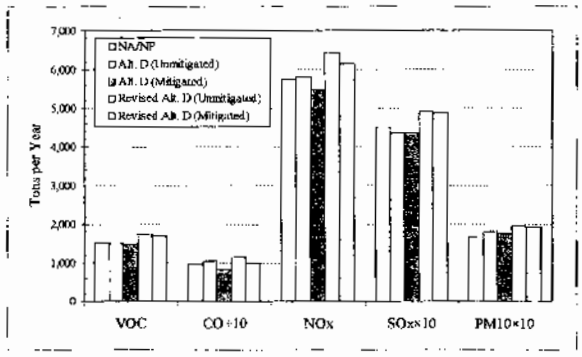


Figure 2. Total Emissions in 2015 (tons per year)

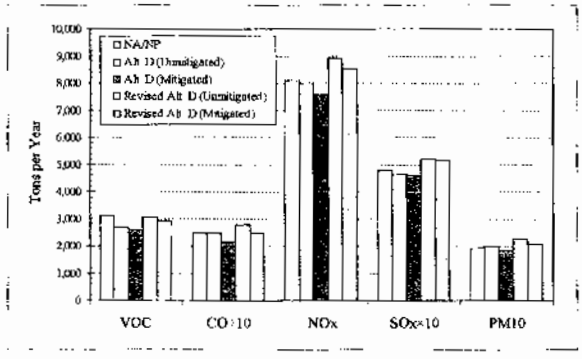


Figure 3. On-Airport Emissions in 2015 Relative to the NA/NP

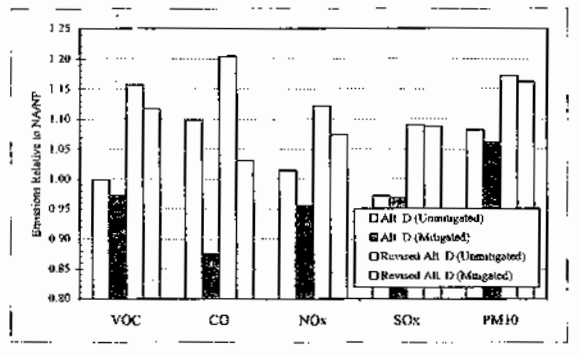


Figure 4. Total Emissions in 2015 Relative to the NA/NP

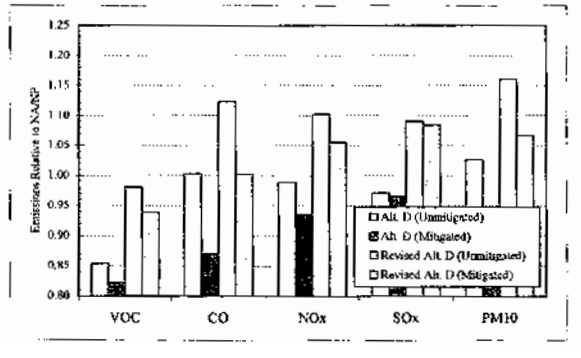


Figure 5. On-Airport Mitigated Emissions in 2015 Relative to the NA/NP

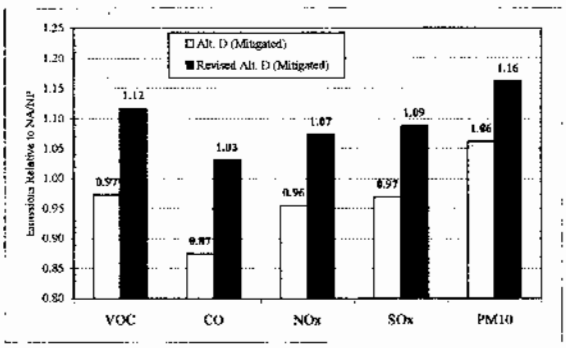
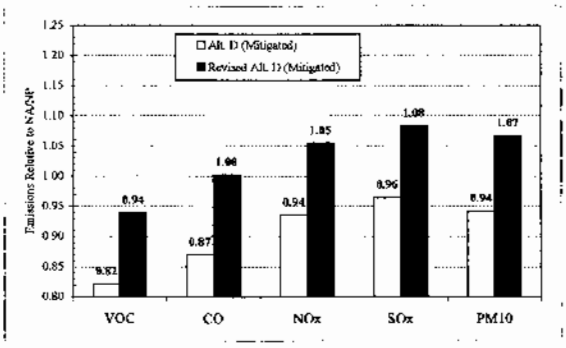


Figure 6. Total Mitigated Emissions in 2015 Relative to the NA/NP



It is more problematic to extrapolate estimates of air quality concentrations as presented in the FEIS to Revised Alternative D, since such impacts depend on both magnitude and location of emissions releases. However, it can be ascertained that, as presented in the FEIS, Alternative C emissions led to interim year exceedances of the NAAQS for NO_2 and PM_{10}. Moreover, these exceedances are over 150% of the NAAQS. Therefore, since on-airport emissions under Revised Alternative D are higher than those of Alternative C and total emissions are only modestly lower, it can be deduced that Revised Alternative D would also demonstrate exceedances of the same NAAQS. Alternative C also demonstrates interim year CO concentrations that are within about 5% of the NAAQS, so it is likely that Revised Alternative D, with higher on-airport emissions would also exceed the CO NAAQS during interim years. Upon buildout in 2015, the FEIS shows that Alternative C meets the NAAQS for all emissions species, but is within about 5% of the NAAQS for NO_2. Therefore, once again, Revised Alternative D, with higher on-airport emissions that Alternative C is likely to result in exceedances of the NO_2 NAAQS.

B. The Air Quality Analysis in the FEIS Does Nothing to Remedy the Flaws in the FEIR's Analysis.

Commentors and others, in the course of the EIR review process, repeatedly pointed out analytic flaws that impaired, and even obviated, the air quality analysis and its conclusions. Those same flaws still exist in the FEIS. Specifically:

1 The FEIS Lacks Reliable Data Concerning Estimated Future Background Concentrations.

The FEIS does not provide data which clarifies the continuing uncertainty with respect to estimated future background concentrations. The importance of this omission cannot be overstated. Regardless of the accuracy and precision of on-site emissions estimates and associated air quality modeling, the overall impact of those estimates depends equally on the accuracy of the estimates of future background concentrations. If background concentrations are underestimated, air quality impacts will be equally underestimated.

Moreover, data required for the appropriate demonstration is available. The SCAQMD monitor used to estimate longer term background concentrations (the monitor designated as Station 094, South West Coastal L.A. County by SCAQMD) should be capable of serving as a long term indicator of the proportionality of response between measured concentrations and regional emission reductions during periods of varying wind direction.

Of additional concern is the differential treatment afforded background concentrations of PM_{10} in both the FEIR and FEIS. Whereas all other pollutant backgrounds are set in accordance with the ratio of emissions inventory estimates for 2015 to base year emissions inventory estimates, the PM_{10} background is set according to the ratio of modeled 2015 to base year PM_{10} concentrations in Central Los Angeles. The only explanation for this differential treatment is the single assertion that "this method allows for the inclusion of secondary PM_{10} formation." Analysis supporting the propriety of the application of the emissions rollback procedure and the Central Los Angeles PM_{10} modeling estimates to the situation at LAX is entirely lacking from the FEIS.

Finally, the overall sensitivity of the air quality analysis to the background concentration reduction is perhaps best demonstrated by examining forecast 2015 pollutant concentrations. Despite an assumed 50% reduction in the background concentration of NO_2 between 1996 and 2015, on-site NO_2 concentrations are forecast to increase. Similarly, while the background 24 hour concentration of PM_{10} is assumed to decrease by almost 50% between 1996 and 2015, overall on-site PM_{10} declines by only about 20%. Clearly, these reduced background concentrations are allowing significant emissions growth to occur from on-site sources. As a result, the integrity of the demonstrated AAQS compliance status hinges on the proper demonstration of background concentration propriety, a demonstration that has not yet been performed.

2. Reverse Thrust Emissions from Aircraft Are Not Included in the Air Quality Analysis.

The air quality analysis continues to lack reverse thrust emissions from aircraft. The underlying environmental documents have, at various times, used various excuses for this absence, including: (a) emissions factors and regulatory guidance for considering reverse thrust operations are not available; (b) emissions from reverse thrust are insignificant; (c) because runway length at LAX is sufficient, reverse thrust operations should be minimal; and (d) the methodology used to estimate the times in mode for approach, taxi, takeoff and climbout modes is sufficiently conservative to inherently account for any reverse thrust emissions. To this list, the FEIS adds that, because aircraft are assumed to carry their maximum allowable weight on takeoff, reverse thrust emissions are inherently considered.

Each of these arguments offered in support of the omission of reverse thrust emissions is inadequate, and in many cases purely speculative. Neither the FEIR nor FEIS offers any compelling evidence that reverse thrust emissions are inherently considered. Times in mode have been specifically tailored to reflect expected operational conditions at LAX, exclusive of

reverse thrust operations. The argument that runway length is sufficient to minimize reverse thrust operations is equally spurious. Aircraft routinely (at LAX and elsewhere) utilize reverse thrust to minimize stopping distance and access the first safe runway turnoff. This both minimizes aircraft time on an active runway and reduces brake maintenance costs. Some airports and airlines restrict reverse thrust operations on longer runways, but there is no evidence in the Record that this is the case at LAX. On the contrary, independent studies in the late 1990s showed reverse thrust operations to be common at LAX.

There are methods by which reverse thrust emissions, even though there is no official guidance with respect to their calculation, can be estimated. For instance, the most common practice is simply to add reverse thrust time to takeoff time and allow EDMS to estimate combined takeoff and reverse thrust emissions simultaneously. This is not a novel approach that can easily be incorporated into the FEIS' analysis. Although the time in mode for reverse thrust is small, generally on the order of 15 to 20 seconds, such high thrust operational modes produce very high NO_x per unit time relative to other operating modes. Based on the data presented in the FEIS and its underlying documents, a reverse thrust mode time of 15 seconds would increase the overall aircraft NO_x inventory by about 10%. Moreover, these emissions occur at ground level. Therefore, there is simply no justification for their omission.

3. The Modeling of Emissions from Ground Support Equipment Is Unvalidated.

Although the population and activity of aircraft Ground Support Equipment ("GSE") at LAX can be estimated with a high degree of certainty by surveying current airport operators, the FEIS continues to rely on the FAA's EDMS model to estimate these parameters. Theoretically, this would be acceptable if there were some validation of the estimates produced by EDMS as consistent with actual population and activity statistics. No such validation is provided. Nevertheless, and without any factual support, the FEIS asserts that the approach employed is "believed" to produce a conservative estimate.

4. The Use of 100% Conversion to Electric GSE as a Mitigation Measure for Alternative D is Inappropriate.

The FEIS continues the reliance on the alleged commitment to convert 100% of LAX GSE to electric (or very low emission) power by 2015. Aside from the fact that, given the schedule contained in the 2002 Memorandum of Understanding between the California Air Resources Board and participating airlines makes this schedule vastly over-optimistic, the anticipated conversion cannot serve as a mitigation measure for Alternative D because it is set to

take place whether or not Alternative D occurs. Therefore, it is appropriately included in the baseline NA/NP Alternative. That it is not appears attributable to the pervasive pattern in the environmental documents aimed at elevating the environmental impacts of the baseline and reducing those of the preferred alternative, Alternative D.

5. Incorrect Aircraft PM_{10} Emissions Factors are Still Being Used in the FEIS' Air Quality Analysis.

Despite repeated comments concerning the impropriety of the PM_{10} emissions factors used in the FEIR's air quality analysis, the same PM_{10} emissions factors underlie the FEIS' conclusion that PM_{10} emissions do not violate the NAAQS, and thus conform to the SIP. The emissions factors in the FEIS, however, consider only the nonvolatile Carbon portion of emitted Particulate. The FEIS relies on the FEIR PM_{10} analysis which in turn relies on documentary support that contains sufficient data to allow for the conversion of nonvolatile PM_{10} to total PM. Prior comments have specified a protocol for such conversion. This conversion is, however, absent from the FEIS. Thus it does not contain a supportable determination of total aircraft PM_{10} emissions from the project.

6. Gate Based Power and Air Continues to be Assumed for All Aircraft, and, thus, Auxiliary Power Unit Emissions Factors are Not Sufficiently Considered.

The assumption 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) results in an underestimation of APU and/or GSE emissions. A realistic emissions estimate for APU would be based on the current usage rate of existing gate based power and air systems at LAX. The rate is either already known or can easily be determined through a modest random survey of gate activity. An assumption of 100% usage certainly provides an indication of the ideal level of APU emissions, but the AAQS compliance demonstration must be based on real, not ideal, emissions levels. Moreover, as a result of the assumption of 100% gate based power, the FEIS continues to assume that PM emissions factors for all APU are zero. The impact of this omission is buffered by the fact that APU usage is assumed to be limited by the assumption of 100% gate based power and conditioned air, but even under this ideal assumption, APU are assumed to operate for 15 minutes per landing takeoff ("LTO") cycle.

In response to previous comments, the environmental documents state that the operational information required to estimate APU PM emissions rate is not available. However, even assuming that is correct, it does not mean that all methods are similarly restricted In

Commentors' previous comments on the DEIR and SEIR, a method was set forth that relies on regression analysis to relate aircraft PM to the inverse of NO_x emissions. This method is not unusual or ground breaking, but it does result in relationship coefficient significant at the 99% confidence level. Since APU are essentially small jet engines, this methodology can be applied to both main aircraft engines and APU. That it is not is a significant defect in the FEIS.

7. Default Aircraft Engine Assignments Continue to be Utilized in the FEIS Rather than More Appropriate LAX Specific Engine Assignments.

Aircraft emissions in the FEIS continue to be based entirely on the default engine assignments of the FAA EDMS model, as opposed to engine assignments tailored to operations at LAX. While this approach does not affect the relative emissions relationships between Alternatives, it can have a significant impact on the absolute level of aircraft emissions and, therefore, on associated AAQS compliance demonstrations. In response to previous comments on this issue, LAWA asserted that the use of EDMS engine assignments represents the most statistically probable aircraft/engine combinations in use at LAX. LAWA also cited the difficulty of engine identification for a particular aircraft and the groundless nature of the claim that LAX air carrier mix is inconsistent with EDMS default assumptions. All three assertions are unsupported, and, ultimately, incorrect.

The air quality report attached to these comments as Attachment I sets forth a detailed analysis of the sensitivity of emissions estimates to the proper allocation of aircraft engines. Using a Boeing 757-200 aircraft as an example, the analysis concludes, among other things, that the effect of tailoring aircraft engine assignments for that aircraft can be a variation in individual pollutants ranging from minus 90% to plus 45%, depending on the engine utilized. Variations for other aircraft can be greater or lesser depending on available engine characteristics. Analysis of the relationship of engines to emissions estimates, despite its importance, is still omitted from the FEIS.

8. Emissions from Heavy Trucks Are Still Omitted from FEIS On-Airport Truck Fleet Mixes.

The apparent omission of heavy duty truck traffic from the FEIS on-airport vehicle emissions estimates is inconsistent with the reality of Federal Express and other cargo carriers which operate substantial fleets of heavy trucks, and will have to increase those fleets when on-airport cargo sort space is purportedly limited. While in previous Response to Comments, LAWA has claimed that diesel truck emissions are included in both on and off-airport traffic emissions estimates, the Tables in the SEIR cited for that proposition (and which continue to be

relied upon in the FEIS which contains no further analysis) contain no evidence of heavy truck inclusion in on-airport traffic estimates. While Table J3, which reflects the year 2000 fleet composition, does include passenger cars, light, medium and heavy duty trucks and buses, Tables J4 (fleet mix in 2013) and J5 (fleet mix in 2015) indicate zero Vehicle Miles Traveled ("VMT") fractions for light-heavy, medium-heavy and heavy-heavy trucks on all on-airport road links, even those for which heavy duty truck traffic is assumed in 2000. Without emissions estimates for heavy duty diesel trucks which are significant contributors to PM_{10}, a pollutant for which the project is potentially nonconforming, the FEIS' air quality analysis is fatally flawed.

C. FAA's Conformity Determination is Based on the Same Flawed Assumption and Absence of Relevant Data as the FEIS' Air Quality Analysis.

Given the inadequacies of the underlying Air Quality analysis, the FAA's demonstration of conformity is predicated principally on the letter of August 12, 2004 from SCAQMD, purporting to certify that "the total of direct and indirect emissions from the action . . . together with all other emissions in the nonattainment (or maintenance) area would not exceed the emissions budget specified in the applicable SIP." 40 C.F.R. § 93.158(a)(5)(i)(A). The problem with this assumption is two-fold. First, such a determination must be "determined and documented by the State agency primarily responsible for the applicable SIP", *Id.*, which, in this case, is not SCAQMD but the CARB. The Record, however, is devoid of such a determination by CARB. Therefore, the FAA's reliance on SCAQMD's determination is seriously misplaced.

Second, even if it could satisfy the relevant criteria for determining conformity, the FAA's Conformity Determination is based on the same equation of capacity between the NA/NP Alternative and Alternative D which compromises the FEIR's analysis. Moreover, the Conformity Determination reflects the same absence of data and requisite analysis concerning PM_{10} emissions factors, reverse thrust emissions, appropriate mitigation measures, including 100% electrification of GSE, and 100% gate based power, that compromise the FEIR. Consequently, and for all the reasons set forth above, the project has not been properly determined to conform to the SIP, and cannot proceed until such legally and analytically accurate determination has been made.

III. THE FEIS' AIRCRAFT NOISE ANALYSIS IS A VICTIM OF BOTH FAULTY ASSUMPTIONS AND ABSENCE OF SUPPORTING DATA AND ANALYSIS.

Relying on a comparison of the noise impacts of the NA/NP Alternative with those of Alternative D, the FEIS concludes that Alternative D's noise impacts are insignificant. In reaching that conclusion, the FEIS relies on the overstated impacts of the NA/NP Alternative, the

flawed capacity analysis for Alternative D, and a series of analytic omissions, all of which, if properly included and addressed, lead to the opposite conclusion.

First, relying on the SEIR's Land Use Supplement Technical Report, S-1, Tables S-56 and 61, the FEIS concludes that Alternative D will cause virtually no additional noise sensitive uses to be impacted by a 1.5 dB increase within the 65 CNEL contour, the standard of significance employed in the FEIS.[4] Other portions of the environmental documents, however, contradict that conclusion. For example, Topical Response TR-N-3.3 acknowledges that "more traffic will certainly mean more noise events, and may mean higher CNEL levels." Moreover, the FEIR acknowledges that future contours will "grow in areas where substantial changes in the airport runway configuration or runway use are proposed."

The reason for, and location of, these shifts become apparent in other sections of the environmental documents. The FEIR acknowledges, for example, that "changes in the runway use patterns are anticipated between now and 2015 that would result in a shift of heavy aircraft from predominant use of the south runway approach to the north runway approach, resulting in an enlargement of the 65 CNEL contour along the north approach and a shortening of the contour under the approach to the south runways." Topical Response, TR-N-6.1. The FEIR further acknowledges that there will be shifts in noise to the east. At least one runway in Alternative D is projected to be increased in length to 12,000 feet, Response to Comment SPC00275-60, 1,280 feet to the east, and 340 feet south. Response to Comment SPC00275-59, and that "some areas within Inglewood would be newly exposed to 65 CNEL noise levels compared to the No Action/No Project Alternative." Response to Comment SPC00275-53.

The real issue, however, is with conditions and resulting impacts mentioned, but unanalyzed in the FEIS or supporting documents. Foremost among these unexplored details is the existence of the NLA A380 in the fleet mix, and its potential impacts. While the FEIR admits that at least seven airlines at LAX have ordered NLAs with delivery as early as 2006, FEIR, Comment SPC00298-6; that by 2015, 27 NLAs will serve LAX on a given "design day" (or 1% of total daily operations), FEIR, Response to Comment SPC00275-39; and that six new gates will be supersized and taxiways rebuilt to accommodate them, Supplemental Aircraft Noise Technical Report, Appendix S C1, Table S7, 2015 Average Annual Day Operations in Fleet Mix Alternative D, lacks any reference to the A380 or any other NLA.

[4] The Land Use Technical Report designates one private school in Los Angeles City as impacted.

Moreover, the text of Appendix S-C1 asserts that, despite the shift from commuter to long distance aircraft claimed in support of the capacity "averaging analysis" described above, "by 2015 the proportion of heavy jet operations will decline to 31% (643 of 2121 total Ops.) compared to the No Action/No Project Alternative case which forecasts heavy jets to comprise 33% of the mix (706 of 2119 operations)". Appendix S-C1, § 3.1.1., p. 18. The only reason given for this notable omission is simply that "since the A380 has not been built, it cannot be modeled." FEIR, Response to Comment SPC00275-39.

That rationale is, however, patently inaccurate. Manufacturer's data exists which reveals that the A380 will weigh in excess of one million pounds, have a wing span as wide as 262 feet, and carry up to 600 passengers. FEIR, Chapter 2, § 2.3.7. That data also allows LAWA to determine the appropriate design standards for runways and gates to accommodate them. It would not be a stretch to model a selection of possible engine characteristics (Pratt & Whitney, Rolls Royce, other) and thereby arrive at a reasonable approximation of the A380's potential noise impacts. Nevertheless, no such modeling has been performed.

Further, the FEIR's assertion that the noise characteristics of the A380 are equivalent to those of the 747-400 is not an acceptable substitute for actual analysis (FEIR, Response to Comment SPC00236-6). The A380 will have a maximum gross takeoff weight approximately 325,000 pounds greater than the 747, and 52,000 pounds more thrust, which is almost equivalent to adding an additional engine. It is therefore reasonable to assume, in the face of no analysis in the FEIR, that noise from the NLAs will affect the noise attributable to Alternative D.

These differences are of concern because of potential additional differences in the operational characteristics of the A380 and aircraft in the existing fleet mix. For instance, LAX Aircraft Noise Abatement Operating Procedures and Restrictions, § 4, addresses conditions under which the "over ocean" (westerly nighttime arrival and departure) cannot be employed. "In the event ATC determine that existing weather provides for only easterly departure traffic flow, including a tail wind component that exceeds 10 knots from the east, ATC shall only permit departures on Runways 6R and 7L", Topical Response TR-N-5.1. However, when queried as to whether "large jumbos perform with tailwinds below 2, 4, 6, 8 and 10 knots", the FEIR refuses to answer on the ground that "tailwind impacts on jumbo aircraft operations is not a comment on the contents of the DEIR or SEIR." Response to Comment SPC00236-6.

That answer begs the question. As the FEIR admits, the direction of operations at night is determined by weather conditions, and "[T]here are no prohibitions against nighttime easterly operations." Topical Response, TR-N-5.2. Given that, in determining CNEL levels, a 10 dB penalty is assessed on operations occurring between 7:00 p.m. and 7:00 a.m.; over ocean

procedures are not always in effect due to wind and weather, some aircraft ignore the over ocean procedures even when they are in effect; and the FEIR lacks any information as to whether the A380 can depart to the west in certain tailwind conditions, it is easy to deduce that noise contours to the east of LAX will be most heavily impacted by the A380.

IV. THE FEIS' ENVIRONMENTAL JUSTICE ANALYSIS IMPERMISSIBLY "AVERAGES" THE IMPACTS ON SURROUNDING MINORITY COMMUNITIES SO AS TO CONCLUDE THAT ALTERNATIVE D WILL CAUSE NO ENVIRONMENTAL JUSTICE IMPACTS.

In spite of its acknowledgment that "as a result of runway orientation, the minority and low income communities to the East bear the greatest burden of aircraft noise from LAX" [FEIS, Vol A, Section A.2.2.4, p. 2-68]; given Alternative D's undeniable capacity enhancing potential; and given that "the combination of longstanding runway orientation and more recent changes in demographic patterns in the area around LAX means that minority and low income communities are directly under the principal arrival flight path" *Id.*, at p. 2-67, the FEIS arrives at the shocking denouement that "Alternative D would not result in disproportionately high and adverse noise impacts on minority and low-income communities." *Id.*, p. 2-81.

This conclusion arises from two favorable assumptions: (1) that Alternative D is properly compared to a NA/NP Alternative baseline that includes future growth, rather than reflecting the status quo at the time of the commencement of environmental review; and (2) the propriety of an "averaging" process whereby the FEIS offsets the increased impacts of Alternative D on massive minority populations, against an alleged reduction in noise over non-minority populations (purportedly resulting from a shift in contours).[7] The former has been addressed in detail above. The latter, however, has the pernicious effect of minimizing the actual impacts of Alternative D, as well as imbuing them with a purported "net beneficial effect". *Id.*, p. 2-81

The FEIR does not shy away from reporting the project's real impacts on minority communities. For example the FEIR, section 4.2, reports that 5080 low income and minority citizens of communities east of the airport will be exposed to a 1.5 Db increase in the 65 CNEL contour under Alternative D, as compared to the 1996-7 Environmental Baseline, *i.e.*, the year that environmental review commenced. Yet despite the increasingly minority character of surrounding communities after 1996-7 [FEIS, p. A.2-60], the FEIS concludes that "fewer people

[7] The conclusion also results from the exclusive use of the "1.5 Db increase within the 65 CNEL contour" standard of significance contained in FAA guidance, rather than a measure of population merely impacted by 65 CNEL noise levels, as is required by CEQA.

residing in minority and low income communities are exposed to 65 CNEL noise levels than in non-minority and low-income communities. *Id.*, at p. 2-81.

By way of example, the FEIS concludes that, while 1630 minority and low-income individuals would be newly exposed to 65 CNEL noise levels by Alternative D, there would be a greater reduction of 1838 resulting from a shifted contour, netting a reduction of about 200 individuals affected by Alternative D. The FEIS then offsets that purported reduction against an alleged increase of 488 individuals exposed in non-minority communities, thereby arriving at the conclusion that the significant increases in operations and consequent noise resulting from Alternative D's 89.6 MAP capacity will actually have a "net beneficial effect." Interestingly, the FEIS' analysis omits the same "averaging" analysis for increases of 1.5 Db within the 65 CNEL contour, the standard of significance upon which the FEIS' Environmental Justice analysis purportedly relies.

Suffice it to say, the Environmental Justice analysis is a "house of cards", built upon an impermissible "averaging" of impacts, and, ultimately a skewed baseline for analysis, both manipulated to produce precisely the result reflected in the FEIS, *i.e.*, a minimization of the significant noise, air quality, and Environmental Justice impacts of Alternative D.

Commentors, therefore, reiterate their urgent request that the FAA reconsider its analysis and conclusions in light of existing law and acknowledged facts, with the goal of revealing the full impacts of Alternative D, including a demonstration of Conformity with the SIP that can withstand judicial scrutiny.

Commentors look forward to the FAA's prompt cooperation in these matters.

Sincerely,

CHEVALIER, ALLEN & LICHMAN, LLP

Barbara Lichman

Barbara E. Lichman, Ph.D.

cc: Anita Willis, Esq., City Attorney, City of Inglewood
Thomas J. Faughnan, Esq., Principal Deputy County Counsel, County of Los Angeles
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Jim Ritchie, Los Angeles World Airports

ATTACHMENT 1

Meszler
Engineering Services
906 Hamburg Drive, Abingdon, Maryland 21009

February 16, 2005

Mr. David B. Kessler, AICP
U.S. Department of Transportation
Federal Aviation Administration
P.O. Box 92007
Los Angeles, California 90009-2007

Dear Mr Kessler,

Summary

This constitutes a review of the air quality portions of the January 2005 Final Environmental Impact Statement (FEIS) for the LAX Proposed Master Plan Improvements and the included Final General Conformity Demonstration (FCD). It is important to note that the FEIS carries forward all of the previous air quality analyses performed for the proposed master plan improvements with little or no modifications. As a result, all of the comments provided in the June 4, 2004 comment letter in response to the release of the Final Environmental Impact Report (FEIR) for the same proposed improvements, as well as previous comment letters on earlier draft FIS/EIR releases, continue to apply. Given that specific air quality comments have been submitted on several occasions, this letter is structured to highlight those elements that are most fundamental to illustrating the continuing inadequacy of the FEIS air quality analysis and, as a result, the inability of that analysis to support the determinations required under both the National Environmental Policy Act (NEPA) and Clean Air Act Conformity provisions.

The major reason for this approach is that, while there are deficiencies of varying importance throughout the FEIS air quality analysis, there is but *one* fundamental *assumption* that allows the FEIS to conclude that emissions and air quality under the proposed alternative (Alternative D) are similar to baseline (i.e., No Action/No Plan) emissions and air quality. As such, the integrity of this single assumption is critical to the integrity of the associated air quality analysis. If the underlying assumption is reasonable, the basis for the analysis is sound and analysis components can be considered on the merits of the implemented methodologies and calculations. However, if the underlying assumption is itself fundamentally flawed, then debating the merits of the implemented methodologies and calculations is a distraction from the primacy of the flawed assumption. In effect, combining comments on a single overarching flaw with methodological comments allows one to lose sight of the forest for the trees. Such distraction continues to corrupt the conclusions of the FEIS, and the associated conformity determination.

Methodological Approach

The preferred alternative of the FEIS (Alt. D) continues to be very similar in terms of airport activity to the NA/NP alternative. While the propriety of this similarity is discussed in detail in

the body of this letter, the implications of the assumed similarity are significant in regard to air quality impacts since airport-related air quality is primarily a function of the overall level of activity. To the extent that the comments presented in this letter affect the analyses conducted for all of the master plan alternatives, the resultant impact on the NA/NP alternative and Alt. D can be expected to be similar. Where comments affect solely the analysis for Alternative D (or the NA/NP alternative), the relative relationship between the business as usual and build alternative may change. For obvious reasons, these latter comments are most important in judging the efficacy of the build alternative. The former comments, which might affect both the build and no action alternatives similarly, are primarily important in properly assessing the overall onsite and near-site air quality under either of the alternative futures.

The FEIS has been reviewed from a "top down" perspective. Essentially, this means that the presented material has been evaluated in terms of stated methodologies and, to the extent possible from presented materials, assessed in terms of whether those methodologies are reasonable and have been implemented as stated and appropriate. When possible, the consistency of analysis results has been considered against expectations derived from either previous experience or theoretical relationships. In a few instances, confirmatory analyses have been conducted to evaluate assertions presented in the FEIS. These analyses are best characterized as providing modestly detailed comparative calculations intended to evaluate issues where presented FEIS data appears either inconsistent or unexpected. Except when indicated by such data anomalies, efforts to replicate the various air quality analyses have not been performed. It is entirely possible (and likely in a document the size of the FEIS) that minor errors, that are not identified, are present in the various air quality analyses and results. To the extent that such errors would produce "major" shifts in analysis results, they should be inherently identified through various identified issues discussed in the body of the letter. However, minor discrepancies that produce relatively small errors in analysis results, may pass through a review at the associated level-of-detail without detection. As always, a more detailed review is possible, including a complete replication of the underlying modeling and associated analysis work, but such a review would require an allocation of resources well beyond those associated with this work.

It is important to note that the FEIS is not less comprehensive than most previous examples of similar documents. Nevertheless, there remain several areas of deficiency that could impact FEIS conclusions. Despite the underlying analysis, it is somewhat disconcerting that areas of deficiency are actually acknowledged in the FEIS, but subsequently dismissed through unsubstantiated claims of insignificance. Moreover, the responses to comments included as an integral component of both the FEIR and FEIS demonstrate a tendency to downplay any significant critiques brought to the attention of the project authority, so that the public comment process appears to be treated more as more of a challenge to defend than an opportunity to refine. Notwithstanding this situation, the discussion presented in the body of this letter presents continuing concerns with the air quality analysis portion of the FEIS.

<u>The Flawed Assumption</u>: ***Airport Demand Under Alternative D will be Virtually Identical to That Under the No Action/No Plan Alternative***

Although there are other lesser assumptions that impact the air quality analysis of the FEIS, the assumption that airport demand is essentially unchanged between the preferred alternative and the no action alternative (78.9 million annual passengers (MAP) versus 78.7 MAP in 2015, a difference of only 0.2 percent) overwhelmingly defines the air quality relationship between the two alternatives. Because demand is assumed to be similar, emissions from aircraft, aircraft support equipment, and ground access vehicles are also similar. The subsequent implementation of mitigation measures, which by definition cannot influence the no action plan, then serve to differentiate the two alternatives by reducing emissions only for the preferred alternative. The only exception occurs during the interim years between 2005 and 2015, when construction activity under the preferred alternative results in temporary emissions increases. With the exception of the construction emissions, the mitigated preferred alternative, *as defined*, must have lower emissions a priori.

Before examining this issue, it is perhaps important to note that this is not a new comment. The issue has been raised in all previous comment letters as well as by other commenters throughout the EIR/EIS process. This discussion simply isolates and expands the issue due to its overwhelming influence on air quality analysis conclusions and, by extension, FEIS conclusions in general.

If the LAX Master Plan is not adopted as proposed, then it is estimated that LAX will handle approximately 78.7 MAP in 2015 under the NA/NP. According to the FEIS, operations would be "very inefficient and congested, and the quality of passenger/visitor service at LAX would be poor."

By comparison, unconstrained demand in 2015 is estimated to be 97.9 MAP (according to the FEIS). The additional demand is not satisfied under the no action alternative because it is assumed that anticipated airfield and terminal conditions result in an economic equilibrium between air travel supply and air travel demand at 78.7 MAP. In effect, it is simply claimed to be more efficient economically for additional demand (i.e., demand above 78.7 MAP) to be satisfied through other airports, other travel modes, or travel forbearance, *i.e.*, market conditions will act as a travel demand constraint at LAX.

However, the travel demand constraints estimated for alternative D are not defined in the FEIS on the basis of economic forecasting, but rather on the basis of a design "bottleneck" intended to limit travel demand to a level below that which economic conditions would dictate. Table 1 illustrates that alternative D offers essentially the same airfield capacity enhancements as alternative C, as well as similar terminal and ground vehicle capacity – yet is predicted to satisfy only the same demand levels as the no action alternative which offers *none* of these service benefits. Clearly, market forces would dictate that additional travel demand would be expected for alternative D relative to the no action alternative, since both passengers and aircraft can more efficiently access the airport. To overcome these market forces, alternative D intentionally

Table 1. Comparison of LAX Design Parameters

Design Parameter	NA/NP	Alt. C	Alt. D
Number of Runways	4	4	4
Runway 1 Length (ft)	8,925	9,400	10,420
Runway 2 Length (ft)	10,285	12,000	11,700
Runway 3 Length (ft)	12,091	12,091	12,091
Runway 4 Length (ft)	11,096	11,096	11,096
Total Runway Length(ft)	42,387	44,587	45,307
Terminal Capacity (sq ft)	4 million	7 million	6.5 million
Parking Spaces	35,600	41,400	39,000
Number of Gates	163	168	153
NBE Gates	203	223	179

purports to introduce a "bottleneck" into the terminal system that separates the increased airfield capacity from the increased terminal and ground access capacity. By limiting the number of gates available to connect the enhanced airside and groundside facilities, alternative D purports to control travel demand to levels virtually identical to those of the no action alternative.

How realistic of a throughput constraint is this design "bottleneck?" The answer depends entirely on how efficiently airlines can utilize these gates and how much potential for efficiency improvement or load shifting exists. In effect, gate capacity does not serve as a constraint to getting either aircraft or passengers to the airport. While runway configuration and capacity can effectively constrain the arrival and departure of aircraft, and terminal and ground access capacity can effectively constraint passenger arrival and convenience, gate capacity does neither. This is especially important under the preferred alternative since capacity on both sides of the gate is being increased. Terminal and ground access enhancements are encouraging more groundside demand, while runway and airfield improvements are encouraging more airside demand. The ability of gate limitations to serve as a countervailing force is questionable and demands a detailed analysis before it can be accepted as a reasonable and effective demand constraint. We have not been able to find any such analysis in the FEIS.

Given a situation where additional passenger demand exists and can easily be served through the additional capacity provided by improved airside facilities, airlines have only to increase gate efficiency from current levels to increase airport activity beyond that estimated in the FEIS. Since current airlines differ dramatically in their ability to utilize gates efficiently, there is dramatic potential for improvement. It is highly unlikely that airlines will forsake the increased capacity being offered through the alternative D improvements by maintaining gate efficiency at levels typical of current operations. Moreover, the FEIS itself appears to recognize this when it follows the description of the alternative D gate constraints with the qualifying statements:

"However, it is important to understand that the levels of passengers that each alternative is designed to accommodate are not finite limits where the airport would somehow be closed or where aircraft would be redirected to some other facility when this number is reached. These levels are an indication of the number of passengers that can be accommodated at a reasonable level of service. The airport can accommodate additional aircraft and passengers beyond these levels; however, the result is a degraded level of service." [FEIS, Page 3-57]

Since there is capacity "pressure" on both sides of the terminal gate, it is unrealistic to expect gate efficiency to remain constant with the implementation of alternative D. While gate availability may well serve as a capacity constraint at the point where no additional efficiency improvements are possible, that point is well beyond current gate utilization characteristics Thus, the assumed constancy of annual airport passenger service at about 79 MAP under both the no action alternative, for which gate capacity is not an important constraint, and alternative D, for which gate capacity is the *only* important constraint, cannot be viewed as a realistic assessment of likely airport activity under the two alternatives.

To provide an indication of the potential impacts of the unrealistic assumption of airport activity, this report contains an emissions inventory estimate for a version of alternative D that is more consistent with the estimates produced for the other airport build alternatives (Revised Alternative D). This estimation treats both airside and groundside airport demand in accordance with the capacity enhancements actually proposed under alternative D. On the airside, alternative D proposes airport enhancements that are functionally equivalent to or in excess of those of alternative C (see for example, the runway parameters presented in Table 1 above, or the more detailed design descriptions of the FEIS). Therefore, if the assumed gate restrictions to not constrain airport activity as presumed in the FEIS, airside improvements can be expected to adequately support the same aircraft activity as estimated for alternative C in the FEIS Similarly, proposed alternative D includes both terminal area and ground vehicle accommodations equivalent to those of alternative C. While the two alternatives differ in the configuration of their proposed groundside enhancements, they both are designed to accommodate and provide similar levels of service. As a result, it is reasonable to expect that a version of alternative D unconstrained by a presumed gate-based "bottleneck" will function similarly to alternative C in terms of aircraft activity, supporting an estimated 89.6 MAP.

Under an assumption of 89.6 MAP, aircraft, APU, and GSE emissions under this revised version of alternative D will also be similar to the emissions from those same sources as predicted for alternative C. Ground access vehicle emissions cannot be taken directly from alternative C as the ground services configurations of the two alternatives are significantly different However, it is reasonable to assume that at least off-airport ground access emissions and parking related emissions for alternative D will scale proportionally with annual activity up to a point where congestion affects cause disproportionate impacts. Should congestion affects cause significant impacts between 78.9 MAP and 89.6 MAP, the emissions estimates calculated via an assumption of proportionality will be too low – so implementing an assumption of proportionality is actually conservative and ground access emissions may be higher. Nevertheless, based on the

information available in the FEIS, an assumption of proportionality is appropriate if additional uncertainty is to be avoided.

Therefore, under Revised Alternative D, aircraft, APU, and GSE emissions are assumed to be similar to those of alternative C.[1] Off-airport ground access vehicle and parking related emissions are scaled upwards by 13.6 percent, the ratio of 89.6 MAP to 78.9 MAP. Even though there is more activity on the airport, it is assumed that on-airport vehicle and stationary source emissions are identical to those estimated in the FEIS for alternative D. Similarly, alternative D construction emissions are unchanged as the airside work is similar to that proposed under alternative C and the groundside work will not change (i.e., the people mover concept is continued, but under an assumption of higher annual activity). Table 2 presents the resulting emission inventory estimates under the heading "Hybrid C/D."[2]

As indicated in Table 2 and Figures 1 though 6, *mitigated* emissions under the revised alternative emissions D shift from a state of being 4-18 percent *less* than emissions under the NA/NP (depending on the specific emissions species considered) to a state where they are as much as 8 percent *more* than emissions under the NA/NP. Only emissions of VOC continue to be lower than emissions under the NA/NP – emissions of CO, NO_x, SO_x, and PM-10 are all higher than those of the NA/NP. As illustrated in Figures 7 and 8, *mitigated* emissions under revised alternative D are equal to or higher than those of mitigated alternative C for on-airport sources and only 1-12 percent lower than mitigated alternative C for all sources (as compared to 12-22 percent lower as alternative D is analyzed in the FEIS). Thus, the sensitivity of emissions and air quality impacts to aircraft activity levels (and the presumed gate constraints) is obvious. Note also, that while the tables and figures presented below only illustrate emissions relationships in 2015, the same relations would carry through to influence interim year emission estimates and air quality.

While it is more problematic to extrapolate estimates of air quality concentrations as presented concentrations in the FEIR/FEIS to revised alternative D since such impacts depend on both the magnitude and location of emission releases, some observations are possible. First, as presented in the FEIS, alternative C emissions lead to interim year exceedances of the NAAQS for NO_2 and PM-10. Moreover, these exceedances are over 150 percent of the NAAQS. Therefore, since on-airport emissions under Revised Alternative D are higher than those of alternative C and total emissions are only modestly lower, it is almost certain that revised alternative D would also demonstrate exceedances of these same NAAQS. Alternative C also demonstrates interim year CO concentrations that are within about 5 percent of the NAAQS, so it is likely that revised alternative D, with higher on-airport emissions, could also exceed the CO NAAQS during

[1] It should be noted that for this analysis, aircraft VOC emissions for alternative C differ from those presented in the FEIS and associated documents by approximately 9 percent since the FEIR/FEIS failed to convert EDMS HC estimates to VOC. The FEIS did implement this conversion for both the NA/NP and alternative D, but HC estimates for alternatives A, B, and C were not converted before the analytical focus of the FEIR/FEIS shifted to alternative D. To convert the emission estimates for this analysis, the average of the conversion factors used in the FEIS for the NA/NP (9.09 percent) and alternative D (9.03 percent) was utilized.

[2] This alternative is also referred to as the "Revised Alt. D" alternative in the charts and narrative that follow.

Table 2. LAX Emission Estimates for 2015 (tons per year)

Source Type	Species	NA/NP	Unmitigated Alt. C	Mitigated Alt. C	Unmitigated Alt. D	Mitigated Alt. D	Unmitigated Hybrid C/D	Mitigated Hybrid C/D
Aircraft	VOC	1,222	1,364	1,364	1,165	1,165	1,364	1,364
	CO	8,617	7,670	7,670	6,283	6,283	7,670	7,670
	NOx	4,850	5,335	5,535	4,865	4,865	5,535	5,535
	SOx	421	481	481	409	409	481	481
	PM-10	63	72	72	59	59	72	72
APU	VOC	9	10	10	9	9	10	10
	CO	198	212	212	189	189	212	212
	NOx	103	103	103	102	102	103	103
	SOx	18	0	0	18	18	0	0
	PM-10	0	0	0	0	0	0	0
GSE	VOC	40	49	0	30	0	49	0
	CO	1,114	1,567	0	2,053	0	1,567	0
	NOx	355	265	0	334	0	265	0
	SOx	1	1	0	1	0	1	0
	PM-10	12	2	0	4	0	2	0
On-Airport Roadways	VOC	138	116	101	120	118	120	118
	CO	1,242	1,188	1,161	1,140	1,128	1,140	1,128
	NOx	181	159	138	220	217	226	217
	SOx	1	3	2	1	1	1	1
	PM-10	51	49	45	56	51	56	51
Parking Lots	VOC	53	85	78	138	130	156	148
	CO	152	341	306	393	544	673	618
	NOx	44	17	16	73	70	83	79
	SOx	0	0	0	1	1	1	1
	PM-10	9	1	1	28	28	32	32
Stationary Sources	VOC	51	96	96	51	51	51	51
	CO	120	124	124	120	120	120	120
	NOx	220	207	207	220	220	220	220
	SOx	7	6	6	7	7	7	7
	PM-10	39	41	41	39	39	39	39
Total On-Airport	VOC	3,513	3,718	3,448	3,511	3,473	3,750	3,498
	CO	9,451	11,201	9,412	10,390	8,266	11,382	9,748
	NOx	5,729	6,287	5,999	5,814	5,474	6,426	6,155
	SOx	449	490	489	437	436	490	489
	PM-10	167	165	158	180	177	195	194
Off-Airport	VOC	1,606	1,326	1,270	1,152	1,091	1,508	1,259
	CO	15,188	17,401	16,336	14,342	13,366	16,287	14,912
	NOx	2,368	2,824	2,741	2,198	2,102	2,496	2,387
	SOx	27	32	30	26	24	30	27
	PM-10	2,780	2,213	2,060	1,817	1,658	2,063	1,873
Construction	VOC	0	43	40	0	0	0	0
	CO	0	330	320	0	0	0	0
	NOx	0	576	469	0	0	0	0
	SOx	0	2	2	0	0	0	0
	PM-10	0	181	124	0	0	0	0
Grand Total	VOC	5,119	5,087	4,758	4,663	4,563	5,258	4,757
	CO	24,639	28,932	26,068	24,732	21,632	27,669	24,659
	NOx	8,097	9,687	9,209	8,012	7,576	8,922	8,542
	SOx	476	524	521	463	460	519	516
	PM-10	1,947	2,559	2,342	1,997	1,835	2,259	1,977

Note: Aircraft VOC emissions for Alt. C differ from those presented in the FEIR/FEIS by approximately 9 percent as the FEIR/FEIS failed to convert HC to VOC. This conversion was done in the FEIR/FEIS for both the NA/NP and Alt. D.

Figure 1. On-Airport Emissions in 2015 (tons per year)

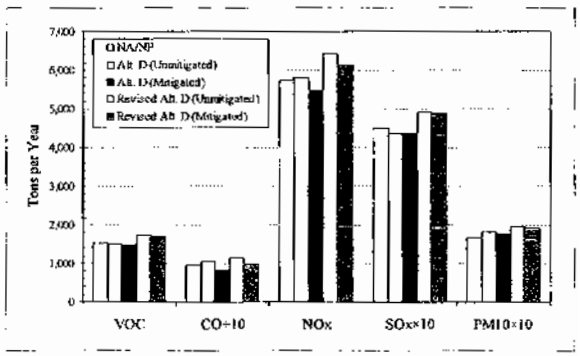


Figure 2. Total Emissions in 2015 (tons per year)

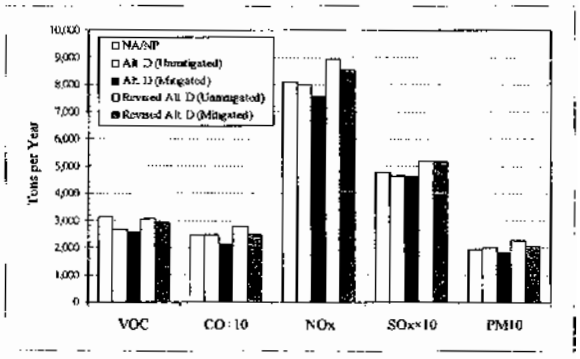


Figure 3. On-Airport Emissions in 2015 Relative to the NA/NP

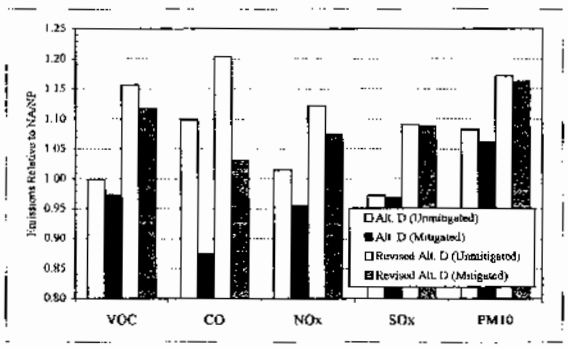


Figure 4. Total Emissions in 2015 Relative to the NA/NP

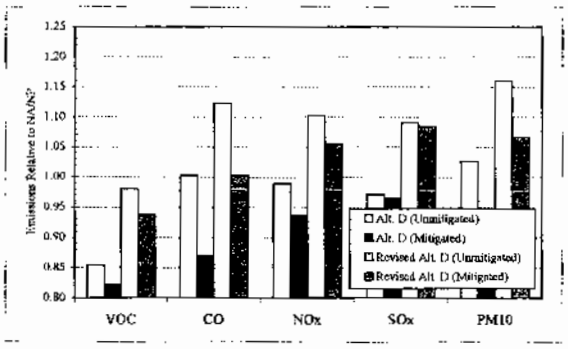


Figure 5. On-Airport Mitigated Emissions in 2015 Relative to the NA/NP

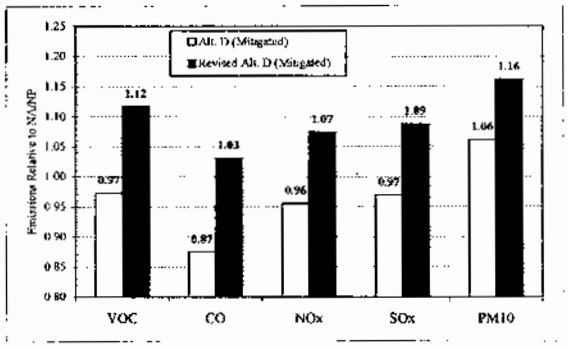


Figure 6. Total Mitigated Emissions in 2015 Relative to the NA/NP

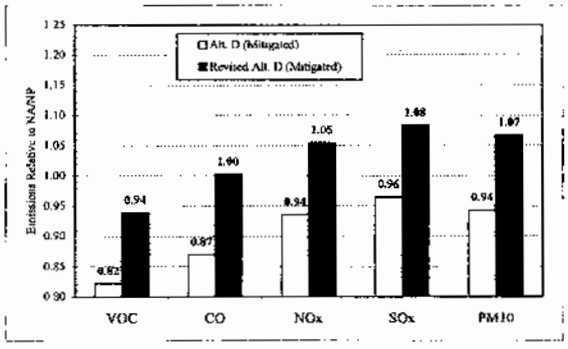


Figure 7. On-Airport Mitigated Emissions in 2015 Relative to Alt. C

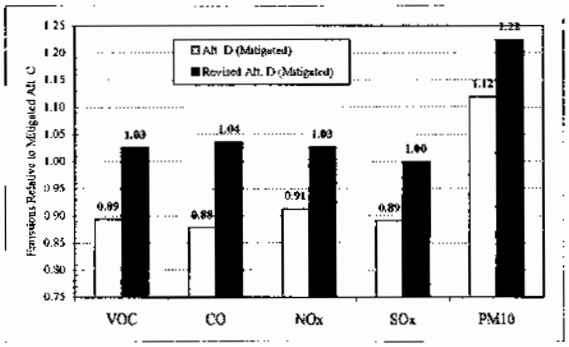
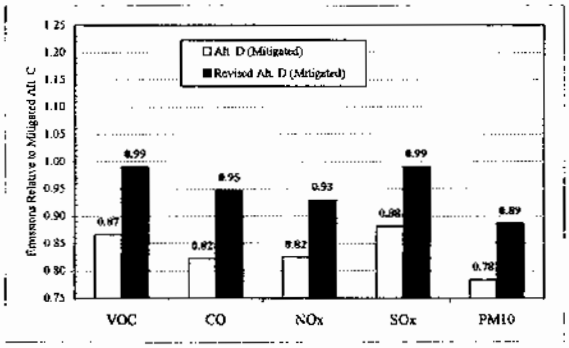


Figure 8. Total Mitigated Emissions in 2015 Relative to Alt. C



interim years. Upon buildout in 2015, the FEIS shows that alternative C meets the NAAQS for all emission species, but is within about 5 percent of the NAAQS for NO_2. Thus, revised alternative D, with higher on-airport emissions than alternative C could result in exceedances of the NO_2 NAAQS.[3] Finally, alternative C, alternative D, and revised alternative D all continue to violate the CAAQS for PM-10, but these violations are considerably more substantial for alternative C and revised alternative D.

Clearly, the reliability of the assumed design constraints is *the* key factor in determining the significance of the FEIS-estimated air quality impacts. For alternatives A, B, and C, runway capacity is the design constraint. The NA/NP is constrained by landside access limitations. Thus, all four of these alternatives are constrained either by the ability of aircraft or passengers to access the airport. Conversely, alternative D is constrained by neither of these market forces. Instead, alternative D actually increases the ability of both airlines and passengers to access the airport, but places a structural design constraint between supply and demand. Such a constraint can only function as designed if it represents a true barrier that cannot be compromised through operational changes. There is no such assurance in the FEIS. Moreover, natural market forces provide the pressure required to "breach" the constraint. Air carriers will recognize the unsatisfied passenger demand available under alternative D and attempt to improve operational efficiency to tap the market. If efficiency improvements can be made for the given number of aircraft gates and gate configurations, pent-up demand is available to reward that improvement. In effect, there is a design incentive to improve efficiency (and increase emissions) under alternative D that does not exist under the NA/NP.

While neither LAWA nor the FAA has the authority to physically limit the number of aircraft or passengers that access LAX, they do have the authority *and the requirement* to develop mitigation measures to offset emissions and air quality impacts. Therefore, given the FEIS reliance on an untested and singular "bottleneck" to restrict emissions and air quality impacts to levels required under state and federal rules, it is only reasonable to support that reliance with assurances that those thresholds will not be breached. Anything less is tantamount to rewarding the underestimation of airport activity, an underestimation that is more critical to the potential approval of alternative D than any mitigation measure currently proposed. One method to accomplish this safeguard would be through the imposition of contingency mitigation measures that would take effect automatically and immediately at any point when actual activity levels exceed the assumptions used to justify implementation of the alternative. While this approach would still not satisfy the obligation to utilize reasonable planning assumptions, it would at least place the airport authority and neighboring communities in equivalent risk positions, whereas alternative D as currently designed places all associated risk on the communities alone. Without question, the reliability of future airport activity estimates is *the* key to assessing the propriety of the FEIS and the FEIS does nothing to support the efficacy of the assumed gate constraints for alternative D.

[3] Note that all of these assessments do not consider the potential emissions and air quality impacts of the other estimation issues raised in this letter. To the extent that those issues increase emissions and air quality concentrations, they will carry over to further exacerbate the potential implications discussed in this section that result solely from the underestimation of airport activity.

Finally, it is important to note that the California Air Resources Board has also questioned the derivation of the airport activity constraints for alternative D (see issue #3 in a March 3, 2003 letter to the FAA that is included as Attachment A-1D to the FCD) and specifically requested that FAA provide an explanation of what steps would be taken to ensure that the assumed levels of activity were not exceeded. The record does not reveal what, if any, actions the FAA took in response to this inquiry.

Additional Issues in FEIS

While the overall sensitivity of FEIS and FCD conclusions to airport activity estimates renders the accuracy of those estimates of primary importance in assessing FEIS and FCD conclusions, there continue to be a number of other issues that influence the emissions and air quality impacts of either or both of the NA/NP alternative and alternative D. A discussion of each of these issues follows.

8-Hour Ozone and PM-2.5 NAAQS: Portions of the Los Angeles area that include LAX were classified as federal nonattainment areas for the 8-hour ozone NAAQS on April 30, 2004 (69FR23857, effective June 15, 2004) and PM-2.5 NAAQS on January 5, 2005 (70FR00943, effective April 5, 2005). While there are currently no official State Implementation Plans for either 8-hour ozone or PM-2.5 in the Los Angeles area (the state has three years from designation to develop an attainment SIP), the U.S. Environmental Protection Agency (EPA) has already amended federal transportation conformity requirements to include provisions for both 8-hour ozone and PM-2.5 (published July 1, 2004, 69FR40004, effective August 2, 2004). Under the revised transportation conformity requirements, EPA provides a one year grace period (as required under the federal Clean Air Act for newly designated nonattainment areas) for affected areas to incorporate 8-hour ozone and PM-2.5 into their conformity demonstrations. No similar revisions have yet been implemented for federal general conformity requirements, which are the specific requirements that govern the LAX conformity determination, but such revisions are undoubtedly forthcoming.

Therefore, while it is clear that no specific regulatory requirements yet exist for the inclusion of 8-hour ozone and PM-2.5 in the LAX Master Plan amendment process, such requirements will be in place for future plan amendments and it would be appropriate, albeit not mandatory, for the project authority and the FAA to consider the impacts of the proposed improvements on these pollutants. In fact, in a letter dated March 3, 2003, the California Air Resources Board recommended just such consideration (see issue #16 in a March 3, 2003 letter to the FAA that is included as Attachment A-1D to the FCD). The FEIS is very clear in stating that the demonstration of compliance with PM-10 standards is being viewed as a surrogate for demonstrating compliance with PM-2.5 standards (FEIS page 4-656) and indicates that the South Coast Air Quality Management District (SCAQMD) has confirmed their agreement with this approach. However, one cannot conclude that PM-10 impacts are equivalent or proportional to PM-2.5 impacts. This is due to the fact that virtually 100 percent of combustion related particulate is PM-2.5. Therefore, while the numerical stringency of PM-2.5 standards is increased relative to PM-10, associated emissions do not decrease proportionally.

Ambient PM-2.5 concentrations due to combustion sources (i.e., aircraft, vehicles, etc.) will be similar in magnitude to combustion related PM-10. In 2015, the FEIS is showing, for alternative D, a 24-hour PM-10 concentration of 65 $\mu g/m^3$ (micrograms per meter cubed) against a PM-10 NAAQS of 150 $\mu g/m^3$, and an annual average PM-10 concentration of 35 $\mu g/m^3$ against a PM-10 NAAQS of 50 $\mu g/m^3$. For PM-2.5, the corresponding NAAQS are 65 $\mu g/m^3$ (24-hour) and 15 $\mu g/m^3$ (annual), so it is very possible that the airport would have difficulty demonstrating compliance with the PM-2.5 standard. While there is insufficient data in the FEIS to make a similar assessment for 8-hour ozone, it likely that the focus on VOC and NO_x emissions as surrogates for assessing ozone impacts would result in little, if any, change in ozone-related analysis.

Issues Common to FEIS and Prior Environmental Documents

Significant Uncertainty Remains in Estimated Future Background Concentrations: As was the case with previous EIR/EIS documents, the FEIS continues to rely on large assumed reductions in ambient background concentrations between 2000 and 2015 to minimize predicted air quality concentration impacts relative to the federal and state AAQS. In effect, emissions in the airport environs are being allowed to increase within the constraints of applicable AAQS through emissions decreases *expected* to occur offsite as reflected in reduced ambient baseline concentrations. While there is nothing inherently wrong with such reliance *providing offsite emission reductions can be reasonably expected to affect background concentrations in the manner presumed*, it is not possible to adequately determine this likelihood from either the discussion or data included in the FEIS, or its predecessor documents.

The importance of this cannot be overstated. Regardless of the accuracy (and precision) of onsite emission estimates and associated air quality modeling, the overall air quality impact of those estimates depends equally on the accuracy of the future background concentrations. If background concentrations are underestimated, air quality impacts will be equally underestimated. In effect, the reliability of the air quality analysis conducted for the FEIS depends *equally* on the accuracy of the *very detailed* onsite emissions and air quality analysis and the *very "generic"* background emissions and air quality analysis. Support demonstrating the reliability of the latter continues to be lacking.

The emissions rollback method employed in both the FEIR and FEIS is a generally recognized method for estimating future background concentrations. However, the applicability of the general method to conditions at LAX must be adequately investigated and validated to provide sufficient assurance of reliability. This investigation and assurance are deficient in the FEIR/FEIS. Without undertaking the appropriate demonstration analysis for the project authority, it is only possible to delineate the type of questions that it would be appropriate to investigate and resolve. Without technically sound answers to these and other questions that might arise during the course of the analysis, it is impossible to place a high degree of certainty in the future background concentration estimates and, by extension, estimated future ambient concentrations.

For example, can concentrations around LAX be expected to decline proportionally with total emission reductions in the South Coast Air Basin? This is precisely the assumption made in the FEIR/FEIS. While this is a generally utilized assumption for estimating future concentrations, there are features associated with LAX that render the unadjusted application of this method questionable. Foremost is the fact that LAX lies within a coastal environment that limits emission reductions to the west. Since a significant portion of air movement occurs in both easterly and westerly directions, it might well be expected that regional emission reductions will have a larger impact during easterly wind conditions (since the bulk of regional emission reductions will occur to the east of LAX). How westerly wind background concentrations are affected is unclear.

The FEIR implies that the maximum background concentrations occur during periods of easterly winds and this is supported by data presented in Table 2 of Attachment Y of the Air Quality Technical Report (Technical Report 4). This lends support to the premise that the regional emissions rollback methodology might be appropriate. However, Table 2 also shows that the short term (i.e., one hour) maximum background concentrations for NO_2 and SO_2 are similar during periods of westerly wind. The maximum NO_2 concentration is 0.14 ppm during westerly winds, versus 0.15 ppm during easterly winds. Similarly, the maximum SO_2 concentration is 0.018 ppm during westerly winds, versus 0.021 ppm during easterly winds. In short, the westerly wind background for these two pollutants is 85-95 percent of the easterly wind background. Unless background conditions reflect a well mixed composite of regional emissions, and this is increasingly unlikely as one moves away from the centroid of regional emissions, it seems unlikely that background concentrations will respond proportionally to regional emission reductions during periods of both easterly and westerly winds. This uncertainty reaches a peak at regional border sites such as LAX.

An analogous situation exists for PM-10, where the maximum background concentration was measured during a 24 hour period in which winds were predominately from the west (15 of 24 hours according to Attachment Y of the Air Quality Technical Report (Technical Report 4) of the FEIR/FEIS). It is not clear that such a concentration be expected, as was assumed in the FEIR/FEIS, to decline proportionally with PM-10 concentrations in central Los Angeles. Perhaps under well mixed conditions, but an appropriate demonstration needs to be made for a coastal area such as LAX.

Data required for the appropriate demonstrations should exist. The SCAQMD monitor used to estimate longer term background concentrations (the monitor designated as station 094, Southwest Coastal LA County by SCAQMD) should be capable of serving as a long term indicator of the proportionality of response between measured concentrations and regional emission reductions *during periods of varying wind direction*. If this response is truly regional in nature and independent of wind direction (even in the coastal environment associated with LAX), then changes in wind direction-specific concentrations over time will reflect the same

degree of proportionality with emission reductions. If not, an appropriate adjustment to the assumed background concentration estimation methodology is required.[4]

Of additional concern is the differential treatment afforded PM-10 in both the FEIR and FEIS. Whereas all other pollutant backgrounds are set in accordance with the ratio of emissions inventory estimates for 2015 to base year emissions inventory estimates, the PM-10 background is set according to the ratio of modeled 2015 to base year PM-10 concentrations in central Los Angeles. The only explanation for this differential treatment in the FEIR/FEIS is the single assertion that "this method allows for the inclusion of secondary PM-10 formation." Without further support, it is difficult to assess the propriety of this approach. It is clear, however, that SCAQMD PM-10 emissions inventories reflect an approximate 11 percent *increase* between 1997 and 2015, while FEIR/FEIS background concentrations indicate an approximate 48 percent *decrease* during this same period (24-hour background concentrations of 82 $\mu g/m^3$ in 1996 versus 43 $\mu g/m^3$ in 2015). Secondary PM cannot account for this level of difference. As potential support, the expected changes in secondary PM precursor emissions, currently lacking in the FEIR/FEIS, should be provided along with additional supporting material as an integral component of the FEIS. Moreover, given the fact that continuing exceedances of the 24-hour PM-10 AAQS represent the major AAQS issue associated with the estimated FEIR/FEIS ambient concentrations in 2015, it is most appropriate to ensure proper characterization of the background PM-10 concentration since any underestimate will further exacerbate AAQS compliance.

The overall sensitivity of the air quality analyses to the background concentration reduction is perhaps best recognized by examining forecasted 2015 pollutant concentrations. Despite an assumed 50 percent reduction in the background concentration of NO_2 between 1996 and 2015, onsite NO_2 concentrations are forecasted to increase. Similarly, while the background 24-hour concentration of PM-10 is assumed to decrease by almost 50 percent between 1996 and 2015, overall onsite PM-10 declines by only about 20 percent. Clearly, these reduced background concentrations are allowing significant emissions growth to occur from onsite sources and, as a result, the integrity of the demonstrated AAQS compliance status hinges on the proper demonstration of background concentration propriety, a demonstration that has not been performed to date.

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[4] At the risk of introducing a concern that might distract from the wider issue being discussed, it is also worth noting that the SO_2 one-hour data published by SCAQMD for station 094 differs by an order of magnitude from that published in the FEIR/FEIS. For 2000, the FEIR/FEIS indicates a one-hour background SO_2 concentration of 0.017 ppm, while data published by SCAQMD indicates 0.17 ppm. The 0.017 ppm concentration must be inaccurate since it is actually lower than the FEIR/FEIS 24-hour concentration of 0.020 ppm, which is a physical impossibility. In fact, the lowest annual one-hour maximum SO_2 concentration published by SCAQMD for station 094 between 1994 and 2002 is 0.03 ppm. Data in Attachment Y of the Air Quality Technical Report (Technical Report 4) of the FEIR/FEIS supports the reported maximum one-hour onsite monitoring station concentration of 0.021 ppm, but it is not clear why this is so much lower than similar data measured at station 094 (although the measured annual maximum for station 094 during the period the onsite monitoring station was in operation was 0.03 ppm, the lowest measured annual maximum during the 1994-2001 period).

In summary, substantial reductions in estimated ambient baseline concentrations continue to reflect a major mechanism by which the FEIS demonstrates compliance with AAQS. As a result, it is imperative that a sufficient level of effort be devoted to the justification of the estimated values. The environmental documents devote literally hundreds, if not thousands, of pages of support to the onsite emissions inventory and dispersion modeling assumptions, but comparatively little in analytical support for the assumed background concentration reductions. The FEIR/FEIS does include a robust set of monitoring data for the onsite air quality monitor that was operated in 1997 through early 1998, but additional analysis supporting the propriety of the emissions rollback procedure and the central Los Angeles PM-10 modeling estimates to the situation at LAX is entirely lacking. Without such support, it is simply not possible to rely on the presented future ambient concentrations.

Reverse Thrust Emissions from Aircraft are Not Considered: The air quality analysis continues to be deficient because it does not address reverse thrust emissions from aircraft. At various times, LAWA has declared that: (1) emission factors and regulatory guidance for considering reverse thrust operations are not available, (2) emissions from reverse thrust are insignificant, (3) because runway length at LAX is sufficient, reverse thrust operations should be minimal, and (4) the methodology used to estimate the times-in-mode for approach, taxi, takeoff, and climbout modes is sufficiently conservative to inherently account for any reverse thrust emissions. To this list, the FEIS adds the argument that because aircraft are assumed to carry their maximum allowable weight on takeoff, reverse thrust emissions are inherently considered.

Each of the arguments offered in support of the omission of reverse thrust emissions is inadequate, and in many cases is pure speculation. The FEIS offers no compelling evidence that reverse thrust emissions are inherently considered. Times-in-mode have been specifically tailored to reflect expected operational conditions at LAX, exclusive of reverse thrust operations. The argument that runway length is sufficient to minimize reverse thrust operations is equally spurious. Aircraft routinely (at LAX and elsewhere) utilize reverse thrust to minimize stopping distance and access the first safe runway turnoff. This both minimizes aircraft time on an active runway and reduces brake maintenance costs. Some airports and airlines restrict reverse thrust operations on longer runways, but there is no evidence that this is the case at LAX. Independent studies in the late 1990s showed reverse thrust operations to be common at LAX.[5]

Although the FEIS is correct in stating that there is no official guidance or emission factors for addressing reverse thrust emissions, common practice has existing since at least the mid 1990s. Takeoff or climbout emission factors are generally recognized to be consistent with those of reverse thrust operations as all three are high thrust modes. In fact, the most common practice is simply to add reverse thrust time to takeoff time and allow the EDMS to estimate combined takeoff and reverse thrust emissions simultaneously. This is not a novel approach and can easily be incorporated into the FEIS analysis. In short, the argument that guidance methods do not exist is irrelevant. What is important is that air quality estimates be as accurate as data allows, and there is sufficient data to estimate emissions from reverse thrust operations.

[5] See, for example, Analysis of Techniques to Reduce Air Emissions at Airports. Energy and Environmental Analysis, September 1997.

Although the time-in-mode for reverse thrust is small, generally on the order of 15-20 seconds, such high thrust operational modes produce very high NO_x per unit time relative to other operating modes. Based on the data presented in the FEIR/FEIS, a reverse thrust mode time of 15 seconds would increase the overall aircraft NO_x inventory by about 10 percent.

Ground Support Equipment (GSE) Populations: The population and activity of aircraft ground support equipment (GSE) at LAX can be estimated with a high degree of certainty by simply surveying current airport operators. Despite this, the FEIS continues to rely on the FAA's EDMS model to estimate these parameters. This would be acceptable if there was some demonstration that the estimates produced by EDMS were consistent with actual population and activity statistics, but no such demonstration is provided. In their response to previous comments, LAWA states that either approach is acceptable under FAA guidelines and also claims, without providing supporting evidence, that the approach employed is "believed" to produce a conservative estimate. It is exactly such support that the verification from suggested comparison to ground counts is intended to provide.

The "acceptability" of the suggested ground count method versus that employed in the FEIS is not the critical issue. The accurate depiction of LAX GSE operations (and emissions) is the issue of importance and that can easily be demonstrated by providing a comparison of actual GSE populations and activity to those assumed in the EDMS modeling. The fact that the FAA has added the option of quantifying GSE emissions through such an airport "census" approach is clear evidence that the agency also supports the maximum possible use of local data. Only through a ground truth validation of the EDMS assumptions can the air quality impacts of LAX GSE be accepted with confidence.

Use of Electric GSE to Fully Mitigate GSE Emission by 2015: The primary emissions mitigation measure employed under alternative D is the conversion of 100 percent of airport GSE to electric (or very low emission) power by 2015. While this is a laudable goal and should be pursued with vigor, the likelihood that it will be accomplished in the suggested timeframe is minimal at best. In 2002, the California Air Resources Board entered into a Memorandum of Understanding (MOU) with various participating airlines to reduce emissions of GSE in the South Coast Air Basin. Under this MOU, airlines have agreed to meet specified fleet average emissions levels by 2010 as well as introduce zero emission GSE into the existing GSE fleet to attain an aggregate fleet penetration rate of 30 percent by that same year. Those goals also demonstrate that a level of zero (or near zero) GSE emissions are unlikely to be attained by 2015. In seven years between 2003 and 2010, the MOU will result in the conversion of approximately 30 percent of the GSE fleet to zero emission status. The alternative D mitigation measure will require the conversion of the remaining 70 percent of equipment to zero emission status in five years. The likelihood of success on that time schedule is obviously very small. It is therefore important that the FEIS indicate specific alternative (and quantifiable) mitigation measures that will be implemented in the event that the GSE conversion measure does not proceed as planned.

It is also important to note that the GSE electrification program could be carried out to the benefit of LAX patrons and neighbors regardless of the fate of alternative D, or any other build

alternative. If, as stated in the FEIR/FEIS, "LAWA continues its commitment to air quality improvement programs for activities over which it has direct control," then this program should be implemented and carried through to completion under any of the LAX alternatives, including the no action alternative. There is simply no activity upon which the electrification of GSE is dependent that is tied to any of the build actions. This measure cannot, therefore, be said to be a specific mitigation measure for Alternative D.

Incorrect Aircraft PM Emission Factors are Used in Air Quality Analyses: The FEIS continues to rely on the incorrect application of its cited methodology for estimating aircraft PM-10. The emission factors employed in the FEIS consider only the non-volatile carbon portion of emitted particulate. The reference documents for the cited PM estimation method are presented in Attachment H of the Air Quality Technical Report, Technical Report 4 of the FEIR/FEIS. The first document included in that Attachment is a June 1999 report entitled "Aircraft Engine Particulate Matter Data." On page 3-1 of that report, it is clearly stated that "The particulate emission indices plotted are directly emitted soot (non-volatile) mass, and do not consider secondary particulate formation." Yet, it is these emission indices that were used to estimate aircraft PM. It is important to note that it is not only secondary particulate that is omitted from the emission indices (as implied by the quoted report statement), but directly emitted volatile and non-carbonaceous PM mass as well. Attachment A of the June 1999 report is a March 1999 report entitled "Estimate of Particle Emission Indices as a Function of Particle Size for the LTO Cycle for Commercial Jet Engines." This is the University of Missouri report cited as a main PM reference by the FEIR/FEIS. As stated on page A-5 of the report, "Table 4 provides "first of a kind" estimates of number and mass-based EI's [emission indices] for the LTO cycle of four popular engines currently in use in the commercial fleets. The EI's are provided for both non-volatile (soot) particulates and for the total particulates for both high and low fuel sulfur contents." Cited Table 4 thus provides the means to convert non-volatile PM to total PM. It is this conversion that is lacking in the FEIS.

The data presented in Table 4 show the total PM to non-volatile PM ratio to be about 2.6 for low sulfur (about 70 ppmW) jet fuel and 14.7 for high sulfur (about 675 ppmW) jet fuel. EPA data demonstrates that U.S. jet fuel averages about 600 ppmW sulfur. As a result, the appropriate adjustment factor for the FEIS PM estimates would be about 13.2, unless specific data for operations at LAX indicate a different average fuel sulfur content. In the absence of such data, I estimate that aircraft PM emissions are underestimated by approximately a factor of 13.

Additional uncertainty arises through the assumed density of carbonaceous soot particles. This uncertainty is also discussed on page A-5 of the University of Missouri report. For the FEIS emission factors, a value of 1 gram per cubic centimeter (g/cc) was assumed, which is within the range of generally accepted values of 1-2 g/cc. However, given this range, actual PM emission rates could be twice as high as estimated in the FEIR/FEIS, and this uncertainty is in addition to the factor of 13 underestimation noted above - so that PM emissions could be underestimated by as much as a factor of 26.

Attachment 9 to the FEIS Air Quality Appendix F-B shows aircraft emissions to constitute about 2 of the estimated 65 $\mu g/m^3$ 24-hour average PM-10 concentration for mitigated alternative D,

along with similar estimates for the no action alternative. If aircraft PM is, in fact, underestimated by a factor of 13-26, then both aircraft-related and total ambient PM concentrations will go up accordingly. If we assume proportionality between emissions and ambient concentrations, overall PM-10 concentrations might be expected to increase by 24-50 $\mu g/m^3$, bringing total estimated PM-10 to 89-115 $\mu g/m^3$. This would clearly exacerbate the already demonstrated noncompliance with the PM-10 CAAQS and increase the potential for violations of the PM-10 NAAQS. Given that even these levels assume the virtual elimination of GSE PM through the electrification mitigation measure, it is clear that any backsliding from full implementation of the GSE electrification program may have significant implications for AAQS compliance.

Gate-Based Power and Air Continues to be Assumed for All Aircraft: The assumption 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) is optimistic and, therefore, results in an underestimation of APU and/or GSE emissions. Experience at airports with fixed gate-based power and air systems, including LAX, has demonstrated that even when gate-based equipment is available, not all airlines or aircraft will utilize it consistently. The most realistic emissions estimate for APU would be based on the current usage rate of existing gate-based power and air systems at LAX. The rate is either already known or can easily be determined through a modest random survey of gate activity. An assumption of 100 percent usage certainly provides an indication of the ideal level of APU emissions, but the AAQS compliance demonstration should be based on the most likely, not the ideal, emissions level.

APU Emission Factors for PM are Not Considered: The FEIS continues to assume that PM emission factors for all APU are zero. The impact of this omission continues to be buffered by that fact that APU usage at LAX is assumed to be limited due to an assumption of 100 percent usage of gate-based power and conditioned air, but even under these ideal assumption, APU are assumed to operate for 15 minutes per LTO cycle. In response to previous comments on this issue, LAWA has stated that the operational information required to estimate APU PM emission rates is not available and concludes that "any calculation of PM10 from APUs would be a gross speculation at best, and not representative of acceptable scientific or engineering methods or ethics."

While there is insufficient information to estimate APU PM emission rates using the approach employed in the FEIR/FEIS for aircraft PM, that does not mean that all methods are similarly restricted. Comments on both the DEIR and SEIR set forth a method that relies on regression analysis to relate aircraft PM to the inverse of NO_x emissions was described. This approach results in relationship coefficients significant at the 99 percent confidence level and since APU are essentially small jet engines, can be applied without sacrificing either engineering methods or ethics, to both main aircraft engines and APU. This method and the developed coefficients have already been described in detail in previous comments on the DEIR/SEIR. Suffice it to say that the assumption of zero APU PM is both clearly an assumption and clearly incorrect. Engineering ethics dictate the development of the best possible estimate given available data and simply deferring to a "best case" emission estimate of zero is clearly not the most appropriate

engineering method or ethical approach to estimating the AAQS impacts of airport operations. For what it is worth, the regression approach cited above estimates APU PM emission rates that average about 5 grams per kilogram of fuel consumed.

Default Aircraft Engine Assignments Continue to be Utilized in Lieu of More Appropriate LAX-Specific Engine Assignments: Aircraft emissions in the FEIS continue to be based entirely on the default engine assignments of the FAA EDMS model, as opposed to engine assignments tailored to operations at LAX. While this approach does not affect the relative emissions relationships between alternatives, it can have a significant impact on the absolute level of aircraft emissions and, therefore, on associated AAQS compliance demonstrations. In response to previous comments on this issue, LAWA claims that the use of the EDMS default engine assignments represents the most statistically probable aircraft/engine combinations in use at LAX. LAWA also cited the difficulty of engine identification for a particular aircraft and the lack of evidence that the LAX air carrier mix is inconsistent with EDMS default assumptions. All three assertions are incorrect.

The EDMS default engine reflects the "most popular" engine for an airframe based on *total* airframe sales. This includes all air carriers operating that airframe, regardless of the location of those operations. If, *and only if*, the distribution of air carrier-specific operations at LAX is similar to that for the national aircraft fleet as a whole, will the probability of encountering a particular aircraft/engine combination be similar to the EDMS default assignments. Such a comparison can be made to justify the use of the EDMS defaults, but there is no evidence presented in the FEIS that such an exercise has been undertaken. In the absence of the comparative analysis, it is statistically most likely that LAX (or any other airport) will exhibit variation about the mean EDMS distribution. It is the magnitude of this variation that will affect airport emission estimates.

The FEIR/FEIS claims that aircraft/engine tracking is difficult, and that is true. However, there are several aircraft census databases that track airframe ownership by air carrier and identify the associated characteristics of those airframes, including equipped engines. The use of such a database allows the uncertainty of the EDMS "most popular" *overall* engine to be refined to the level of individual air carriers. Since operations at the air carrier level of detail are known at individual airports, including LAX, this allows for a substantially increased level of certainty in determining the probability of encountering a particular aircraft/engine combination at a given airport. In short, the EDMS distribution reflects the probability across all airports, while an air carrier-specific distribution allows for distributions to be tailored to a specific airport in accordance with the relative frequency of carrier-specific operations at that airport. Only in the limited case where local airport operations are statistically similar to aggregate operations across all airports will the two distributions coincide.

An example can perhaps best illustrate the sensitivity of emissions estimates to the proper allocation of aircraft engines. While the following presented statistics are a few years old (perhaps three) and were originally generated for another project, their illustrative value is unaffected. According to the FEIR/FEIS, the Boeing 757-200 will account for nearly 18 percent (65,532 of 371,577) of LAX operations under alternative D in 2015 (from Attachment F of the

S-4 Supplemental Air Quality Technical Report of the SEIR). The B757-200 is available with either Pratt & Whitney or Rolls-Royce engines. Table 3 illustrates the relative population of in-use B757-200 engines for U.S. air carriers. As indicated, the EDMS default engine, the Pratt & Whitney PW2037 is, in fact, the most prevalent engine, accounting for about 46 percent of B757-200 engines.

Table 3. B757-200 Emissions Sensitivity to Engine Selection

Aircraft Engine	Engine Fraction	Pounds per LTO (1)			Change from EDMS Default		
		CO	HC	NO_x	CO	HC	NO_x
PW2037 (EDMS Default)	46.0%	24.68	2.08	55.80	default	default	default
PW2040	10.9%	23.01	1.88	44.04	-6.8%	-9.6%	-21.0%
RB211-535C	0.2%	26.59	2.44	48.90	+7.7%	+17.3%	-14.2%
RB211-535E4	15.4%	17.81	0.49	53.65	-27.8%	-76.0%	+44.3%
RB211-535E4B	27.6%	25.63	0.24	39.36	+3.8%	-88.5%	-29.0%
Weighted Average	100.1%	23.71	1.31	46.13	-3.9%	-37.2%	-17.1%

(1) For this comparison, the standard EPA mass-emissions are used to define the LTO cycle.

At this point, we can make the first observation about using EDMS defaults, namely that even ignoring airport-to-airport differences, the EDMS default does not imply that the majority of aircraft possess a given engine. As illustrated, on average, more B757-200's will utilize an engine other than the PW2037. Statistically, 46 out of 100 will use the PW2037, while the remaining 54 will not. So, the probability of a B757-200 utilizing a PW2037 for operations at LAX is actually less than 50/50 on the basis of national statistics.

A statistically reliable method of addressing this situation (on a national population basis) is to use a weighted average engine. This can be accomplished either by introducing a new "composite" engine into EDMS or disaggregating the total number of B757-200 operations into multiple (properly weighted) components, each associated with a different engine. Either approach accomplishes the same goal of better tailoring aircraft emission estimates to expectations. As indicated by the differences in the emission rates included in the table above for the various engine options as well as a weighted national average engine, the effects of tailoring aircraft engine assignments can be significant, with variations for individual pollutants ranging from about -90 percent to +45 percent for this aircraft. Variations for other aircraft can be greater or lesser depending on available engine characteristics. This is why proper engine assignment, rather than simple reliance on EDMS defaults, is critical

Despite the magnitude of the potential emissions differences, it is critical that it be understood that the data reflected in Table 3 above does *not* yet reflect any airport-specific population data, but instead is based on national average data. Table 4 shows how the B757-200 engine populations break out by major U.S. air carrier. It is this data that is critical in tailoring an airport assessment to local conditions.

While the FEIR/FEIS is correct in that local tracking of aircraft engines is limited at best, "census-type" databases tracking aircraft sales do exist and can be accessed to develop carrier-specific tables such as that shown in Table 4 for the B757-200. While this does not allow the specific engine associated with each operation at an airport to be determined, it does allow

Table 4. B757-200 Engine Distribution by Major U.S. Carriers

Air Carrier	B757-200 Engines			
	PW2037	PW2040	RB211-535E4	RB211-535E4B
America West			13	
American Airlines				102
Continental				34
Delta Air Lines	100	6		
Northwest	48			
United Airlines	49	49		
US Airways			34	
Aggregate U.S. Majors	197	55	47	140

for the development of more reliable statistics at the airport level-of-detail than does the use of EDMS default engine assignments. Using these data, air carrier-specific engine assignments can be identified and individual airport "default" engine assignments can be developed by weighting the air carrier specific engine data by the fraction of aircraft operations accounted for by that carrier. Clearly, when America West, American, Continental, and US Airways B757-200's utilize LAX, they do not do so with a PW2037 engine. The bottom line is that it is not only possible to develop a tailored airport-specific emissions analysis using readily available data, but such tailoring should be an integral component of any airport emissions analysis.

Note also that the above statistics as well as the EDMS defaults represent data for domestic air carriers only. To the extent that LAX is encouraging international flights, the exercise summarized above will need to consider both domestic and international air carriers. Although the B757-200 is not a long range aircraft, it can illustrate the necessity of considering foreign aircraft configurations when one recognizes that on a worldwide basis, the Rolls-Royce RB211 engines, not the Pratt & Whitney engines, are the dominant engine for the B757-200.

It is Still Not Clear that Heavy Trucks are Properly Considered in On-Airport Fleet Mixes: From data presented in the FEIR/FEIS, it appears that on-airport vehicle emission estimates continue to exclude heavy duty truck traffic. Such an assumption is not consistent with the fact that Federal Express and other cargo carriers operate substantial fleets of heavy duty vehicles. In response to previous comments on this issue, LAWA has claimed that diesel truck emissions are included in both the on-airport and off-airport traffic emission estimates. However, LAWA has provided no additional evidence for this assertion in the FEIR/FEIS and continues to cite data tables presented in the SEIR as evidence of the emissions inclusion. After another review of Attachment J of the S-4 Supplemental Air Quality Technical Report from the SEIR, there is still no evidence of heavy truck inclusion in the on-airport traffic estimates. Table J3, which

indicates the year 2000 fleet composition, does include passenger cars, light duty trucks, medium duty trucks, heavy duty trucks, and buses. However, both Tables J4 (fleet mix in 2013) and J5 (fleet mix in 2015) indicate zero VMT fractions for light-heavy, medium-heavy, and heavy-heavy trucks on all on-airport road links, *even those for which heavy duty truck traffic is assumed in 2000*. VMT on all of the cargo facility links is indicated as being comprised of 60.4 percent *gasoline* light duty trucks, 39.4 percent *gasoline* medium duty trucks, and 0.2 percent diesel *light* duty trucks. Since these data are not indicated to have changed in the FEIS, it appears that on-airport heavy truck emissions are not considered.

The Determination of Conformity

The FDC concludes that NO_x, NO_2, and PM-10 emissions exceed conformity thresholds and does provide an associated conformity analysis for each. However, as a threshold issue, this analysis must be viewed in the context that associated emission rates are underestimated due to the issues presented in this letter and, as a result, conformity conclusions could (and would) be affected for alternative D were the FEIS revised to properly address the various emissions issues discussed.

Federal conformity requirements allow for the use of various approaches to demonstrate conformity. Generally, these approaches can be summarized as follows:

1. Demonstrate that the emissions increases are specifically identified and accounted for in the associated SIP,
2. For ozone and NO_2, demonstrate that emissions are fully offset by other measures in the nonattainment area,
3. For pollutants other than ozone and NO_2, demonstrate through air quality modeling that the emissions do *not* increase the frequency or the severity of NAAQS exceedances,
4. Demonstrate that the state has certified that the emissions increases are accounted for in the applicable SIP emissions budgets, or
5. Demonstrate that the state has certified that it will revise the applicable SIP emission budgets to include the emissions increases.

The FCD relies on criterion 4 to demonstrate conformity for NO_x and NO_2 and criterion 3 to demonstrate conformity for PM-10. The FCD *purports* to demonstrate that emissions of NO_x and NO_2 do not exceed the emissions budgets specified in the approved SIP (criterion 1), but it does not actually do this and could not adequately demonstrate conformity without an associated certification from the state that the emissions budgets are not exceeded. Despite significant effort in the FCD to illustrate that project emissions are within the applicable emissions budget, this effort is unconvincing because there is no way to determine what component of the applicable SIP budget is associated with emissions at LAX.

The closest the FCD gets to an actual emissions budget comparison is for aircraft and APU emissions, where FEIS emissions estimates for alternative D are compared to LAX-based aircraft

emission estimates from the approved SIP (the 1997/99 AQMP). However, this comparison is flawed for several reasons. Foremost is the fact that the SIP budget as developed includes emissions from reverse thrust operations, which continue to be excluded from the FEIS and FCD despite repeated comments. As indicated further in this and previous comments, such inclusion can be expected to increase NO_x and NO_2 emissions by at least 10 percent. An increase of this magnitude would be sufficient to alter the relationship between alternative D emissions and the approved SIP budget for LAX aircraft operations. The FCD also provides associated aircraft emission budgets from the 2003 AQMP that purport to be for LAX, but these emissions are so inconsistent with those of both the 1997/99 AQMP and the FCD that there is simply no way they can be for LAX operations alone.

A secondary aspect that renders the aircraft emissions comparison obsolete is that the 1998 Regional Transportation Plan upon which the LAX emissions budget is based, clearly states that operations at LAX (and El Toro, which was assumed to be operational) "cannot be estimated … due to lack of air traffic simulation modeling ability."[6] Therefore, LAX was assumed to be unconstrained from a growth perspective and it was further assumed that operations would have to be redistributed among the other airports in the region once definitive modeling analysis was available. Thus, the emissions estimated for LAX are essentially regional placeholders and cannot be used to support an airport-specific emissions budget since budgets for other airports will be correspondingly underestimated. In effect, this emissions estimation approach left the 1997/99 AQMP without an airport-specific emissions budget.

Similar difficulties exist with regard to determining a specific emissions budget for GSE, stationary sources, motor vehicles, and construction activities. The approved SIP emission budgets are simply not sufficiently detailed to allow LAX-specific budgets to be determined. While the FCD attempts to show that the level of emissions from LAX is but a fraction of the areawide emission budgets for each source category, these comparisons are ultimately irrelevant as there is simply no way to know how the LAX emissions (regardless of their magnitude) compare with the level of emissions assumed in the SIP for activity at LAX.

Ultimately, this entire demonstration is effectively relegated to academic status through a letter dated August 12, 2004 from the SCAQMD that states that the emission estimates developed for alternative D are below the applicable SIP budgets. Since such a certification is an allowable conformity determination option (see criterion 4 above), the issue of comparing emissions to specifically identified emission budgets (criterion 1) is avoided. It should be emphasized that the FCD is not supported by any emissions comparison, and it is solely the state certification that provides the necessary basis for conformity.

For PM-10, the FCD relies on conformity criterion 3 as there are no PM-10 emission budgets for aircraft operations in the applicable SIP. Though the associated modeling analysis found peak concentrations to be below both the 24-hour and annual NAAQS, it is important to note that concentrations as high as 90 percent of the NAAQS were estimated. Since the emissions leading to this concentration are underestimated due to the emissions inventory impacts of the alternative

[6] See FCD Attachment C-1.

D activity underestimate discussed above and various additional inventory shortcomings discussed below, it is entirely possible that exceedances of the annual PM-10 NAAQS could well be observed were these various shortcomings corrected.[7]

Respectfully,

Daniel J. Meszler, P.E.

[7] The FCD concludes that the net emissions increases of both VOC and CO are below the significance thresholds for conformity determination. This conclusion is based on the emission estimates presented in the FEIS and could, and likely would, change were the issues presented in this letter properly addressed. Since no specific conformity demonstration was performed for either pollutant due to the conclusion that neither exceeded the conformity emissions threshold, no further comment is possible.

PROOF OF SERVICE

I declare that I am over the age of eighteen (18) and not a party to this action. My business address is 695 Town Center Drive, Suite 700, Costa Mesa, California 92626.

On February 22, 2005, I served the following document: **FINAL ENVIRONMENTAL IMPACT STATEMENT FOR THE PROPOSED MASTER PLAN IMPROVEMENTS AT LOS ANGELES INTERNATIONAL AIRPORT - COMMENTS BY THE CITY OF INGLEWOOD, CITY OF CULVER CITY AND COUNTY OF LOS ANGELES** on the interested parties in this action by placing a true and correct copy of each document thereof, enclosed in a sealed envelope, addressed as follows:

Mr. David B. Kessler, A.I.C.P
U. S. Department of Transportation
Federal Aviation Administration
P. O. Box 92007
World Way Postal Center
Los Angeles, CA 90009-2007
FAX: (310) 725-6848

(X) (BY MAIL) I am "readily familiar" with the business' practice for collection and processing of correspondence for mailing with the United States Postal Service. I know that the correspondence is deposited with the United States Postal Service on the same day this declaration was executed in the ordinary course of business. I know that the envelope was sealed and, with postage thereon fully prepaid, placed for collection and mailing on this date, following ordinary business practices, in the United States mail at Costa Mesa, California.

( ) (BY PERSONAL SERVICE) I delivered such envelope by hand to the above address(es).

(X) (BY FACSIMILE MACHINE) I caused the above-referenced document(s) to be transmitted to the above-named person at the telephone number indicated adjacent to said person(s) name(s) and address(es). Attached to this declaration is a "TX Confirmation Report" [2 pages] confirming the status of the transmissions.

( ) (BY FEDERAL EXPRESS) Having placed the document in an envelope(s) or package(s) designated by Federal Express with the Federal Express' Airbill designating FedEx Standard Overnight service (next business morning delivery), with delivery fees paid or provided for, addressed as stated above, I deposited the envelope(s) or package(s) in a box or other facility regularly maintained by Federal Express or delivered the envelope(s) or package(s) to a courier or driver authorized by Federal Express to receive documents.

Executed on February 22, 2005 at Costa Mesa, California.

(X) (State) I declare under penalty of perjury under the laws of the State of California that the above is true and correct.

( ) (Federal) I declare that I am employed in the office of a member of the bar of this court at whose direction the service was made.

Bernie C. Hart

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PAGE(S)	02 02
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DAVID E. JANSSEN
Chief Administrative Officer

VIA FACSIMILE AND U.S. MAIL

Board of Supervisors
GLORIA MOLINA
First District
YVONNE B. BURKE
Second District
ZEV YAROSLAVSKY
Third District
DON KNABE
Fourth District
MICHAEL D. ANTONOVICH
Fifth District

February 22, 2005

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AIRPORTS DIVISION
AWP-610

David B. Kessler, AICP
U.S. Department of Transportation
P.O. Box 92007
Los Angeles, CA 90009-2007

Dear Mr. Kessler:

COMMENTS ON LAX PLAN FINAL ENVIRONMENTAL IMPACT STATEMENT

On behalf of the County of Los Angeles, I am submitting the attached comments prepared by the County's Department of Public Works concerning the Off-Airport Surface Transportation Section of the Final Environmental Impact Statement. These comments focus on traffic growth, traffic mitigation measures, proposed improvements for the intersection of La Cienega Boulevard at Lennox Boulevard, fair share contributions towards transit enhancement, discrepancies regarding unmitigated intersections, and increased traffic projections.

Under separate cover, and in conjunction with the Cities of Hawthorne, Inglewood, and Culver City, the County is also submitting comments on the Air Quality section of the Final EIS.

Thank you for your serious consideration of these comments.

Sincerely,

DAVID E. JANSSEN
Chief Administrative Officer

MARTIN K. ZIMMERMAN
Acting Branch Manager
Office of Unincorporated Area Services and Special Projects

DEJ:MKZ
JR:os

Attachment (1)

c: Each Supervisor
Executive Officer, Board of Supervisors
County Counsel
Acting Director of Public Works
Director of Planning
A.C. Lazzaretto and Associates

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AIRPORTS DIVISION
AWP-610

February 10, 2005

TO: Martin Zimmerman
Chief Administrative Office

FROM: William J. Winter
Assistant Deputy Director
Traffic and Lighting Division

COMMENTS ON LOS ANGELES INTERNATIONAL AIRPORT MASTER PLAN FINAL ENVIRONMENTAL IMPACT STATEMENT

As requested, we have reviewed the Off-Airport Surface Transportation Section of the Final Environmental Impact Statement (FEIS) for the Los Angeles Airport Master Plan (LAX). The off-airport transportation information contained in the FEIS augments the information in the Final Environmental Impact Report (FEIR).

The Playa Vista II development, now referred to as the Village at Playa Vista, is included in the FEIS and in the third addendum of the FEIR. The Village at Playa Vista is a related project to the LAX Master Plan and we concur with its inclusion, at the traffic volume shown, in the FEIS.

We are pleased that the FEIS was able to account for the relatively recent change in traffic growth due to the downsizing of the Village at Playa Vista development. However, we are concerned that other growth isn't properly reflected in the study. For example, are the project horizon years (project build out and peak construction year) analyzed appropriately? The airport construction is projected to peak in 2008 which is only three years away if the airport construction is underway this year. Is this realistic? Shouldn't the study be revised to reflect more reasonable horizon years?

We have not been consulted regarding the feasibility of some of the traffic mitigation measures in the FEIS. Based on our preliminary assessment, most of the proposed improvements have not been completely scoped.

The proposed improvements for the intersection of La Cienega Boulevard at 111th Street includes the removal of on-street parking on the east side of La Cienega Boulevard. Also, the proposed improvement for the intersection of Inglewood Avenue

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and Lennox Boulevard includes the removal of parking on Inglewood Avenue south of Lennox Boulevard. We ask that the study quantify the amount of on-street parking that would be removed so that we can determine the impact it will have on the businesses at these locations. Other mitigation measures should be explored before we consider removal of parking.

The proposed improvements for the intersection of La Cienega Boulevard at Lennox Boulevard for triple left turn lanes on the westbound approach for the Alternative Mitigation Plan (without the Lennox interchange) is not acceptable. The unincorporated community of Lennox will be significantly impacted by this improvement which will attract more airport traffic through this residential community. We wish to continue to stress the importance of the Lennox Boulevard interchange with the San Diego Freeway as the only mitigation that will address the current as well as the projected airport and growing area traffic. The County was not consulted with respect to the incorporation of ATSAC/ATCS system or equivalent type of improvements in the project for traffic mitigation purposes. The County does not use the ATSAC/ATCS system. Incorporation of such improvements to mitigate traffic impacts in the unincorporated areas must be discussed with the County prior to their acceptance as mitigation measures.

It is stated that a fair share contribution to the Metropolitan Transportation Authority's Metro Rapid Program or other transit enhancements to benefit transit to and from LAX is no longer needed for some of the key intersections in the area including the intersection of Lincoln Boulevard and Marina Expressway (SR 90). This is inconsistent with how other developments in West Los Angeles, specifically the Playa Vista project, have mitigated their traffic impact. Consequently, some fair share contribution towards transit enhancements seems to be necessary.

The conclusion of the Off-Airport Surface Transportation Section stated that there will be no unmitigated intersections and yet on page A 1-25, it indicates that two intersections (one partially in unincorporated County at Imperial Highway and La Cienega Boulevard) will remain unmitigated. This discrepancy should be corrected. All intersections should be fully mitigated.

Figures A2.1-1 through A2.1-3 show increased traffic on Admiralty Way between Bali Way and SR90 with Reduced Playa Vista. What is the reason for the increase?

Please give either James Chon or Barry Kurtz of our Traffic and Lighting Division a call at (626) 300-4709 for any questions.

JHC:cn

cc: A.C. Lazzaretto & Associates (Mr. Andy Lazzaretto)
Department of Regional Planning (Mr. Ron Hoffman)

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February 18, 2005

Via USPS Express Mail

David B. Kessler, AICP
U.S. Department of Transportation
Federal Aviation Administration
P.O. Box 92007
Los Angeles, CA 90009-2007

Re: City of El Segundo Comments on the Final Environmental Impact Statement and Conformity Determination for the Proposed Master Plan Improvements at LAX

Dear Mr. Kessler:

Please accept the following timely comments on the Federal Aviation Administration ("FAA") January 2005 Final Environmental Impact Statement ("FEIS")[1] for the proposed Master Plan Improvements at Los Angeles International Airport ("LAX") ("Master Plan Project") and the attachments thereto. In addition, these comments and the technical report by Dr. J. Phyllis Fox and Dr. Petra Pless, attached hereto as Exhibit A, describe how the Clean Air Act Final Conformity Determination fails to comply with the requirements of section 176(c) of the Clean Air Act, 42 U.S.C. § 7506(c) and Title 40 of the Code of Federal Regulations, Part 93, Subpart B. These comments are submitted on behalf of the City of El Segundo ("El Segundo").

[1] According to the Executive Summary of the FEIS, the FEIS is comprised of: 1) Volume A, which was released in January 2005 and contains information and analysis specific to the FEIS; 2) The First, Second and Third Addenda to the Final Environmental Impact Report ("EIR") for the LAX Master Plan Project; 3) Volumes 1 through 4 of the Final EIR; 4) Appendices and Technical Reports to the Final EIR; and 5) Response to Comments from the Final EIR. FEIS at A.1-2 to 1-3.

I. **The FEIS Perpetuates the Fundamental Flaw of the FAA's NEPA Documents: It Bases Its Analysis on the Assumption That Capacity Will Not Exceed 78.9 Million Annual Passengers, Without Providing the Means of Enforcing Such a Limit and Without Justifying Its Assumptions.**

On November 4, 2003, we submitted a comment letter on behalf of El Segundo in response to the July 2003 release of the Supplement to the Draft Environmental Impact Statement/Environmental Impact Report ("Draft EIS/EIR"). That letter included extensive comments about the likelihood that implementation of the Master Plan Project would result in a significantly greater capacity than the 78.9 million annual passengers ("MAP") assumed by the FAA[2] as the current capacity of LAX.[3] The comment letter was supplemented with a report prepared by Professor Adib Kanafani, an eminent expert in airport design and capacity, which demonstrates the capacity consequences of the Master Plan Project, also known as Alternative D.

El Segundo's November 4, 2003 comments, and Dr. Kanafani's accompanying report, remain relevant – and have yet to be adequately addressed by the FAA. The FEIS does not provide meaningful assurances that LAX is designed to cap capacity at 78.9 MAP. It simply declares that implementation of Alternative D will result in a capacity of 78.9 MAP based on market assumptions.

As we emphasized in the 2003 comment letter, the FAA's assertion that the capacity of Alternative D is 78.9 MAP is premised on a number of market-based assumptions about how airlines and the air transportation industry would respond to the configuration of Alternative D. These assumptions are not consistent with an analysis of the actual physical

[2] The Draft EIS/EIR and the Supplement to the Draft EIS/EIR were jointly prepared by Los Angeles World Airports ("LAWA") – the lead agency for purposes of the California Environmental Quality Act ("CEQA") – and the FAA – the lead agency for purposes of the National Environmental Policy Act ("NEPA"). In April 2004, LAWA separately released a Final EIR for the LAX Master Plan Project. The FAA has incorporated many components of the Final EIR into the FEIS that is the subject of this comment letter. While much of the FEIS was, therefore, jointly prepared by the FAA and LAWA, for purposes of simplicity, wherever possible, this letter refers only to the FAA as the agency responsible for preparation of the FEIS.

[3] The FAA previously estimated the current capacity of LAX as 78 MAP. Not until it released the Supplement to the Draft EIS/EIR – and unveiled Alternative D – did the FAA place the current capacity at 78.9 MAP. Though a seemingly small increase involving only the addition of a decimal point and a single digit, this represents an addition of nearly 1,000,000 annual passengers. For purposes of consistency and ease of reading, we refer to the 78.9 MAP capacity assumption throughout this letter. The FAA has, however, offered no justification for the increase from 78 to 78.9 MAP.

capacity of Alternative D, and the FEIS does not provide an adequate explanation or support for its market assumptions. Moreover, the Master Plan Project as proposed fails to include facility limitations that would assure the maintenance of a 78.9 MAP capacity limitation. For further discussion of the failures of the FEIS to ensure capacity limits, *see* Exhibit B attached hereto (October 2004 report on the Final EIR capacity discussion, by Adib Kanafani).[4]

One of the primary stated purposes for the design of Master Plan Alternative D was to address environmental concerns by developing an alternative with a capacity to serve no more than 78.9 MAP. Given the importance that both the FAA and the public place on this issue, the FAA must provide concrete assurances that the project is designed to ensure that this capacity level will not be exceeded. Reliance on abstract and unsubstantiated market predictions does not represent adequate assurances.

As detailed in Dr. Kanafani's report, many specific elements of Alternative D indicate that the capacity of LAX will greatly exceed 78.9 MAP. For example, the airfield improvements envisioned in Alternative D will increase capacity as they will translate to more runway availability. Similarly, Alternative D calls for significant increases in square footage of terminal space and airport parking, without providing an explanation for why such major increases are necessary. More square footage means an ability to accommodate more people– in other words, greater capacity.

Dr. Kanafani's analysis provides a thorough examination of the physical capacity of LAX under Alternative D, and calculations utilizing a range of reasonable input for the variables relevant to actual capacity. As demonstrated in his analysis, a *conservative* estimate is that the terminal and gate configurations of Alternative D will result in a capacity of 87 MAP far greater than the 78.9 MAP claimed by the FAA. A figure as high as 93 MAP is possible with fairly likely values of load factors and seating configurations. (Ex. B, pp. 14-15.) The FAA has offered no meaningful response to the data or comprehensive analysis of the gate capacity provided by Dr. Kanafani. The FEIS fails to respond to the capacity analysis, instead stating incorrectly that Dr. Kanafani's analysis is not inconsistent with the FAA's own unsupported assumptions. The FAA continues to confuse forecasts and market assumptions (which it used) with actual capacity analysis (which El Segundo used). In deriving its 78.9 MAP figure for Alternative D, not only does the FAA rely upon unproven market assumptions, but it also makes a number of assertions without providing any evidence of their validity. For example, the FAA assumes – without support – that air traffic will shift to other southern California airports when Alternative D's major improvements are built. It also ignores the technological advances that

[4] This report was prepared after the release of the Final EIR in April 2004 and the First Addendum to the Final EIR in September 2004. Though the report refers to the Final EIR and the First Addendum to the Final EIR, it is equally applicable to the FEIS, as both the Final EIR and the First Addendum have been explicitly adopted by the FAA as part of the FEIS.

are already occurring in the airport industry, relies upon outdated seating configurations, and assumes use of old aircraft in deriving its estimates. In addition, it distorts the picture by failing to acknowledge that narrow-body equivalent gates can accommodate aircraft with widely varying numbers of passengers.

Many capacity-enhancing actions have already begun at LAX. These projects are improperly segmented from the Master Plan analysis. For example, the airport is proceeding with changes to the Terminal 2 baggage claim facilities and Tom Bradley International Terminal ("TBIT"). In fact, at its January 25, 2005 meeting, LAWA's Board of Airport Commissioners voted to approve the TBIT project and adopt the Final Mitigated Negative Declaration prepared for it. As detailed in comment letters that we previously submitted on behalf of El Segundo regarding the TBIT and Terminal 2 projects, characterizing these projects as separate from the Master Plan process is misleading and inaccurate. *See* letters dated June 22, 2004 and July 30, 2004 attached hereto as Exhibits C and D. These projects, which themselves will have significant impacts, must be analyzed as elements of the larger Master Plan process, and their capacity-enhancing character must be acknowledged and evaluated.

The FAA simply used LAWA's inadequate documentation without revision, and in doing so neglected to use the release of the FEIS as an opportunity to address the failures of its previously released documents. Unfortunately, the First Addendum continues the previous pattern of making bold assertions regarding capacity limitations without offering any evidence to support such claims.[5] For example, it specifically states that Alternative D offers the distinct environmental advantage over Alternatives A, B and C of limiting capacity to a level equivalent to the No Action/No Project ("NA/NP") Alternative. First Addendum at 5-2. However, it provides no means to enforce this assertion, and as El Segundo has demonstrated, the actual capacity of LAX under Alternative D would be about 90 MAP. The environmental documents fail to analyze the impacts of Alternative D because they erroneously assume an artificially low level of operations, far lower than the airport would actually be able to serve if this Plan is implemented.

The First Addendum does refer to the addition of a proposed new "re-study" requirement relating to capacity. It states that a "Specific Plan Amendment Study to address security benefits, traffic, and aviation activity" will occur when, *inter alia*, "the annual aviation activity analysis forecasts that annual passengers are anticipated to exceed 78.9 million." First Addendum at 3-2. Yet it provides no details about the nature or scope of such a study, nor does it suggest that any consequences will result from it. In addition, by making a predicted

[5] As previously noted, the FAA expressly incorporates the First, Second and Third Addenda to the Final EIR into the FEIS. These Addenda are discussed in greater detail below. We discuss the First Addendum in this section, however, because it raises capacity-related issues

exceedence of 78.9 MAP a trigger for this study, the First Addendum appears to implicitly acknowledge the likelihood of such an occurrence.

Nor did the FAA use the opportunity of release of the FEIS to correct the analytical errors of and fill in the blanks left by the previous environmental review documents. Like all of the earlier documents released by the FAA, the FEIS makes broad assertions about Alternative D's capacity without supporting these assumptions with any, let alone sound, data. *See e.g.*, FEIS at A.1-21. Moreover, the FAA's identification of Alternative D as both the environmentally and staff preferred alternative is premised on the alleged 78.9 MAP capacity of that alternative. The FAA identifies Alternative D as both the environmentally and staff preferred alternative based on claims of lower impacts from Alternative D than Alternatives A, B and C, and in some respects, the NA/NP Alternative. Yet these claims take for granted the unsupported assumption of a 78.9 MAP capacity. *See* FEIS at A.3-1 to 3-2. The lack of basis for these capacity claims, then, undermines the entire reasoning for selecting Alternative D as either the environmentally superior, or staff preferred, alternative.

Further, none of the documents published by the FAA discusses the capacity of Alternative D as currently proposed (i.e., as modified by the Specific Plan, which made significant amendments to the Master Plan after the formulation of Alternative D) (see below for further discussion on the inconsistency between the Master Plan Project as analyzed and as approved). The capacity of Alternative D as modified by the Specific Plan may very well, because of the proposed phasing of airport improvements, exceed that of the original Alternative D. A competent capacity analysis must be completed and disclosed to the public and decision-makers before the Master Plan can be approved by the FAA.

II. The FEIS Fails to Adequately Respond to Comments on Traffic, Air and Other Important Environmental Issues.

NEPA is intended to facilitate public participation in environmental decision-making. To that end, the NEPA regulations require the agency preparing an EIS to "[r]equest comments from the public, affirmatively soliciting comments from those persons or organizations who may be interested or affected." 40 C.F.R. § 1503.1(a)(4).[6] The NEPA regulations also require the agency to "assess[,] consider ... and respond" to these comments. 40 C.F.R. § 1503.4(a). A final EIS must include and respond to all comments received on the draft EIS. *Id.*

[6] The NEPA regulations, issued by mandate by the Council on Environmental Quality, are binding on all federal agencies, except when compliance with them would be inconsistent with other federal laws. 40 C.F.R. § 1500.3. Further, "[t]he provisions of [NEPA] and of ... [the] regulations must be read together as a whole in order to comply with the spirit and letter of the law." *Id.* Accordingly, the NEPA regulations are treated as mandatory throughout this letter.

The FEIS does not satisfy NEPA's mandate to provide meaningful responses to public comments. We submitted extensive comments on behalf of El Segundo on the Draft EIS/EIR in September 2001 and the Supplement to the Draft EIS/EIR in November 2003. These comments detailed the failure of the environmental review documents to address significant environmental impacts. The FAA's responses to comments do not adequately respond to the concerns raised by El Segundo. The FEIS perpetuates the failings of the Draft EIS/EIR and seeks to defend the assertions and conclusions of the prior documents, rather than providing meaningful public disclosures of impacts.

For example, the FAA fails to respond to the extensive comments previously submitted by air quality experts, Dr. J. Phyllis Fox and Dr. Petra Pless, on behalf of El Segundo. Those expert comments set forth the failure of the Draft EIS/EIR and Supplement to the Draft EIS/EIR to adequately analyze the air quality effects of all four of the build alternatives. The FEIS includes a fragmented and incomplete presentation of air quality information that obscures public review. The FAA continues to neglect to analyze PM2.5 impacts, and utilizes flawed emissions standards in its air quality discussion. These analytical defects in the FAA's environmental documents result in vast underestimations of air quality impacts. They also result in a failure by the FAA to propose adequate mitigation measures for the significant air quality impacts. For further discussion on the failure of the FEIS to analyze air quality impacts, *see* Exhibit E (November 2004 report by J. Phyllis Fox, Ph.D., P.E., DEE, QEP, REA I/II and Petra Pless, D.Env.)[7].

Similarly, the responses to El Segundo's expert analysis regarding the traffic impacts of the Master Plan Project seek to defend the FAA's faulty methodology. They fail to provide the necessary explanations, technical support, and documentation for the FAA's unsupported and self-serving assumptions and projections regarding future traffic. As with the FAA's "market" assumptions on capacity, its traffic modeling makes assumptions without providing any factual support. For example, the assumptions regarding the number of trips generated by the LAX Northside development are completely unsupported by land use projections. In addition, the FAA traffic modeling assigns to the freeway a number of car trips exceeding the freeway's capacity; in doing so it ignores the likelihood that cars will divert to surface streets, and ignores the impacts of those cars on the surface streets. The FEIS states that Alternative D will affect freeway segments, yet the FAA has failed to conduct any analysis on the freeway mainlines and interchanges, thus failing to disclose significant impacts and neglecting to address the need to design and implement effective traffic mitigation measures. Finally, the FAA documents fail to include any analysis of the impacts – and necessary

[7] This report was prepared after the release of the Final EIR in April 2004 and First Addendum to the Final EIR in September 2004. Though the report refers to the Final EIR and the First Addendum to the Final EIR, it is equally applicable to the FEIS, as both the Final EIR and the First Addendum have been explicitly adopted by the FAA as part of the FEIS.

mitigation measures – that would be associated with each phase or component of Alternative D. This is particularly important in light of revisions to Alternative D that eliminate the GTC and other Master Plan Project elements that were assumed in the FAA's traffic analysis. The FAA has provided no traffic analysis of the tens of thousands of airport trips that would be rerouted away from the proposed GTC, back to the Central Terminal Area. These and other fundamental analytical flaws are detailed in Exhibit F, attached (November 2004 analysis of Tom Brohard, PE.).[8] The FAA's traffic analysis remains inadequate under NEPA.

III. The FEIS Conformity Analysis Does Not Comply with the Clean Air Act.

After carefully reviewing the Clean Air Act Final General Conformity Determination ("GCD") for LAX Proposed Master Plan Improvements, Alternative D, we have determined that the FAA has not cured the main flawed assumptions for its determination of conformity to the applicable State Implementation Plan ("SIP") that El Segundo identified in its February 6, 2004 letter on the Draft GCD and the attachments thereto. Therefore, as described below and in the technical report by Dr. J. Phyllis Fox and Dr. Petra Pless, attached hereto as Exhibit A, the Final GCD fails to comply with the requirements of section 176(c) of the Clean Air Act, 42 U.S.C. § 7506(c) and Title 40 of the Code of Federal Regulations, Part 93, Subpart B. Moreover, as discussed below, had the FAA performed an adequate analysis, it could not have found Alternative D to conform to the applicable SIP.

A. The NA/NP Alternative is Unreasonably Inflated

Both the Draft and Final GCD include in their emissions estimate for the NA/NP Alternative, *i.e.* the baseline against which Alternative D is compared, projected emissions from the Northside and Continental City projects. Draft GCD 4-4, Final GCD 4-4. In fact, as El Segundo noted in its comments on the Draft GCD 4-4, these projects are likely never to be built, even if Alternative D is not approved, and are therefore inappropriately considered in the NA/NP Alternative. The FAA's response to these comments does not deny that no work has been undertaken on the Northside and Continental City projects since they were authorized in the early 1980s, but claims, without any support, that "if the Master Plan were not approved, it is reasonably expected that LAWA would pursue development of [the projects]." Final GCD at C-9, C-10.

The FAA's bare assertion provides no evidence that LAWA has dusted off the decades-old plans to build these projects. Because the projects certainly do not qualify as

[8] This report was prepared after the release of the Final EIR in April 2004 and First Addendum to the Final EIR in September 2004. Though the report refers to the Final EIR and the First Addendum to the Final EIR, it is equally applicable to the FEIS, as both the Final EIR and the First Addendum have been explicitly adopted by the FAA as part of the FEIS.

"growth that would occur even if [Alternative D] were not constructed," (*see* Letter from Environmental Protection Agency ("EPA") to David B. Kessler (Jan 25, 1996), attached hereto as Exhibit G), their inclusion in the NA/NP emissions estimates is entirely inappropriate. As described in the attached technical report, the unreasonable assumption of a full buildout of these projects under the NA/NP alternative artificially inflates the baseline against which Alternative D emissions estimates are compared.

B. Alternative D Emissions are Underestimated.

As described in our comments on the Draft GCD, the FAA makes the unreasonable assumption that Alternative D will accommodate just 78.9 MAP and 3.1 million tons of cargo in 2015. However, as the City of El Segundo demonstrated in detail in its November 2003 comments on the Supplement to the Draft EIS/EIR, this capacity prediction of 78.9 MAP greatly underestimates LAX's actual capacity under Alternative D. As previously discussed, an independent evaluation by an airport design and capacity expert of the capacity of Alternative D established that a more realistic, though still conservative, capacity estimate for Alternative D, based on a methodical analysis of the proposed terminal and gate configurations, would be 87 MAP. By substantially underestimating Alternative D activity levels, both the Final and Draft GCD fail to disclose reasonably expected future emissions.

In response to this observation, the FAA argues that El Segundo's capacity analysis "arbitrarily continues to highlight the upper limit of potential passenger activity," and claims that El Segundo's expert report acknowledges a range of potential passenger activity that includes FAA's far lower estimate. Final GCD at C-21. FAA's comment, however, misses the mark because it mischaracterizes Professor Kanafani's analysis, which showed a range of results based on different assumptions, so that it was clear what the effects of different assumptions were. *See* Ex. B at 4, 6, 11, 14-15. His 87 MAP is explicitly a conservative estimate; the lower range is shown for comparison purposes and not because he or we think that is the actual capacity. Ex. B at 4, 14-15. El Segundo's approach - an effort to reach a reasonable projection of the airport's actual probable capacity - is the only one condoned by the Clean Air Act. The statute provides that the agency must "assur[e]" that its action conforms with the applicable SIP. 42 U.S.C. § 7506(c)(1). The FAA's approach of basing its determination on a lower activity level derived from artificial and unjustified assumptions, rather than a more realistic higher one, frustrates the general purpose of the Clean Air Act, which is to protect and enhance the nation's air. 42 U.S.C. § 7401(b)(1); *see Automotive Parts Rebuilders Ass'n v. E.P.A.*, 720 F.2d 142, 159 fn. 66 (D.C. Cir. 1983) ("Statutes should be interpreted in a manner that will effectuate the purposes for which they were enacted.").

As described in the attached technical report, had the FAA employed the more realistic activity projection proffered by El Segundo's expert, it would have been unable to demonstrate conformity without additional mitigation. The Final GCD's responses to comments

criticize El Segundo's earlier calculation of emissions based on the more realistic activity level of 87 MAP because it does not account for fleet changes. This response is flawed for two reasons. First, to achieve a conservative capacity estimate, the expert analysis submitted by El Segundo did not question the Master Plan's fleet mix assumptions, even though many of them appear to be unrealistic. Ex. B at 3. Moreover, El Segundo has requested from FAA the modeling files and spreadsheets with emission estimates for the Draft GCD that would enable its experts to perform a more detailed analysis of the assumptions used, in fleet mix and other variables, by FAA. In response, the FAA provided a CD containing construction emission spreadsheets for Alternatives A through D last updated November 11, 2003 and for the NA/NP Alternative last updated September 15, 1998. These files do not contain the construction emissions estimates for the Draft GCD, which differ considerably from the Supplement and the Draft EIR for which these spreadsheets were developed.

It is completely unreasonable to assume that an excess capacity of more than 8 MAP over the FAA's assumption of 78.9 MAP would not result in an increase of emissions. It can reasonably be expected that this increase would prevent a finding of conformity, for NOx emissions for aircraft and auxiliary power units for all years evaluated, where the Final GCD's emissions estimates were already very close to the emission allocations for LAX for aircraft and APUs in the SIP. *See* Exh. A at Comment II.A.1. In addition, reliance on the more realistic and well-documented future activity estimate of 87 MAP would prevent a finding of conformity for motor vehicle NOx emissions in all years (Exh. A at Comment II.A.2) and PM10 in 2013 (Exh. A at II.A.3).

C. Mitigation in the FEIS Provides an Inadequate Basis For Demonstrating Conformity.

The Draft and Final GCD also make numerous unsupportable assumptions about the level and effectiveness of mitigation measures that are incorporated into Alternative D as part of the City of Los Angeles' compliance with CEQA. As described in the attached expert report, the FAA's emissions estimates are based on a Project design that assumes successful implementation of all the mitigation measures listed in the City's Mitigation Monitoring and Report Program ("MMRP"). *See* Exh. A at Comment III.A; Final GCD at 2-2, 6-1. The FAA's approach is problematic because, as discussed fully in El Segundo's comments on the Draft GCD, the Final EIR, and the Draft EIR and Supplements, the mitigation measures in the MMRP are wholly inadequate because they contain no enforceable performance standards or assurances that they will be successfully implemented. *See* Exh. A at Comment III.A. Therefore, the mitigation upon which the FAA relies cannot support the determination of conformity.

D. Conclusion

In order to demonstrate Alternative D's conformity to the applicable SIP, the FAA relied on manifestly unreasonable assumptions. When the analysis is based on the proper foundation, it is clear that the Project as proposed does not, in fact, conform. The FAA has therefore abused its discretion and may not approve Alternative D until changes to the Master Plan Project, including appropriate mitigation measures, and measures assuring appropriate adjustment of airport facilities to effectively maintain the target capacity of 78.9 MAP, allow for a true demonstration of conformity.

IV. The Environmental Impact Analysis Remains Incomplete Without the Results of the Pending RAND Corporation Security Study.

Responding to public skepticism about whether Alternative D – the preferred "security enhancing" alternative – would actually improve security at the airport, the City of Los Angeles commissioned the RAND Corporation, a non-profit research organization that specializes in security analysis, to study the security implications of Alternative D. A report on the first part of this two-part study was released on September 24, 2004. September 24, 2004 RAND Corporation Study attached hereto as Exhibit H.[6] Focusing on current operations, the study concluded that significant vulnerabilities exist that make LAX a tempting terrorist target.

LAWA stated that the second part of the RAND study would address the security implications of Alternative D. All agencies involved with the Master Plan process have pointed to the commissioning of this study as evidence of their commitment to improving the safety, rather than increasing the capacity, of LAX. However, the Master Plan Project approval process has proceeded without the results of this important study. This is wholly inappropriate, as the pending RAND analysis will help to determine the merits of a primary justification for Alternative D: increased security.

V. Resources Have Been Prematurely Committed that Prejudice the Selection of an Alternative.

The NEPA regulations expressly forbid agencies from prematurely committing resources that prejudice the selection of an alternative before a final decision is made. 40 C.F.R. §§ 1506.1(a)(2), 1502.2(f). In other words, an agency cannot commit to elements of its proposed project, so as to effectively encourage the selection of that alternative.

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[6] The RAND Corporation previously prepared a report on the security implications of Alternative D, at the request of Congresswoman Jane Harman. This prior report is attached hereto as Exhibit I.

Moreover, during the NEPA process, if the federal agency considering the non-federal entity's application is aware of the project proponent taking any actions that prematurely commit resources to the proposed project, the federal agency must promptly notify the project applicant that it will "take appropriate action to insure that the objectives and procedures of NEPA are achieved." 40 C.F.R. § 1506.1(b); Forty Most Asked Questions Concerning CEQ's NEPA Regulations ("Forty Questions") No. 11. Such action "could include seeking injunctive measures under NEPA, or the use of sanctions available under either the agency's permitting authority or statutes setting forth the agency's statutory mission. For example, the agency might advise an applicant that if it takes such action the agency will not process its application." Forty Questions No. 11.

El Segundo has repeatedly noted that LAWA has impermissibly segmented individual projects from the larger Master Plan Project, before the Project was approved. *See e.g.* Ex. C at 2; Ex. D at 1-2. For example, LAWA has consistently inappropriately portrayed improvements to the Tom Bradley International Terminal ("TBIT") as separate from the Master Plan Project. Yet the TBIT improvements appear to be an integral element of LAWA's larger plan to modify LAX facilities to accommodate both additional passengers and, more specifically, the so-called New Large Aircraft ("NLA"). The first NLA, the Airbus A-380, was unveiled on January 18, 2005 and is slated for delivery and operations beginning in spring 2006. *See* "A Plane as Big as the Globe," Los Angeles Times (Jan. 17, 2005) attached hereto as Exhibit J. Other elements of LAWA's plans to accommodate NLAs are described in the LAX Master Plan and the LAX Southside Airfield Improvement Program (which includes the following elements: Runway 25L Relocation, Center Taxiway, Airfield Intersection Improvements, Remote Boarding Facilities Modifications). The TBIT project is an integral element of LAWA's overall effort to accommodate NLAs and should not be segmented from that program and the Master Plan generally.

In addition, El Segundo has repeatedly noted that the massive increase in TBIT's baggage handling capacity appears to be geared to accommodating baggage that would be produced by the planned West Satellite Concourse that Alternative D proposes to add west of and connected to the TBIT. *See* Final Mitigated Negative Declaration for the TBIT and Baggage Screening Facility (November 2004) at A-28. As such, the addition of baggage handling facilities as part of the proposed TBIT project would ultimately serve (and appears designed to serve) the new gates proposed as part of the Master Plan.

On January 25, 2005, the Board of Airport Commissioners of the City of Los Angeles ("BOAC") voted to approve the TBIT project and adopt the Final MND prepared for it. This is a major step towards project implementation, and represents a prejudicial commitment of

resources in violation of NEPA. As explained above, LAWA's attempts to characterize the TBIT project as separate from the Master Plan Project constitute impermissible segmentation of the Master Plan Project. In reality, the TBIT Project is an element of the larger Master Plan Project.

VI. The FEIS Does Not Adequately Explain the Master Plan Project's Inconsistencies with Regional Land Use Plans or Attempt to Reconcile these Inconsistencies.

The NEPA regulations require an EIS to identify any "[p]ossible conflicts between the proposed action and the objectives of Federal, regional, State, and local ... land use plans, policies and controls for the area concerned." 40 C.F.R. § 1502.16(c)1506.2(d); *see also* 40 C.F.R. § 1506.2(d). In addition, where inconsistencies exist, the EIS "should describe the extent to which the agency would reconcile its proposed action with the plan or law." 40 C.F.R. § 1506.2(d). While a project can proceed despite determinations of inconsistency with federal, regional, state, or local plans, the EIS should discuss reasonable possibilities for resolving these inconsistencies. Forty Questions Nos. 23a, 23c. The FAA has failed to adequately discuss inconsistencies with various local and regional plans, and it has not satisfactorily attempted to resolve these inconsistencies.

In April 2001, the Southern California Association of Governments ("SCAG") adopted a Regional Transportation Plan ("RTP") that advocated a regional approach to meeting the area's projected airport demand. As part of the RTP, SCAG adopted an aviation strategy that called for a maximum capacity at LAX of 78 MAP in the year 2025. Additional demand would be satisfied by other regional airports.

As detailed above, despite claims by LAWA, the FAA and others, Alternative D does not limit capacity to 78.9 MAP, let alone 78 MAP as called for in the RTP. Rather, conservative estimates place its actual capacity at 87 MAP -- far more than the level identified in the RTP. Adhering to the passenger levels advocated by SCAG would require a truly regional plan, rather than a capacity enhancing approach that the FAA chooses to label a "regional alternative."

Far from acknowledging the inconsistencies between Alternative D and the RTP as required by NEPA, the FAA attempts to circumvent this mandate by claiming that, of all the build alternatives, Alternative D is the most consistent with the RTP. FEIS at A.3-1. Yet it does

not, nor can it, claim that Alternative D is entirely consistent with the RTP.[12] To the extent that it claims consistency with the RTP, the FAA does so by maintaining that Alternative D fulfills the policy framework of the aviation strategy that calls for no increase in capacity at LAX. *Id.* However, as discussed, this claim is not supported by the evidence of Alternative D's capacity enhancing features, and is entirely rebutted by the expert analysis submitted by El Segundo. Thus, Alternative D is not consistent with the RTP; to comply with NEPA, the FAA must identify these existing inconsistencies, explain the extent to which LAWA proposes to resolve them, and discuss existing possibilities for resolving them. In this case, such possibilities include the adoption of a truly regional plan. This discussion is conspicuously absent throughout the FEIS.

In addition, the FEIS fails to include an analysis of the Los Angeles County Airport Land Use Plan ("CLUP") prepared by the Los Angeles County Airport Land Use Commission ("ALUC"), pursuant to the State Aeronautics Act, California Public Utilities Code section 21670 *et seq.* On August 26, 2004, the ALUC unanimously determined that the LAX Master Plan and related documents were inconsistent with the CLUP, a comprehensive land use plan to facilitate orderly airport growth and minimize noise and risk to public welfare. *See* Pub. Util. Code § 21675(a).[13] *See* Resolution of the Airport Land Use Commission Aviation Case No. 04-162-(2,4) and accompanying staff reports, attached hereto as Exhibit K. The FEIS is silent on both the CLUP itself and the ALUC's determination of the Master Plan Project's inconsistency with it. This approach violates NEPA's mandate to discuss, and seek to resolve, inconsistencies with other federal, state, regional, and local land use plans and policies.

Having reached an impasse with the City of Los Angeles over the Master Plan process, El Segundo submitted an appeal to the ALUC regarding the Master Plan's inconsistency with the purposes of the State Aeronautics Act. *See* Appeal to the ALUC of the December 7, 2004 action by the Los Angeles City Council adopting the LAX Master Plan Improvements Project (Dec. 29, 2004), attached hereto as Exhibit L. A hearing on this appeal, as well as a similar one filed by Los Angeles County, is tentatively scheduled for March 30, 2005. The FAA should recognize this ongoing local process and delay action on the LAX Master Plan until the local review process is complete.

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[12] Similarly, the FAA neglects its duty to discuss inconsistencies with the City of Los Angeles General Plan. Rather than acknowledging Alternative D's inconsistencies with the General Plan, it discusses how the NA/NP Alternative will not fulfill all of the elements of the General Plan, and emphasizes the limited features of Alternative D that are consistent with specific elements of the General Plan. FEIS at 3-1 to 3-2. This does not satisfy NEPA's mandate to discuss *inconsistencies* with local plans.

[13] This determination was overruled by the Los Angeles City Council in October 2004.

VII. The First, Second and Third Addenda Do Not Remedy Failures in the Draft EIS/EIR and the Supplement to the Draft EIS/EIR and Instead Create New Problems.

Subsequent to LAWA's release of the Final EIR, but before the FAA's release of the FEIS, LAWA released four addenda to the Final EIR. The First Addendum was released in September 2004. The Second, Third and Fourth Addenda were released in December 2004, and were not made available to the public until after the City of Los Angeles approved the Master Plan Project, and certified the EIR. Consequently, El Segundo had no opportunity to comment on these three Addenda before LA approved the Master Plan.

As noted, the FAA explicitly adopts the First, Second and Third Addenda to the Final EIR as components of the FEIS. It does not, however, adopt the Fourth Addendum. We, therefore, comment on the First, Second and Third Addenda in this letter, and note that the public still has had no opportunity for comment on the Fourth Addendum. As the discussion below demonstrates, these addenda represent "significant new information," such that a supplement to the FIS is required, and must be recirculated for public review and comment, under NEPA.

A. First Addendum

The First Addendum to the Final EIR was released in September 2004. This Addendum includes additional discussion about the environmental consequences of the Master Plan Project, a description of changes made to the LAX Plan and the LAX Specific Plan, a brief overview of three additional alternatives offered by various commentors, and an explanation of alterations made to the Environmental Action Plan. In addition, the First Addendum includes an Errata to the Final EIR.

Unfortunately, the First Addendum not only fails to correct the inadequacies of the previous environmental review documents, but it also raises new problems. Amendments to the Master Plan Project are now proposed that add a bit more space here, and a few more job relocations there, which all add up to more additional capacity for LAX. In addition, the First Addendum follows the pattern of prior environmental documents of deferring decision making regarding mitigation and other important aspects of plan implementation, for a later date. This approach of non-analysis violates NEPA. The discussion that follows walks through the First Addendum, including the Errata to the Final EIR, and explains its deficiencies.

1. Additional Discussion of Environmental Consequences

a. Relocation Plan/Property Acquisition

The First Addendum acknowledges that, in its present form, Alternative D as amended calls for the acquisition of 20,026 square feet of air freight space and 4,874 square feet of office space *in addition* to the extensive property acquisition previously disclosed in the Final EIR. First Addendum at 2-1. It goes on to claim, without any justification, that these substantial additions of acquired property will have no associated business relocation impacts. These figures represent significant additional acquisition of air freight and office space from what was originally presented in the Draft EIS/EIR and Supplement to the Draft EIS/EIR. That they will not have significant associated relocation impacts is far from obvious. Such unlikely claims cannot be believed without evidence provided to support them.

Similarly, the First Addendum admits that nearly 100,000 square feet of office space, which was not identified in the Master Plan and not previously analyzed, must be relocated off site, yet it asserts that this will not result in any significant relocation impacts. First Addendum at 2-5. Not only are these relocation claims unconvincing, but such an addition has likely capacity-enhancing implications for LAX. The relocation of this significant amount of office space off site will open it up for additional on-site operations, resulting in a likely increase in service at the airport.

The impacts of these additional acquisitions – both regarding relocation and capacity enhancement – must be analyzed and discussed. The First Addendum does not do so

b. Air Quality

The First Addendum suggests that important changes were made to mitigation measure MM-AQ-1, which provides for the development of an LAX Master Plan-Mitigation Plan for Air Quality. It claims that these revisions clarify the measure's intent. First Addendum at 2-11. Such clarification would be desirable, as the mitigation measure is nebulous and noncommittal. However, MM-AQ-1 does little more than change word choices of the original mitigation measure. It still avoids making binding commitments to air quality improvement, and does not clarify the intent of the mitigation strategy.

In its discussion of the Master Plan Project's air quality mitigation measures, the First Addendum defers the development of concrete commitments until a later date. It refers to future consultations with other agencies to develop an air quality mitigation plan, rather than identifying specific measures to mitigate the extensive air quality impacts that the project will create. NEPA requires the identification of actual mitigation measures. An abstract

commitment to mitigation in the future does not satisfy the Act's mandates and removes the program from public review.

In addition, the First Addendum claims that the elements of mitigation measures MM-AQ-2, MM-AQ-3 and MM-AQ-4 were selected from the universe of suggested mitigation approaches because they "are considered to be the most feasible and effective methods to mitigate the air quality impacts of the LAX Master Plan." First Addendum at 2-12. Yet no evidence is provided to support this assertion. As an attachment to both our September 18, 2001 comment letter following the release of the Draft EIS/EIR, and our November 4, 2003 comment letter on the Supplement to the Draft EIS/EIR, we included numerous mitigation measures suggested by air quality experts, Dr. J. Phyllis Fox and Dr. Petra Pless, that are feasible and have been utilized elsewhere, yet have not been included in the proposed mitigation measures. Thus, the First Addendum clearly did not include all feasible and effective mitigation measures.

Similarly, the Fourth Addendum to the EIR identifies additional mitigation measures that would help to offset the air quality impacts of the Master Plan Project. The Fourth Addendum includes measures, such as implementation of an air quality study, electrification of various airport operations, diesel fuel reduction programs, and formulation of PM 2.5 compliance programs. Fourth Addendum at 2-4 to 2-7. As the Fourth Addendum itself recognizes, implementation of these measures "could provide a greater level of mitigation for significant air quality and noise impacts than anticipated in the Final EIR." Fourth Addendum at 2-2. Yet, as previously noted, the FEIS does *not* include the Fourth Addendum, and these mitigation measures are not proposed for adoption by the FAA. The FAA's mitigation plan, then, fails to include even all of the mitigation measures specifically identified as feasible during the Master Plan process.

Not only does the First Addendum fail to justify its selection of mitigation measures, but it makes unsupported claims about post-mitigation air quality effects. The FEIS quantifies ranges of potential emissions reductions for construction-related mitigation measures, the construction of eight new fly-away terminals, and conversion of ground support equipment. FEIS at Tables F4.6-18, F4.6-19 and F4.6-20. Emission reductions for all other mitigation measures are absent from both the FEIS and the First Addendum. While it acknowledges that some mitigation measures might be found to be infeasible once the Master Plan process begins, the First Addendum asserts that these determinations will not affect the projected post-mitigation emission levels. First Addendum at 2-12. Yet the FAA does not, nor can it, guarantee that the only mitigation measures that will be found to be infeasible are those for which emissions reductions were not previously quantified. Determining that proposed mitigation measures are infeasible, which the FAA apparently expects will occur, could greatly impact the level of post-mitigation emissions.

2. "Refinements" to Alternative D

a. Amendments to the LAX Plan

The First Addendum notes that many changes have been made to the LAX Plan, but claims that these changes "do not alter the characteristics of Alternative D, but rather are intended to make the LAX Plan more concise and to clarify existing goals and policies." First Addendum at 3-1. Yet, as previously noted, the First Addendum itself makes unsubstantiated claims that, for example, the addition of tens of thousands of square feet of dislocated activities will not result in relocation or other impacts.

Statistical summaries from LAWA indicate that significant growth in both passenger and cargo volume has occurred in recent years. For example, in 1993 the passenger level at LAX was less than 48 million; its 2004 levels approached 61 million passengers. *See* passenger statistics and January 27, 2005 Press Release attached hereto as Exhibit M. LAX's historical peak year (2000) was 67 million passengers. Similarly, cargo volume rose nearly 50 percent between 1993 and 2003. *See* air freight statistics attached hereto as Exhibit N. The history provides strong evidence that apparently small additions and improvements at LAX translate into significant capacity increases. The FEIS should recognize that fact.

The First Addendum alleges that the LAX Plan has been revised to ensure consistency with regional plans, including the CLUP, discussed above. First Addendum at 3-1. Yet on August 25, 2004, the ALUC determined that the April 2004 LAX Master Plan is inconsistent with the CLUP. *See* Ex. K. This inconsistency, and others, must be disclosed to the public and decision makers.

b. Refinements to the LAX Specific Plan

The First Addendum fails satisfy NEPA's requirements by ignoring the significant environmental implications of the proposed LAX Master Plan changes inherent in the Specific Plan. The so-called "Consensus Plan" amendments to the Specific Plan call for approving Master Plan Alternative D, but only proceeding with certain elements of Alternative D. Other Master Plan elements will not proceed unless they receive subsequent approvals required by the Specific Plan. Eliminating certain project elements from the Master Plan in the eleventh hour "Consensus Plan"will result in significant environmental impacts not analyzed in the EIS prepared by the FAA.

For example, the Specific Plan approved by the City of Los Angeles excises the Ground Transportation Center ("GTC") from the Master Plan. This project is included in the current EIS analysis and was credited with reducing air quality and traffic impacts at the airport to a level of less-than-significant. Similarly, the Specific Plan removes the north runway

reconfiguration from the Master Plan. The First Addendum itself claims that improvements to the north runway are anticipated to yield environmental benefits. First Addendum at 4-2. Elimination of the GTC, the north runway, and other project elements has important environmental implications and requires environmental review as mandated by NEPA. Yet the First Addendum ignores the environmental consequences of the revised Specific Plan.

The City of Los Angeles admits that removal of these project elements, which are widely regarded as unlikely ever to be approved, requires preparation of additional environmental reviews. *See* newspaper articles attached hereto as Exhibit O. The NEPA regulations require preparation of a supplement to the EIS when "[t]he agency makes substantial changes in the proposed action that are relevant to environmental concerns." 40 C.F.R. § 1502.9(c)(1)(i). The modifications to the proposed plan represent "substantial changes" that require preparation of a supplement to the EIS.

3. Feasibility Analysis of the Three "Alternative E" Proposals

As El Segundo has repeatedly pointed out, the FAA has ignored NEPA's mandate to evaluate all reasonable alternatives. 40 C.F.R. § 1502.14(a) In addition, under NEPA, an agency should evaluate reasonable alternatives that are offered by the public during the public comment period. Forty Questions No. 29(b); *see also* 40 C.F.R. § 1503.4(a)(2).

In an apparent attempt to respond to this failure, the First Addendum includes a discussion of three new project alternatives: 1) ARSAC E, which was submitted by the Alliance for Regional Solution to Airport Congestion as part of its comments on the Supplement to the Draft EIS/EIR; 2) ARSAC E-1, which is a revised version of ARSAC E; and 3) Parks E-1, which was submitted by Los Angeles City Councilmember Bernard Parks at the joint hearing of the Los Angeles Citywide Planning Commission and the Los Angeles Board of Airport Commissioners on June 14, 2004. Unfortunately, like the alternatives discussion in previous environmental documents, the "feasibility analysis" contained in the First Addendum does not satisfy NEPA's requirements.

NEPA requires a meaningful analysis of the environmental impacts of the project alternatives. 40 C.F.R. §§ 1502.14, 1502.16. The First Addendum provides no analysis of environmental impacts of the three Alternative E proposals. In the limited instances where it addresses the environmental implications of these alternatives, the First Addendum makes broad and highly speculative predictions about what might happen under these scenarios. *See, e.g.*, First Addendum at 4-2 (potential consequences of not improving the north airfield due to aircraft idling and taxiing), 4-14 (consequences of hypothetical convention center). 4-17 (consequences of shuttle system that would be necessary because smaller parking facility than under Alternative D). These predictions defy common sense, and they are not supported by any information that facilitates a meaningful evaluation and comparison of alternatives, as required by NEPA. It is

the responsibility of the public agency preparing the EIS – not the public – to supply the level of detail required for this comparison. The FAA must provide considerable additional analysis to satisfy NEPA's mandate.

The determination of all three alternatives' infeasibility appears to be based entirely on their distinctions from Alternative D. Rather than treating Alternative D as one of several options for LAX, the First Addendum faults the three Alternative E proposals for not containing the exact same elements. For example, the First Addendum summarily dismisses the alternative Rent-A-Car facilities proposed by the three alternatives, simply asserting that Alternative D's approach is preferable. First Addendum at 4-16 to 4-17. This approach enables the FAA to attempt to claim Alternative D's merits without justifying its proposal to accommodate more than twice the projected 2015 demand for rental car space. It fails to satisfy the requirements of NEPA.

4. Refinements to the Environmental Action Plan

The title of this section of the First Addendum suggests that it discusses changes made to the Final EIR's environmental action plan, which the First Addendum defines as the Master Plan's project design features, commitments, and proposed mitigation measures. Yet this title is misleading. Far from a "refinement," this chapter is almost exclusively a restatement of Chapter 4 of the Final EIR.[12] With the exception of new commitments regarding environmental justice, the "refined" environmental action plan offers few, if any, actual changes. In addition, this section is poorly annotated and does not make clear where actual changes are made. Thus, it fails to accomplish NEPA's fundamental purpose of public disclosure.

Moreover, some of the assertions made in the "Project Design Features" section are suspect. For example, the First Addendum implies that the purpose of the airfield improvements proposed under Alternative D is environmental sensitivity. First Addendum at 5-2. This is misleading. The stated purpose of these modifications is to increase the safety and efficiency of those facilities, which will have the direct result of increasing the airport's capacity. Similarly, the First Addendum suggests that, by consolidating the rental car companies in one location, the Rent-A-Car facility will result in environmental benefits due to the reduced use of shuttles. First Addendum at 5-3. This, too, is implausible. The First Addendum makes no attempt to explain the need for a rental car facility that is more than twice the size – 7.87 million square feet – of the projected year 2015 need. The logical implication of such a large facility is

[12] We refer here to "Final EIR," as opposed to "FEIS," to indicate the time frame being discussed. The First Addendum, issued after LAWA released the Final EIR but before the FAA released the FEIS, purports to modify the Environmental Action Plan contained in the Final EIR. Similarly, the next section of this letter discusses the "Errata to the Final EIR," as it was referred to in the First Addendum.

that many more cars will be housed there and more shuttles will be needed to serve it. Not only does this provide further evidence of an increased capacity, but the traffic and air quality implications of this facility will be significant. These implications, however, are ignored in the First Addendum and, ultimately, the FEIS.

5. Errata to the Final EIR

Like the "Refinement to the Environmental Action Plan" chapter just discussed, the Errata to the Final EIR is ambiguously arranged and does not support NEPA's fundamental goal of public disclosure. It does not explain why changes are made, and makes no distinction between seemingly meaningless changes and changes with substantial implications. Thus, significant changes are buried in an effort to hide the Master Plan Project's environmental implications from the public.

A close reading of the Errata reveals some significant revisions that are not adequately discussed. For example, Tables F.4.4.2-18, F.4.4.2-20 and F.4.4.2-21 indicate that Alternative D envisions acquisition of an additional 5,000 square feet of office space (plus the 20,000 square feet of air freight space previously discussed), as well as a need to relocate more than 50 jobs that are currently housed in LAX. These are significant changes from the Final EIR and require additional analysis. Yet the Errata simply slips them into revised tables, and provides no further discussion about their implications.

B. Second Addendum

Pursuant to FAA Order 5050.4A and National Oceanic and Atmospheric Administration regulations, the FAA must make a determination as to "whether improvements in the coastal zone would be consistent to the maximum extent practicable with the approved coastal zone management program before it can issue its Record of Decision. FEIS at 4-1016 (internal citations omitted). In August 2004, the FAA determined that Alternative D is consistent with the California Coastal Management Program and the California Coastal Act ("CCA"). This Coastal Consistency Determination ("Consistency Determination") addresses "impacts associated with the proposed relocation and improvement of existing navigational aids associated with Alternative D that would be located within the coastal zone." Second Addendum at 2-1.

Also in August 2004, and in conjunction with the FAA's release of the Consistency Determination, LAWA completed a Coastal Consistency Certification ("Consistency Certification") that addresses "potential impacts to coastal resources that may occur from Alternative D project-related improvements other than those associated with the navigational aids, including improvements situated outside of the coastal zone." Third Addendum at 2-1.

Both the FAA's Consistency Determination and LAWA's Consistency Certification were submitted to the California Coastal Commission ("Commission") for review and a determination of whether it concurred with the agencies' findings. On November 17, 2004, the Commission voted in concurrence with the FAA's Consistency Determination and LAWA's Consistency Certification, subject to a requirement that LAWA provide details to the Commission in the future on the hydrology and water quality management plan it proposed in conjunction with implementation of Alternative D.

The Second Addendum addresses the Commission's concurrence with the Consistency Determination and Consistency Certification. It also discusses the implications of a rule proposed by the United States Fish and Wildlife Services ("USFWS") on April 27, 2004 regarding designation of critical habitat for the Riverside fairy shrimp.

1. California Coastal Commission Action

Notwithstanding the Commission's ultimate concurrence with both the FAA's and LAWA's consistency findings, the Second Addendum suggests many flaws in the analysis conducted by both agencies. As noted above, the Commission conditioned its concurrence of the Consistency Certification upon LAWA providing more details on the hydrology and water quality management plan proposed for development in conjunction with Alternative D. Regarding the FAA's Consistency Determination, the Commission required further analysis on the potential impacts to the coastal zone from the proposed improvement and relocation of navigation aids, and the adequacy of mitigation of these impacts. These analytical supplements required by the Commission demonstrate the inadequacy of the analysis performed by both the FAA and LAWA, and suggest the likely presence of additional flaws and inadequacies.

Similarly, the Commission required the strengthening of several of the mitigation measures originally proposed and analyzed in both the FAA's Consistency Determination and LAWA's Consistency Certification. *See* Second Addendum at 2-2, 2-3, 2-7, 2-8. This suggests that the Commission was not satisfied with the original mitigation measures proposed by LAWA and the FAA.

In addition to the analytical flaws both resulting from and admitted to in the Second Addendum, the Commission's consistency determination is itself in violation of the CCA. According to the CCA, "[e]nvironmentally sensitive habitats shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within these areas." Pub. Res. Code § 30240(a). While the Commission acknowledges that the new navigational devices and access road would significantly impact the sensitive habitats, it determined that this was necessary to permit runway realignment. However, the realignment itself is a discretionary act that is not required by the FAA or any federal law. Thus, approval of these actions constitutes a violation of section 30240 of the CCA.

2. U.S. Fish and Wildlife Service

As explained above, the Second Addendum also discusses the potential impacts of the Master Plan Project on Riverside fairy shrimp critical habitat, proposed for designation by the USFWS on April 27, 2004, after its previous designation was nullified by the U.S. District Court for the District of Columbia in 2002. Unfortunately, this section of the Second Addendum follows the pattern established by previous environmental review documents of misstating the applicable requirements, downplaying likely impacts and inaccurately portraying the adequacy of mitigation measures.

The FAA maintains that the analysis in the Second Addendum of impacts on designated habitat for the Riverside fairy shrimp was conducted in accordance with FAA Order 5050.4A, which provides guidelines for the FAA's environmental impact analysis. Second Addendum at 2-9. Claiming to have complied with these guidelines, the FAA concludes that "Alternative D as considered, would not result in significant adverse impacts to Riverside fairy shrimp and proposed designated critical habitat that are not adequately addressed by the mitigation measures that are already proposed." Second Addendum at 2-23. Yet the basis for this conclusion is a biological opinion that itself violates FAA Order 5050.4A.

Paragraph 47e(10) of FAA Order 5050.4A describes the process that the FAA must follow for a project that requires preparation of an EIS. The FAA must request information from the USFWS or the National Marine Fisheries Service ("NMFS"), whichever has jurisdiction, on whether any species listed or proposed to be listed as endangered or threatened may be present in the area that will be affected by the project. If USFWS or NMFS determines that there are no species present, the FAA can assume that the project will not result in significant impacts to endangered or threatened species. If, however, the USFWS or NMFS determines that such species may be present in the affected area, the appropriate agency must prepare a biological assessment to determine whether the species, *or its critical habitat*, are likely to be impacted by the project and what those impacts would be.

If the biological assessment determines that the project will not adversely affect the species or its habitat, the FAA can assume that the project will not result in significant impacts to endangered or threatened species. However, if the biological assessment indicates that the project will result in adverse effects on the species or its critical habitat, the project "is considered to be one with potential significant impacts." This determination triggers additional requirements including consultation pursuant to section 7(a) of the Endangered Species Act, and consideration of other alternatives that would not jeopardize the impacted species or its designated critical habitat or an individual determination that the impacts are not significant. FAA Order 5050.4A at ¶ 85(j).

Thus, this process depends upon the biological assessment (or biological opinion) issued by USFWS or NMFS as the starting point for the FAA to determine if and/or how to proceed. However, here, the FAA depends on a flawed biological opinion issued before the USFWS released its updated proposal for designated habitat – as its basis for all of its conclusions. As the FAA itself acknowledges, "[w]hile the April 20, 2004 Biological Opinion determined only 23 acres of the [Airfield Operations Area] were critical to the remaining cysts [i.e. Riverside fairy shrimp eggs], one week later, on April 27, 2004, the USFWS issued a proposed designation of critical habitat that included approximately 108 acres proposed for critical habitat for Riverside fairy shrimp." Second Addendum at 2-19.

Rather than requesting an updated biological opinion from the USFWS, the FAA relied on the outdated April 20, 2004 Biological Opinion, which analyzed only one-quarter of the habitat ultimately proposed for designation. The analysis is, therefore, incomplete. By limiting its consideration to a small fraction of the currently proposed designated habitat, the FAA conveniently avoids considering 85 acres of potentially impacted critical habitat, as required by the Endangered Species Act and FAA Order 5050.4A.

Even if the area considered by the FAA was sufficient, its limited analysis would still fall short of its mandate to consider impacts to critical habitat. Despite the FAA's mandate to consider *all* designated critical habitat when reviewing a proposed project, its analysis focused almost exclusively on the 1.3 acres on which the USFWS determined that Riverside fairy shrimp cysts were present. The remaining 21.7 acres identified in the outdated Biological Opinion upon which the FAA relies, are essentially ignored. The FAA Order 5050.4A procedure described above explicitly requires the FAA to consider impacts to both endangered or threatened species and their habitat; it does not allow the agency to consider only the species and ignore critical habitat on which it may not have been sited. By focusing on just the 1.3 acres on which cysts are present, and ignoring the remaining 21.7 acres – by far the majority of the designated critical habitat that the USFWS originally identified, the FAA ignores its mandate to consider a project's impacts on all designated critical habitat.

Finally, the Second Addendum frames the entire discussion by suggesting that preservation of Riverside fairy shrimp habitat comes at the cost of increased danger to other wildlife. Second Addendum at 2-13 to 2-14. This characterization is an apparent attempt to deflect attention from the real tension: between development and habitat preservation. Similarly, the Second Addendum's suggestion that Riverside fairy shrimp would be better served by implementation of Alternative D, than by the NA/NP alternative is unconvincing. While it is true, as the FAA's claims, that the mitigation measures that would be implemented under Alternative D would not occur if the Master Plan Project were not carried out, such mitigation would not be necessary at all if the Project did not occur, as this habitat would not be disrupted.

C. Third Addendum

In September 2004, the Los Angeles City Council approved a development project for Playa Vista. This project is to occur in two phases. The project approved in September reflects a lesser level of development for Phase II of the Playa Vista project than was originally analyzed in the environmental review documents for the LAX Master Plan. The Third Addendum contains a revised analysis of transportation impacts of Alternative D, based on the reduced development approved for Phase II of the Playa Vista project.

The Third Addendum repeatedly claims that, because the development plan for Phase II of the Playa Vista project is reduced, the revised analysis reflects improved environmental background conditions. However, the Third Addendum includes figures that stand in direct opposition to these claims. For example, according to Table AD(3)2-4, the volume to capacity ratios at three intersections – El Segundo/Sepulveda in the PM Peak, Imperial/Main in the AM Peak, and Mariposa/Sepulveda in the AM Peak -- actually *increase* after accounting for the reduced level of development in the approved Phase II. This increase in traffic impacts, which for one of the intersections is "significant" according to the threshold identified on Page 4-424 of the FEIS, is contrary to the claims of reduced impacts made throughout the Third Addendum. Not only does it call into question these claims, but it also undermines the analytic integrity of the entire document.

In addition, the Third Addendum analyzes only the effects of the Phase II changes on Alternative D and the NA/NP Alternative rather than its impacts to all four of the build alternatives. This analysis does not satisfy the requirements of NEPA, which states that the discussion of alternatives constitutes "the heart of the environmental impact statement." 40 C.F.R. § 1502.14.[3]

D. NEPA Requires Preparation and Recirculation of a Supplement to the EIS Given the "Significant New Information" Presented in these Three Addenda.

According to the NEPA regulations, a supplement to the EIS must be prepared when there is "significant new ... information relevant to environmental concerns and bearing on the proposed action or its impacts." 40 C.F.R. § 1502.9(c)(1)(ii). As detailed above, each one of these Addenda presents significant new information and raises more questions about

[3] While the FEIS itself does add some discussion about the impact of the Phase II changes on Alternatives A, B and C, this cursory discussion does not satisfy NEPA's mandate of meaningful discussion of and comparison between alternatives to the proposed action. Rather, it follows the pattern of previous environmental review documents of skewing the discussion in favor of Alternative D by inadequately addressing the alternatives, in particular the NA/NP Alternative.

environmental impacts than they answer. Arguably, each one rises to the level of requiring a supplement to the EIS envisioned by NEPA; collectively, they certainly present the necessary significant new information. Thus, pursuant to NEPA, the FAA "[s]hall prepare, circulate, and file" a supplement to the EIS addressing and adequately analyzing the information contained in the First, Second and Third Addenda "in the same fashion ... as a draft and final statement." 40 C.F.R. § 1502.9(c)(4).

CONCLUSION

As set forth above, the analysis and documentation by the FAA regarding the LAX Master Plan is patently deficient. El Segundo is requesting, first, that the FAA prepare a supplement to the EIS to address new information contained in the Addenda. In addition, El Segundo urges the FAA to take the time necessary to review these comments and the comments that other interested parties are submitting, and to take appropriate remedial actions to address the deficiencies in its environmental analysis, before rendering its decision on this project.

We further request that you decline to file a Record of Decision until after the conclusion of the local processes that are currently underway. In particular, as stated above, the County Airport Land Use Commission is set to hear appeals by El Segundo and Los Angeles County on March 30. We, and numerous other petitioners, have brought a legal challenge against Los Angeles for its failure to comply with environmental review requirements in approving the Master Plan; we are hopeful that the need for additional litigation in the federal courts can be obviated by the FAA's careful consideration of our comments and by its deference to the completion of the local processes.

Very truly yours,

SHUTE, MIHALY & WEINBERGER LLP

OSA L. ARMI

cc: Mayor and City Council, City of El Segundo
Claudia Culling, Los Angeles World Airports

List of Exhibits

Exhibit A	February 2005 report by Petra Pless, D. Env and J. Phyllis Fox, Ph.D., P.E., DEE, QEP, REA I/II
Exhibit B	October 2004 report by Adib Kanafani on the FEIR capacity discussion
Exhibit C	June 22, 2004 El Segundo comment letter on Terminal 2 project
Exhibit D	July 30, 2004 El Segundo comment letter on Tom Bradley International Terminal project
Exhibit E	November 2004 report by J. Phyllis Fox, Ph.D., P.E., DEE, QEP, REA I/II and Petra Pless, D.Env.
Exhibit F	November 2004 analysis of Tom Brohard, PE, regarding traffic
Exhibit G	January 25, 1996 letter from the Environmental Protection Agency to David B. Kessler
Exhibit H	September 24, 2004 RAND Corporation Study
Exhibit I	2003 RAND Corporation report on the security implications of Alternative D
Exhibit J	January 17, 2005 Los Angeles Times Article, "A Plane as Big as the Globe"
Exhibit K	August 25, 2004 Resolution of the Airport Land Use Commission, Aviation Case No. 04-162-(2,4) and accompanying staff reports
Exhibit L	December 29, 2004 El Segundo Appeal to the Airport Land Use Commission
Exhibit M	Passenger statistics and January 27, 2005 Press Release
Exhibit N	Air Freight (Cargo) statistics
Exhibit O	Newspaper articles

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A

Comments

On

Federal Aviation Administration
Clean Air Act
Final General Conformity Determination

For

LOS ANGELES INTERNATIONAL AIRPORT
PROPOSED MASTER PLAN IMPROVEMENTS
ALTERNATIVE D

Prepared by

Petra Pless, D.Env.
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February 16, 2005

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COMMENTS

The Federal Aviation Administration ("FAA") has prepared a Final General Conformity Determination[1] ("Final GCD") pursuant to the requirements of 40 CFR Part 93, Subpart B, to document the conformity of Los Angeles International Airport ("LAX") Proposed Master Plan Improvements, Alternative D, ("Project"), with the applicable (*i.e.* approved) State Implementation Plan ("SIP"), which is based on the 1997/1999 Air Quality Management Plan ("1997/1999 AQMP") and the proposed modifications thereto, the 2003 Air Quality Management Plan ("2003 AQMP").

We previously commented on the Draft General Conformity Determination ("Draft GCD") as well as on the underlying Draft Environmental Impact Report/Environmental Impact Statement ("Draft EIS/EIR") and its Supplement. (Fox & Pless 02/04[2]; Fox 07/01[3]; Fox & Pless 11/03[4].) Based on our careful review of the /Final GCD, we conclude that even though the FAA has addressed some of our concerns, it has not resolved the main problems regarding conformity with the applicable SIP or the 2003 AQMP. Specifically, the FAA I.) relies on artificially inflated baseline emissions, *i.e.* emissions from the No Action/No Project ("NA/NP") Alternative by inappropriately including projects that will not be built as approved, II.) considerably underestimates potential emissions resulting from construction and operation of Alternative D, and III.) relies on inadequate mitigation of Alternative D emissions. As a result, the FAA severely underestimates incremental emissions attributable to Alternative D compared to the baseline. This leads the FAA to erroneously conclude that Alternative D conforms to the applicable SIP, which, as demonstrated in detail below, it does not.

[1] Federal Aviation Administration, Clean Air Act Final General Conformity Determination, Los Angeles International Airport Proposed Master Plan Improvements, Alternative D, January 2005.

[2] J. Phyllis Fox and Petra Pless, Comments on Clean Air Act Draft General Conformity Determination, Los Angeles International Airport Proposed Master Plan Improvements, Alternative D, February 6, 2004; attached as Exhibit A to February 6, 2004 Comments submitted by Shute, Mihaly & Weinberger on behalf of the City of El Segundo.

[3] J. Phyllis Fox, Comments on Air Quality and Human Health and Safety, LAX Master Plan Draft EIR/EIS, July 13, 2001.

[4] J. Phyllis Fox and Petra Pless, Comments on Air Quality and Human Health and Safety, LAX Master Plan Supplement to the Draft Environmental Impact Statement/Draft Environmental Impact Report: Attachment 3 to November 3, 2003 Comments submitted by Shute, Mihaly & Weinberger on behalf of the City of El Segundo; attached as Exhibit C to February 6, 2004 Comments on the Draft General Conformity Determination submitted by Shute, Mihaly & Weinberger on behalf of the City of El Segundo.

I. NA/NP ALTERNATIVE BASELINE EMISSIONS ARE INFLATED

The NA/NP alternative represents the no-build scenario, *i.e.*, the configuration and activity levels expected for LAX in the absence of approval of Alternative D. For the conformity determination, projected emissions for the NA/NP alternative are used as a baseline against which emissions from Alternative D are compared. Therefore, it is crucial to accurately define the no-build scenario.

I.A Northside and Continental City Emissions Are Inappropriately Included

The Final GCD's emissions estimates for the NA/NP alternative include construction and operational emissions from the Northside Development and Continental City projects. Both projects were authorized in the early to mid 1980s but have not been realized to date. As we write these comments in mid-February of 2005, the same year the Final GCD assumes as the start of construction for Alternative D, we are not aware of any activity, such as permitting and budget authorization, required to build these projects.

We previously commented on the inappropriate inclusion of the Northside and Continental City projects in the NA/NP alternative. (Fox & Pless 02/04, Comment I.A.) The FAA does not deny that no work has been undertaken on these projects since they were authorized but nevertheless claims that "if the Master Plan were not approved, it is reasonably expected that LAWA would pursue its original plan for the development of [the projects]." (Final GCD, p. C-15.) The FAA's mere assertion that these projects would suddenly be dusted off does not constitute sufficient evidence that they would, in fact, be realized under the NA/NP alternative as laid out in the respective 1980s EIRs. We therefore maintain that the NA/NP alternative as presented in the Final GCD presents an artificially inflated baseline against which Alternative D is compared.

I.B Emissions Estimates Are Not Sufficiently Documented

The FAA indicates that "under Alternative D, LAX Northside would be implemented, but at a lower intensity than under the No Action/No Project Alternative." (Final GCD, p. C-15.) Yet a description or numerical breakdown of emissions attributable to these projects is nowhere to be found in the Draft or Final GCD or in their Appendices. This leaves the reviewer in the dark regarding the difference between the buildout scenarios under Alternative D and the NA/NP alternative or the magnitude of mitigated emissions resulting from the construction and operation of these projects.

I.C Emissions from Northside and Continental City Are Substantial

Considering the sheer scale of the Northside and Continental City projects, it is obvious that their buildout would result in considerable construction and operational emissions. Under the NA/NP alternative, the Northside project encompasses "approximately 4.5 million square feet ... of office space, hotel space, retail space, and a golf course in an area of approximately 340 acres of land..." and the Continental City project consists of "approximately 3 million square feet ... of office space, hotel space, and retail space ... in an area of approximately 28.5 acres of land..." (Final GCD, p. 4-4.) The EIRs for the Northside and Continental City projects indeed reveal that emissions estimates for these projects are massive.

As approved, the anticipated buildout period for both projects is on the order of eight to ten years. The Continental City project would require the removal of 680,000 cubic yards of material from the site, which would result in considerable exhaust emissions from heavy-duty construction equipment (wheeled dozers) and haul trucks as well as fugitive dust emissions during grading (Continental City Final EIR[5] p. III-4.) The Northside project also requires massive earthmoving and results in about 330 tons per year ("ton/year") of unmitigated fugitive dust particulate matter ("PM") emissions. (Northside Final EIR[6], p. IV-85.) Neither EIR contains sufficient information to summarize all emissions attributable to construction or operation of these projects. Nor does the Final GCD state whether it used the emissions estimates from these environmental review documents or revised them.

Due to the absence of a detailed breakdown of emissions for these projects in the Final GCD for either the NA/NP alternative or Alternative D in addition to a lack of mitigation efficiency percentages, we were unable to verify emission estimates provided in the Final GCD, let alone estimate by how much the baseline is inflated. Considering the scale of these projects, it is, however, obvious, that their inappropriate inclusion in the baseline will result in artificially low incremental emissions for Alternative D.

[5] City of Los Angeles, Continental City Draft Environmental Impact Report, SCH No. 83022407, August 1984. Notice of Determination for Final Environmental Impact Report signed August 12, 1985.

[6] City of Los Angeles, Final Environmental Impact Report, LAX North Side Development Project, certified March 29, 1983

II. EMISSIONS ESTIMATES FOR ALTERNATIVE D ARE FLAWED AND DO NOT CONFORM TO THE SIP

We previously commented on the fact that emissions from Alternative D are consistently underestimated for a variety of reasons, including flawed assumptions, flawed input parameters, and flawed modeling. (See Fox & Pless 11/04, Comments IV and V; Fox & Pless 02/04, Comment II; Fox & Pless 11/03, Comments III and IV; Fox 07/01, Comments I–III.) Rather than reiterating all those reasons, most of which still have not been adequately addressed by LAWA or the FAA, we herewith incorporate these comments by reference. Below, we discuss the effect the underestimation of airport capacity has on conformity to the SIP in more detail.

II.A Underestimated Airport Capacity Results In Underestimate of Alternative D Emissions

The Alternative D planning assumptions reflected in the Final GCD assume that airside gate access for aircraft will restrict the activity level at LAX in 2015 to 78.9 million annual passengers ("MAP") and 3.1 million tons of cargo ("MAT"). (Final GCD, p. 3-1.) However, it appears that these assumptions considerably underestimate the actual capacity under the Alternative D gate configuration. An independent evaluation by the airport design and capacity expert Professor Adib Kanafani, UC Berkeley, revealed that LAWA never conducted a proper capacity analysis of the proposed terminal and gate configuration but instead based its estimates on a number of market assumptions.[8] Based on the proposed gate configuration, Professor Kanafani established a conservative capacity estimate for Alternative D at 87 MAP.

The FAA argues that Professor Kanafani's capacity analysis "arbitrarily continues to highlight the upper limit of potential passenger activity," and points out that his analysis comprises a wide range of possible outcomes, including the FAA's considerably lower capacity estimate of 78.9 MAP. (Final GCD, p. C-21.) This is incorrect. As Professor Kanafani in his rebuttal clarifies. "[t]he FEIR refers to the

[7] J. Phyllis Fox and Petra Pless, Air Quality and Public Health, Los Angeles International Airport Proposed Master Plan Improvements, Final Environmental Impact Report, November 29, 2004; attached as Exhibit A to November 2004 Comments submitted by Shute, Mihaly & Weinberger on behalf of the City of El Segundo.

[8] Adib Kanafani, Comments on 2003 LAX Master Plan Addendum & Supplement to the DEIS/DEIR, November 2003, attached as Exhibit B to February 6, 2004 Comments on the Draft General Conformity Determination submitted by Shute, Mihaly & Weinberger on behalf of the City of El Segundo.

estimate of 87 MAP as the upper limit of capacity. In fact the upper limit is much higher than that. A figure of 93 MAP is possible ..." (Kanafani 10/04[9], Response to RTC SAI.00015-333.) In other words, Professor Kanafani's estimate of 87 MAP figure is a more realistic, but still conservative figure, which could very well be considerably exceeded.

The Clean Air Act mandates that the agency "assure" that its actions conform to the applicable SIP. (42 U.S.C. §7506(c)(1).) This mandate can only be fulfilled, if the agency, here the FAA, determines a project's maximum potential impacts, which is then evaluated regarding its conformity with the applicable SIP. Consequently, the FAA must base its assessment on the maximum potential airport capacity of 87 MAP, if not 93 MAP, and not on a capacity that falls within a range of possible future outcomes.

We previously commented on the emissions estimates presented in the Draft GCD, demonstrating that because the FAA based its emission estimates for Alternative D on an airport capacity of only 78.9 MAP as opposed to a more realistic passenger capacity of 87 MAP, it substantially underestimated operational emissions from LAX. Absent availability of detailed information[10], we approximated emissions for maximum capacity based on passenger capacity estimates. (Fox & Pless 02/04, Comment II.A.2.) The FAA criticized our approach because it did not account for potential fleet changes, which may result in a decreased number of operations due to the use of larger aircraft while at the same time increasing passenger activity levels. However, as Professor Kanafani pointed out, a fleet change towards larger aircraft would automatically also accommodate a higher level of passenger activity, which would increase the MAP even further. (Kanafani 10/04, Response to RTC SAI.00015-11.) Further, it is unlikely that an increase of more than 8 MAP over the Final GCD's estimate, *i.e.* an increase in passenger activity of about 10 percent,[11] may be accommodated by fleet changes. As discussed above, the Clean Air Act mandates the evaluation of maximum potential impact, *i.e.* the use of 93 MAP, which is equivalent to an increase of almost 18 percent over the FAA's assumption of 78.9 MAP.[12] Therefore an increase in passenger activity will undoubtedly require an

[9] Adib Kanafani, Comments on the LAX Master Plan Final EIS/EIR Responses to Comments, October 2004; attached as Exhibit A to December 1, 2004 Comments on the FEIR submitted by Shute, Mihaly & Weinberger on behalf of the City of El Segundo.

[10] See Freedom of Information Act requests from Christy H. Taylor to David Kessler dated October 16, 2003, January 13, 2004, and March 16, 2004, requesting modeling files and spreadsheets with emission estimates. None of the responses provided updated and complete information, necessary to adequately review the FAA's emissions calculations and dispersion modeling results.

[11] (87 MAP) / (78.9 MAP) = 1.103

[12] (93 MAP) / (78.9 MAP) = 1.179

increase of aircraft operations and traffic and, consequently, result in increased emissions.

II.A.1 Aircraft and APU NOx Emissions

Considering how close the Final GCD's Alternative D NOx emissions estimates for aircraft and auxiliary power units ("APU") are to the approved SIP allocations, such increase in aircraft operations and associated emissions will result in exceedance of the applicable SIP for all evaluated years and therefore result in non-conformity for this criteria pollutant. Table 1 compares the Alternative D aircraft and APU NOx emissions a) as presented in the Final GCD, b) based on a more realistic capacity of 87 MAP, and c) based on an upper limit of 93 MAP to the emissions allocated to aircraft and APUs for LAX in the 1997/1999 AQMP, the basis for the applicable SIP.

Table 1:
Comparison of Alternative D NOx emissions from aircraft and APUs to the approved SIP emission allocation for LAX (aircraft and APUs)

Year	Approved SIP[1] (ton/year)	NOx Emissions (ton/year)	Fraction of Approved SIP (%)	A (Alternative D - Approved SIP) (ton/year)
		Alternative D[1] based on 78.9 MAP		
2005	4,546	4,399	97%	(147)
2008	4,869	4,667	96%	(302)
2010	5,084	4,845	95%	(239)
		Alternative D based on 87 MAP[2]		
2005	4,546	4,851	107%	305
2008	4,869	5,146	106%	277
2010	5,084	5,342	105%	258
		Alternative D based on 93 MAP[3]		
2005	4,546	5,185	114%	639
2008	4,869	5,501	113%	632
2010	5,084	5,711	112%	627

[1] From Final GCD, Table 9, p. 5-4.

[2] Alternative D emissions from Final GCD scaled based on 87 MAP/78.9 MAP.

[3] Alternative D emissions from Final GCD scaled based on 93 MAP/78.9 MAP.

Table 1 clearly illustrates that an increase to 87 MAP or 93 MAP would result in considerable exceedance of the SIP allocations for aircraft and APUs. As discussed above, while emissions may not be directly proportional to passenger activity level due to potential fleet changes, any shift towards larger aircraft would automatically increase the potential passenger increase. We therefore conclude that the above estimates serve as a reasonable approximation of aircraft and APU NOx emissions for increased passenger activity levels and are adequate to demonstrate that Alternative D does not conform to the SIP in the milestone years 2005, 2008, and 2010 for NOx.

II.A.2 Motor Vehicle NOx Emissions

The Final GCD provides the following line of reasoning to demonstrate that motor vehicle NOx emissions under Alternative D conform to the applicable SIP:

> "As demonstrated .. operational emissions estimated for aviation sources (aircraft, APUs, GSE) and for stationary sources at LAX under Alternative D are within the respective emissions budgets of the applicable SIP. By making the reasonable assumption that motor vehicle activity which has LAX as a source or destination is directly related to the level of aircraft operations at LAX, together with the knowledge that aircraft activity levels under Alternative D are generally consistent with those in the RTP [Regional Transportation Plan], it is reasonable to assume that SCAG [South Coast Association of Governments] has modeled the associated motor vehicle emissions to support the activity levels represented by the emissions estimates for aviation sources at LAX in both the approved SIP and the 2003 AQMP. Therefore it can be inferred that the motor vehicle NOx emissions for Alternative D, taken together with NOx emissions for all other motor vehicle sources in the SCAB [South Coast Air Basin], would not exceed the NOx emissions budgets for motor vehicle sources in the applicable SIP or alternatively in the 2003 AQMP." (Final GCD, p. 5-5.)

The applicable SIP as well as the proposed 2003 AQMP are based on the Regional Transportation Plan ("RTP") published by the South Coast Association of Governments ("SCAG"). As demonstrated above, the aircraft activity levels under Alternative D are *not* consistent with the applicable SIP and, consequently, its underlying RTP. Following the Final GCD's line of logic, we therefore infer that the motor vehicle NOx emissions for Alternative D, taken together with NOx emissions for all other motor vehicle sources in the South Coast Air Basin ("SoCAB") *will exceed* the NOx emissions budgets for motor vehicle sources in the applicable SIP. In other words, motor vehicle NOx emissions under Alternative D do *not* conform to the applicable SIP.

II.A.3 PM10 Emissions

The Final GCD admits that Alternative D PM10 emissions from aircraft exceed the applicable SIP budgets for this pollutant. The Final GCD then proceeds to demonstrate conformity for this pollutant via air dispersion modeling, showing that the resulting ambient air concentrations will not exceed the federal ambient air quality standards ("AAQS"). (Final GCD, pp. 5-7/5-8.)

Previously in the Draft GCD, the resulting annual ambient air quality concentrations (Alternative D plus background) for PM10 in 2006, 48 µg/m³, were close enough to the federal AAQS (50 µg/m³) as to cause concerns with the South Coast Air Quality Management District ("SCAQMD"), the agency responsible for implementing the SIP. (Draft GCD, p. 5-7; SCAQMD 02/04[13].) Of these 48 µg/m³, which represent the total of Alternative D plus the ambient background concentration, Alternative D is responsible for 20 µg/m³. The Final GCD now presents a revised annual PM10 ambient air concentration for 2006 of 43 µg/m³, of which 15 µg/m³ are attributable to Alternative D. Table 2 summarizes the PM10 emissions estimates for Alternative D and the resulting ambient air concentrations as presented in the Draft and Final GCD.

Table 2:
Combined construction and operational Alternative D PM10 emissions and predicted annual ambient air PM10 concentration due to Alternative D — Comparison between Draft GCD and Final GCD

	Draft GCD[1]	Final GCD[2]	Δ
Interim Year 2006			
Alternative D PM10 emissions	2,021 ton/year	1,846 ton/year	(175 ton/year)
Annual ambient air PM10 concentration			
– Due to Alternative D	20 µg/m³	15 µg/m³	(5 µg/m³)
– Alternative D plus background	48 µg/m³	43 µg/m³	(5 µg/m³)
Interim Year 2013			
Alternative D PM10 emissions	2,210 ton/year	2,208 ton/year	(2 µg/m³)
Annual ambient air PM10 concentration			
- Due to Alternative D	15 µg/m³	17 µg/m³	2 µg/m³
– Alternative D plus background	40 µg/m³	42 µg/m³	2 µg/m³

[1] Draft GCD, Table 13, p. 5-7, and Table 14, p. 5-8.

[2] Final GCD, Table 4, p. 4-7, and Table 5, p. 4-6.

[13] Barry Wallerstein, South Coast Air Quality Management District, Letter to David Kessler, Federal Aviation Administration, Re: Draft General Conformity Determination – Los Angeles International Airport, Proposed Master Plan Improvements Alternative D, dated February 9, 2004

Neither the Draft nor the Final GCD provided a breakdown for Alternative D emissions that would allow evaluating the considerable emission reduction of 175 ton/year in the interim year 2006 and the resulting decrease in ambient air PM10 concentrations. The Final GCD does not explain the substantial reduction of predicted ambient air PM10 concentrations attributable to Alternative D of 5 µg/m³, or 25 percent. The Final GCD also does not provide an explanation why, paradoxically, Alternative D emissions in interim year 2013 slightly decreased, yet ambient air PM10 concentrations attributable to Alternative D increased by 2 µg/m³.

Any increase in emissions will bring the PM10 ambient air concentrations closer to the federal annual AAQS of 50 µg/m³. As discussed above, the actual passenger capacity at LAX under Alternative D is 10 percent higher than assumed in the Final GCD. While emissions cannot be directly scaled, a 10 percent increase in PM10 emissions will obviously result in higher ambient PM10 concentrations and might result in a violation of the federal annual AAQS in interim year 2013. If the maximum potential passenger level activity is assumed, the federal annual AAQS will most certainly be violated in 2013. Furthermore, as discussed elsewhere, the underestimate of airport capacity is not the only contributor to the considerably underestimated emissions from Alternative D. (*See* Fox & Pless 11/04, Comments IV and V; Fox & Pless 02/04, Comment II; Fox & Pless 11/03, Comments III and IV; Fox 07/01, Comments I–III.)

These potential violations of the federal annual AAQS are not restricted to the interim years analyzed in the Final GCD, *i.e.* 2006 and 2013, but may also be found in other interim years as well as in and after the final buildout year. A lack of documentation on years other than 2006 and 2013 prevents meaningful comments on such potential violations.

III. MITIGATION PROGRAM IS INADEQUATE TO ENSURE CONFORMITY TO THE SIP

The Final GCD relies upon the CEQA-related mitigation measures specified in the LAX Master Plan Mitigation Monitoring and Reporting Program ("MMRP"), which describes LAWA's lead responsibility for administering the program, the timing of implementation, monitoring frequency, and actions indicating compliance. (Final GCD, p. 2-2.) This MMRP is based on a series of mitigation measures developed during the NEPA/CEQA process.

III.A MMRP Is Inadequate and Not Enforceable

The FAA relied in its Final GCD upon "CEQA-related mitigation measures that have been expressly adopted by LAWA and the City in approving Alternative D" and states that it "will require, as a condition of its final approval in the Record of Decision, that LAWA and the City implement the mitigation measures as contemplated in the adopted LAX Master Plan MMRP." (Final GCD, p. 2-2.) However, as discussed below, the MMRP, as adopted, does not provide adequate enforcement mechanisms nor does it require all feasible mitigation.

Commenting on the Draft GCD, the SCAQMD requested that the "FAA must include enforceable mechanisms in its final general conformity determination (*e.g.*, Record of Decision) to ensure that all necessary reductions assumed in the conformity determination are achieved. Specifically, such provisions must entail performance monitoring requirements for quantifying the emission reductions at various construction and operational phases of the project and binding enforcement mechanisms as well as safeguards (*i.e.* contingency measures) to offset any shortfalls in emission reductions." (SCAQMD 08/04[14].)

As discussed below and in our previous comments on the Draft GCD, the Final EIR, and the Draft EIR and its Supplement, the measures contained in the MMRP are inadequate and not enforceable. (Fox & Pless 02/04, Comment II.E; Fox & Pless 11/04, Comment VI; Fox 07/01, Comment IV; Fox & Pless 11/03, Comment V.) We incorporate these comments herewith by reference.

III.A.1 Incentives Are Insufficient To Ensure Compliance

Several of the mitigation measures contained in the MMRP are incentive-based and would only "encourage" participation, which is insufficient to guarantee compliance. For example, in Appendix A, Protocol for General Conformity Determination, the FAA states that "for purposes the general conformity evaluation, it is assumed that … under Alternative D, emissions from GSE will be eliminated at LAX by 2015." (Final GCD, Appx. A., p. A-18.) Here, the FAA relies on LAWA's proposal to "virtually" eliminate GSE emissions under Alternative D. However, the mitigation measure is based on nothing more than vaguely identified "incentives and tenant lease requirements." (MMRP, MM-AQ-4, p. 48.) There is no enforcement or monitoring required and it remains doubtful that LAWA will, in effect, be

[14] Barry Wallerstein, South Coast Air Quality Management District, Letter to David Kessler, Federal Aviation Administration, Re: Follow-up Comments on Draft General Conformity Determination - Los Angeles International Airport, Proposed Master Plan Improvements Alternative D, dated August 12, 2004

successful in eliminating GSE emissions. What's more, the required element of this mitigation measure is "[t]he successful conversion of all GSE at LAX to *extremely low* or zero emission equipment by 2015." (MMRP 09/04, MMAQ-4, p. 49, emphasis added.)

III.A.2 All Feasible Mitigation Is Not Required

On the one hand, the MMRP requires that LAWA expand and revise the LAX Master Plan Mitigation Plan for Air Quality including "all feasible methods to reduce air pollutant emissions from aircraft, Ground Support Equipment (GSE), traffic and construction equipment both on and of the airport." (MMRP 09/04, MM-AQ-1, p. 36.) On the other hand the MMRP contains three pages full of, definitely feasible mitigation measures that "may be developed." (MMRP, MM-AQ-3, pp. 45–48.) No specific requirement exists to implement these entirely feasible mitigation measures, which have been required for many other projects.

III.A.3 Ranges for Construction Emission Reductions

For the construction-related measure, the MMRP only provides ranges of emission reductions and volunteers that "[r]eliable emissions reductions were not able to be quantified for all of the [listed mitigation measure] components." (MMRP, MM-AQ-2, p. 39.) The Final GCD fails to disclose whether it assumed the lower end of this range of mitigation efficiency for construction mitigation, which is essential to demonstrate compliance with the MMRP. Because the Final GCD also fails to specify unmitigated emissions for Alternative D, we can not review the consistency of mitigated Alternative D emissions presented in the Final GCD with the range of emission reductions proposed by the MMRP.

III.B Final GCD Alternative D Emissions Are Inconsistent With MMRP

The MMRP states that "[a]t a minimum, air pollutant emissions associated with implementation of the LAX Master Plan will be reduced to levels equal to those identified in Table AD5-8." Table 3 summarizes the criteria pollutant emissions levels presented in MMRP for the interim year 2013 and the horizon year 2015 for Alternative D and the corresponding emission levels presented in the Final GCD.

Table 3:
Alternative D mitigated total operational and construction emissions – Comparison of MMRP with Final GCD

Pollutant (ton/year)	Interim Year 2013			Horizon Year 2015		
	MMRP[1]	Final GCD[2]	Final GCD < MMRP?	MMRP[1]	Final GCD[2]	Final GCD < MMRP?
VOC	2,964	2,976	No	2,564	2,607	No
CO	26,352	26,372	No	21,432	21,464	No
NOx	9,529	9,473	YES	7,876	7,914	No
PM10	2,269	2,208	YES	1,835	1,835	No

[1] From MMRP 09/04, Table AD5.8

[2] From Final GCD, Table 5, p. 4-6.

Table 3 demonstrates that in two cases, *i.e.* NOx and PM10 emissions in the interim year 2013, implementation of the MMRP will not assure the mitigated emission levels assumed by the Final GCD. In other words, the Final GCD assumes emission levels that are lower than accounted for by mitigation in the MMRP.

Finally, as we pointed out in our comments on the Final EIR, the MMRP is based on considerably underestimated emissions for Alternative D and fails to include secondary emissions from electricity generation and, and, consequently, will not be able to achieve its own proposed emission limits. (*See* Fox & Pless 11/04, Comment VI.B.)

IV. CONCLUSION

As detailed above, the Final GCD relied on an artificially inflated baseline, substantially underestimates potential emissions resulting from construction and operation of Alternative D, and relies on inadequate and unenforceable mitigation of Alternative D emissions. As a result, the FAA erroneously concludes that Alternative D will conform to the SIP. We demonstrated that Alternative D does not conform to the SIP for a number of reasons, including, but not limited to, exceeding the NOx SIP allocation for LAX for aircraft, APUs, and vehicle traffic as well as presenting emissions estimates lower than those guaranteed by the MMRP.

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Comments on the LAX Master Plan Final EIS/EIR Responses to Comments
By Professor Adib Kanafani
October 2004

General Comments

The following comments on the LAX Master Plan Final EIS/EIR deal with the question of airport capacity and with whether the gate positions system proposed in Alternative D can limit traffic at the airport to 78.9 MAP. In this regard the Final EIS/EIR does not differ substantively from the Master Plan Addendum dated June 2003. Comments in the FEIR continue to confuse market analysis and capacity analysis. The FEIR does not provide any additional evidence as to why its traffic assumptions should be accepted. The forecast in the FEIR continues to represent heroic assumptions about airline and market behavior in response to a capacity constraint. Yet, the Master Plan and the FEIR in their phasing do not show any gate capacity constraint for most of the life of the Master Plan. 163, not 153 gates are shown to continue to be operational until the very last phase, presumably in 2015. By then, with current traffic growth trends continuing, no gate capacity constraints would have had an effect on traffic and none of the market adjustments postulated in the Master Plan would have occurred. Traffic could very well have reached or exceeded 78.9 MAP before any gate reductions are implemented at LAX.

There is nothing in the FEIR that supports the Master Plan's claim that one of its goals is to limit traffic to 78.9 MAP. Furthermore, there is no new evidence in the FEIR to support the critical assumptions made in the Master Plan regarding, and that affect, the capacity of the system. The comments in the FEIR do not give any rationale for changing any of the conclusions present in our original comments. If anything, there is ample reason to adjust our original capacity estimate upwards, as is shown in some of our responses below.

Therefore, we conclude that the FEIR does not convincingly make the case that the capacity of LAX is limited to 78.9 MAP. We believe that the plan called Alternative D has a capacity that exceeds that number significantly.

Comments on Specific Sections

SAL00015-2

Final EIR:

> *"As stated in Section E1.3 Aircraft Gate Assignments, in Appendix E Alternative D Airside Analysis of the Draft LAX Master Plan Addendum detailed gate capacity analysis has been conducted. All flights in the 2015 design day schedule for Alternative D were assigned to a gate to determine future terminal loadings and to simulate airside operations. Aircraft gate assignments were made based on the user allocation and maximum gate size assumptions. Ranges of minimum integrate [sic] times, dependent on airline group, were assumed between gate uses. The minimum integrate [sic] times used in the other alternatives were also applied in this alternative. The results of an Alternative D gate assignments and the utilization of each gate throughout the day are shown on Figures E-5 and E-6."*

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Response:

Assigning the forecasted operations and a forecasted fleet mix to the available gates does not constitute a gate capacity analysis. Such an assignment shows that the gates can handle the projected traffic, but does not demonstrate that the gates cannot handle more traffic, and is therefore not sufficient to prove that the gates will limit traffic to 78.9 MAP.

Table V-A.5 of Draft LAX Master Plan shows the inter-gate times by airline groups, which range from 15 to 60 minutes and states: "*Ranges of minimum inter-gate times, dependent on airline group, were assumed between gate uses…Occasionally, it was necessary to violate these minimum inter-gate times in order to accommodate all the flights in available gates.*" [quoted from Draft LAX Master Plan] With the Master Plan's own acknowledgment that it is possible to violate these numbers, it can be concluded that the inter-gate times of one hour which are seen in Tables E-5 and E-6 of the Master Plan Addendum, can be shrunk to increase gate throughput, especially for regionals and commuters, which the Master Plan expects will become a growing proportion of the traffic. The Addendum and the Final EIR do not therefore convincingly show that gate utilization is maximized and that the throughput of gates cannot be increased. These documents do not show a capacity analysis.

In our original comments on the Addendum we did not even question the Master Plan's assumptions regarding gate utilization and we illustrated that it is possible to exceed the 78.9 MAP even with the gate utilization assumed in the Addendum and defended in the Final EIR. In our original comments we focused on the ability of the gates positions, with the utilization assumed in the Master Plan, to handle traffic higher than 78.9 MAP. With increased gate utilization, which is clearly possible with some inter-gate times of 60 minutes, the gate capacity is even higher than is shown in our original comments.

SAL00015-11

Final EIR:

> *"… Alternative D is designed to serve approximately 78.9MAP, the level of passenger activity identified by SCAG…"*

Response:
In our original comments we did not question the forecast. We questioned the capacity.

Final EIR:

> *"Alternative D would encourage the development and use of regional airports to serve local demand by constraining the facility capacity at LAX…."*

Response:

The Master Plan fails to explain how LAX will encourage the development of regional airports. Indeed, in the FEIR the Plan states: "*…Airlines rather than government*

FAL00003

decide which airports will be served…", the Plan goes on to talk about LAX's: "*…need to compete for international gateway service…*". [quoted from FEIR pages ES4, ES6] Furthermore, the Plan's stipulation that limiting the number of gates at LAX will encourage airlines to shift operations to other airports in the region is without merit since the Plan's phasing shows that no gate reduction from the current 163 gates will occur until the very last stage, i.e. 2015. As mentioned above, all the factors that would result from gate constraints and that would encourage airlines to shift operations will not have taken effect until well into the life of the master plan.

Final EIR:

> *"If the commentor doesn't accept that market conditions and factors affect the volume of passengers served at LAX why does their proposed capacity analysis ignore the available gate capacity between 12:00AM and 6:00 AM daily? If market factors don't have an affect on the volume of air traffic served, then 25 percent more capacity is immediately available at LAX."*

Response:

This is surely a rhetorical statement! As mentioned before, in our original comments we did not question the Master Plan's forecast, schedule, or gate utilization, although we believe those to be faulty and unrealistic. If the Master Plan is willing to adjust its traffic forecast to include substantial operations between 12 and 6 am, in face of all noise abatement procedures, then we would adjust the capacity accordingly, i.e. upwards! The issue is not whether market factors affect traffic or not. That much is understood. The issue is the ability of the gates to handle traffic that is much higher than the Master Plan stipulates. The Master Plan is based on market analysis and not on capacity analysis. This not the same as doing a capacity analysis that reflects market factors such as load factors, and aircraft fleet development.

Final EIR:

> *"…The commentor focuses only on the number of operations in the market segment while ignoring the corresponding fleet changes and associated passenger levels….This change resulted from the abandonment of the LAX market by 19 seat aircraft."*

Response:

As we state in numerous places in our original comments, ours is a conservative capacity analysis in which we retained many of the forecast assumptions of the Master Plan assumptions, even though we believe some of them to be wrong. For example, we did not question the Master Plan's fleet mix assumptions, which show a continued use of 19 seater commuter aircraft, even though as the FEIR now says, these aircraft have already ceased operating at LAX. Airlines that abandoned 19 seaters replaced them with larger regional jets with higher seating configurations. To make that correction to the Master Plan will only increase the number of passengers per flight in that category and will push the MAP capacity of LAX even higher than our original estimates.

Final EIR:

> *"The constrained activity level of 78.9 MAP forecast for Alternative D in 2015 remains within the range in each table and chart presented in Professor Kanafani's report referred to by the commentor."*

Response:

Not true. The activity level of 78.9 MAP is within a range of only Tables 10, 13, 15, 17 and 19, where the variables used (load factor, seating configuration assumptions and annual conversion factor) are the ones we think are wrong to assume. In fact, the load factor used in those tables is usually lower than even the forecasted one assumed by the Master Plan's analysis. And in all the cases that produce an activity level of 78.9 MAP, a lower seating configuration is used. We do not agree that such a low seating configuration number should be used and likewise do not agree with the use of annual conversion factors lower than 310.

SAL00015-14

Final EIR:

> *"The remaining pavement would be used for Remain Over Night (RON) parking positions, temporary aircraft maintenance parking, departure holding and arrival gate clearance holding. Several airlines that operate commercial service to LAX from Asia schedule extended time between the arrival and departure of their aircraft. Those aircraft that would remain at LAX for extended periods of time would be stored on the west remote pad in order to free contact gates for use by other airlines that have an immediate need for a contact gate."*

Response:

Retaining this pavement would increase both the airport and gate capacity. Even LAWA in this comment says "*…to free contact gates for use by other airlines that have an immediate need for a contact gate.*" If this is not an increase in contact gate capacity, then what is?

Final EIR:

> *"Maintaining the west pad would allow the aircraft maintenance operator's additional locations to position aircraft awaiting maintenance procedures in addition to each maintenance operator's ramp area."*

Response:

This form of use will increase capacity since without it aircraft needing maintenance would be parked in the maintenance operator's area. Parking aircraft in the west pad pavement would create more space in the operator's ramp.

Final EIR:

> *"The maintenance of the west pad after the implementation of Alternative D for aircraft parking for departure holds, arrival holds, maintenance operations and RON positions would not constitute additional gate capacity. As described in the Supplement to the Draft EIS/EIR, all aircraft passenger loading and unloading would occur at the contact gates that exist or would be constructed as a part of Alternative D."*

Response:

Using the west pad in such a way would actually be an increase in the gate capacity even though aircraft would not be loaded/unloaded at the west pad. Gate capacity would be increased because the aircraft that would otherwise have to wait at the gate will be able to move away from the gate and enable other aircraft to use it.

SAL00015-312
Final EIR:

"*Alternative D does not increase runway capacity.*"

Response:

In our comments on Alternative D we did not address the question of runway capacity. But there is no question but that the improvements to the airfield will have a non-negative effect on capacity, by reducing delay and reducing wave-offs. With any de-peaking as might be expected with traffic growth the Alternative D airfield will be able to handle more than the 2058 design day operations used in the Master Plan analysis.

SAL00015-314

Final EIR:

> *"Between the hours of midnight an 6:00 a.m. the airport sees fewer than 25 hourly operation. This lack of activity is not due to constrained airport capacity but due to market conditions that make it difficult for airlines to sell seats on flights that depart at this time of the day."*

Response:

We have already addressed this in our reply to the responses SAL00015-11. If the Master Plan forecasts traffic during this period, then we can adjust the capacity upwards to reflect that.

Final EIR:

> *"The commentor suggests adjustments to several variables in the Draft LAX Master Plan Addendum activity scenario for Alternative D, but fails*

> *to address the changes that would occur to other interconnected variables."*

Response:

We have taken a fairly conservative approach to estimate the capacity of the gate positions proposed in the Master Plan. As such we decided not to question many of the assumption especially those related to forecast, schedule, gate utilization, and fleet mix. What we questioned are three factors, the annualization factor, the load factors and the seating configurations of airplanes. Selecting what we believe are the correct values for these does not necessitate changing any of what the FEIR calls "*interconnected variables*". Any further adjustments to the forecast assumptions made in the Master Plan can only result in higher capacity figures, as we mention in the introduction to this document.

Final EIR:

> *"While it acknowledges a high of 87 MAP it fails to acknowledge its corresponding low capacity figure of 73 MAP."*

Response:

The sensitivity analysis shown in our capacity analysis is there to illustrate the implication of Master Plan assumptions that we question. For example, the 73 MAP figure corresponds to the annualization factor of 300, which we believe to be patently wrong, and to a load factor of 70%, which we also think is wrong, and not consistent with the values assumed in the Master Plan itself either. Recall that the Master Plan uses a load factor in the range of 72%-73.4% in its forecast, and a load factor of 80% in the design of terminal building square footage! We do not think an annual conversion factor of 300 and load factor of 70% are reasonable, especially considering that both values are already higher today. We do not focus on the 73 MAP capacity figure that results from an annual conversion factor of 300 and load factor of 70% because we do not believe they reflect reasonable assumptions.

SAL00015-315

Final EIR:

> *"Correspondingly, Alternative D assumes that other airports in the Los Angeles region would accommodate some of the traffic LAX would no longer be able to comfortably serve."*

Response:

The Master Plan cannot simply assume such a shift in traffic, especially when there is not instrument in place to induce it, much less force it. As addressed above, the Master Plan recognizes that airlines decide where to serve, not master plans. Also, as mentioned earlier, the absence of any gate reduction until the last stages of the plan, presumably in 2015, means that none of the pressures that might induce airline shifts will be in place for basically all the Master Plan period. Furthermore, as calculated by the

LAWA in LAX Master Plan, delays in Alternative D are lower than in Alternative C. Given the Master Plan's own association of capacity with delay, this means that LAX will be able to serve the forecasted traffic with tolerable delays, thus not creating any inducements for airlines to move their service to other regional airports.

Final EIR:

> *"In order to achieve these goals Alternative D must be designed to reflect that the most likely air carrier service to be accommodated at other regional airports is domestic narrow body jet service."*

Response:

Again, LAWA has no clear plan for how to achieve the stated goal of shifting air carrier traffic to other regional airports.

Final EIR:

> *"Secondly, commuter operations are more likely to remain prevalent at LAX because LAX operates as a hub airport for American Airlines and United Airlines. The commuter operations into LAX feed the American and United hubs and their international alliance and marketing partner flights. Little or no airline hubbing occurs at any other airport in Southern California."*

Response:

Domestic air carrier operations also feed international flights, as well as other traffic. It is actually preposterous that the Master Plan forecasts a drop in domestic air carrier operations at LAX between the base year and the year 2015.

SAL00015-316

Final EIR:

> *"Additionally, though the 737-300, 400 and 500 are older derivatives, they have Stage 3 engines and are anticipated to continue operating well into the future…With production of the 757 ending in the near future after a 20 year run, it is probable that some of the 757 operations expected with implementation of Alternative D would be replaced with Boeing 737-800, 737-900 or Airbus 321."*

Response:

There is no basis for the assumption that older aircraft types will remain, and newer ones will go out. Instead, is it more likely that the Boeing 757's will be replaced by newer models such as the Boeing 7e7 with higher capacity. Furthermore the 757 was identified as a separate category with its own presence in the fleet mix and its own seating, for many design purposes it is not mixed with the 737 category of aircraft.

Final EIR:

> *"As acknowledged by the commentor, the Master Plan analysis is based on the actual way aircraft are configured and used in revenue service in the LAX market."*

Response:

Indeed, the numbers we used are based on the real seating plans of airlines that fly to LAX, confirmed from the airline websites, Aviation Week and Space Technology, 2003 Aerospace Source Book, as well as the Master Plan's own source, the OAG.

Final EIR:

> *"Similarly the ATR-42 and F100 may be replaced by more modern aircraft but with similar seating capacity. This would not change the passenger volume assumptions contained in the Draft Master Plan Addendum or Supplement to the Draft EIS/EIR."*

Response:

More modern aircraft in that category are Regional Jets, and any one of them has higher seating configuration than the ATR-42. Furthermore, there is a fair number of 19-seaters used in the LAX Master Plan calculations. In the response to SAL00015-2 LAWA says that 19-seaters already abandoned LAX and larger aircraft are being used. However, in the Master Plan there are 43 operations forecasted by J-31, 58 operations by SWM, 38 operations by BE1 and 43 operations by CAN. Replacing these mentioned aircraft types with the appropriate commuter aircraft type would at least double the offered seats, and possibly double the number of passengers actually flown. It will certainly double the capacity of that component of the system!

SAL00015-317
Final EIR:

> *"…This change resulted from the abandonment of the LAX market by 19 seat aircraft."*

Response:

As mentioned above, we believe this to be an inconsistency of assumptions in the Master Plan and in the FEIR. The Master Plan continues to use 19 seaters in the analysis.

Final EIR:

> *4. "…The domestic air carrier profile would be de-peaked and service would be reduced from the 2015 unconstrained forecast levels in the Central, Easter and Asia-Pacific regions to reflect…"*

Response:

All this represents assumptions about market behavior. Apart from being rather daring to make such detailed assumptions about what the airlines might or might not do, this ignores the fact that the constraints of gate reduction will not be in place for a long time, and that the runway capacity of Alternative D is not any less than, say Alternative C. Furthermore, this market analysis has very little to do with the capacity analysis that is the subject of our original comments.

Final EIR:

> *5. "…The percentage of domestic and international air carrier and O&D passengers would increase as the airlines attempt to serve the unconstrained forecast O&D demand with fewer operations."*

Response:

See the response just above. Furthermore, this is inconsistent with statements elsewhere the Master Plan that these categories of traffic are to be diverted to other regional airport.

Final EIR:

> *6. "… The average aircraft size would increase from existing levels without significantly exceeding the unconstrained forecast seats per departure for each air service component. This is reflective of the already large fleet size serving LAX."*

Response:

Seating assumptions in the LAX Master Plan do not agree with this assumption. They are in many cases lower than what is already at LAX. (Refer to Table I below).

SAL00015-318

Final EIR:

> *"The correct input parameter to the analysis when annualizing design day activity, should be annual to design day operations factors by market segment. This is the factor that is forecasted and correctly reflects the hourly airfield and gate constraints addressed in the Master Plan."* And:
>
> *"…The Design Day to annual operations factors are a reflection of the seasonal characteristics of the LAX market. This seasonality profile does not change over time…"*

Response:

These are two inconsistent statements. First, regardless of how the annualization factor is segmented, its average should not fall below the current values. The overall average, which has been in the range 310-312 for the years since the base year of 1996 will only grow as the traffic de-peaks in the future. The FEIR says that only aircraft

operations will be de-peaked, and that passenger peaks will remain the same and be accommodated by larger aircraft and higher load factors? This is not consistent with the Master Plan's assumptions about aircraft sizes and load factors?

For the second, if these seasonality factors are stable then there is no logical basis for the Master Plan to drop these numbers from 310-312 to 300. One can only conclude that the annualization figure of 300 is reverse-engineered to arrive at a desired passenger load of 78.9 MAP. It has no basis in facts and should not be the basis for annual capacity calculation.

Final EIR:

> *"Design day aircraft operations are the only parameter that is assumed to be de-peaked. In the case of design day and peak hour passengers, the number increases even with fewer operations due to the combined effects of larger aircraft (higher seat capacity) being used in the peak hour and higher peak hour load factors representing high passenger demand for these key travel periods during the day."*

Response:

This seems inconsistent with the Master Plan's assumptions that aircraft sizes will not increase. It also is not reflected by higher load factors as the statement implies. If this statement in the FEIR is correct then this would result in higher aircraft seating and higher load factors causing the capacity estimate to increase even further. Furthermore this is not an assumption that is justified by facts. Under pressure from limited facility capacity all traffic patterns will be de-peaked and the annualization factors will rise. Additionally, there is no evidence that airlines use different aircraft types, with higher seating capacities only during the peak hours especially if, as mentioned in the FEIR, load factors rise during these hours.

SAL00015-319

Final EIR:

> *"Ramp charts are provided for Alternative D in Appendix E, Alternative D Airside Analysis, Figures E 5 and E 6 in the Draft Master Plan Addendum."*

Response:

We have not questioned the gate utilization use in the Master Plan and implied in the ramp charts. As mentioned earlier, the long inter-gate times used for some traffic categories mean that these utilization factors can be increased, resulting in more throughput from the given number of gates.

SAL00015-333

Final EIR:

> *"The commentor's analysis actually identifies a range of capacities based on several variables that range from a low of 73 MAP to the consistently stated high of 87 MAP."*

Response:

The purpose of the sensitivity analysis is to show how capacity can vary with factors such as aircraft seating, load factors and annualization rates. The fact that some of these numbers can results in a figure of 73 MAP does not mean that that is the capacity of the airport. In the estimate of capacity used in our original comments we use the load factors adopted in the Master Plan 72%-73.4%, the annualization factor of 310 which is a conservative estimate given that it is the current value and likely to increase rather than decrease in the future, and seating configurations based on aircraft currently in use at LAX or on order by airlines flying at LAX. Our estimate of 87 MAP is conservative and based on many assumptions in the Master Plan that we did not question. As mentioned elsewhere here, we question some of these assumptions and believe that if anything, the capacity of the Master Plan could be even higher than our original estimate.

Final EIR:

"LAX Master Plan Alternative D has a stated constrained activity level of 78.9 MAP which is within the range the commentor's analysis finds to be probable with the proposed 153-gate airport."

Response:

See the response just above. Our analysis shows that 78.9 MAP is not a likely capacity figure and is not a reasonable estimate of the capacity of the airport.

Final EIR:

"The commentor also fails to state which assumptions were rejected."

Response:

In the part 2. of our Review of the Addendum's Design and Market Assumptions we state clearly all the Master Plan assumptions, and list the ones that we accepted and the ones we subjected to scrutiny, and why. Furthermore, as mentioned elsewhere here, our purpose was to calculate the capacity and not to comment on the Master Plan's market analysis.

Final EIR:

"Manufacturer and airline internet sites, though reasonable sources of data, are not as accurate as OAG data which was used to determine the seat capacity of each aircraft serving the LAX market in the Alternative D analysis."

Response:

We have compared seating arrangements from all sources, including the OAG. As shown in Table 1 below, OAG figures agree with the figures from the airlines' websites and if anything when they differ they do tend to be higher. Table 1 shows that the figures

used in our original comments and capacity analysis are in many cases conservative, even in comparison with OAG and all the other sources.

Table 1. Aircraft Type Seating Assumptions:

Aircraft	Manufacturer Seat Range	Master Plan Assumption	Lower Range Used	Higher Range Used	Current Fleet	Order/ Options**	OAG Numbers#
F100*	98	98	98	98	87		107/119
A-300	266/298	270-285	275	280	250/251		220/375
A-310	240/247	220-237	220	240			220
A-318						107 (15)	
A-319	124/134	120	120	124	120-124	124 (386)	124
A-320	150/164	144-150	144	150	138-150	150 (162)	150
A-321					169	185 (18)	
A-330-200							253/293
A-330	295/335	300-335	300	300	266-298	253-440 (17)	253/335/353
A-340	380/419	303-335	303	380			239
737-300	128/134	118-134	128	130	120-134		128/149
737-400	146/159	138-146	138	146	144		146/168
737-500	108/122	102-110	102	115	104-116		110/132
737-700	126/149	118-134	120	135	124	126 (223)	126/149
737S*	102-110	102-110	105	110	107-113		120/130
737-800					134-155	162 (158)	162/189
737-900					167	177 (5)	
747-400	416/496	390-436	390	416	347-403	416-568 (2)	416/524
747*	366-496	260-410	366	416	353-430		452/548
74M*	366-497	234	234	416			410
74X	600	600	600	600			
757	200-280	185-188	185	220	168-224	200-243 (47)	178/239
767-300*	261/290	220-240	220	250	174-204	181-218 (15)	181/224/269
767*	226-375	172-203	181	226	168-204		216/290
767 400					256 287	245 (37)	245/375
777	305-370	305-375	305	360	224-348	301-368 (55)	305/375
A-300	266/298	270-285	280	280	250-251		
DC-10*	250-380	260-310	275	280	273		255/380
MD-11*	285/410	284-375	285	300	268		250/400
MD80*	155/172	142-147	143	150	129-141		
MD87*	130/139	125	125	140	142		109/130
MD90*	153/172	150	150	150	150		153/172
MD90-30*	153/172	104	104	153			
ATR72*	66-72	68	64	68	64		64/74
ATR42*	46/48/50	46	46	46	46		42/74
BE1	19	19	19	19	19		19
CS0	50	50	50	50	46-50		
C70	64 75	70	70	75	64 70		
C90					80		
CAN	19	n/a	19	19	N/a		
DS7*	50/54	48	48	50	N/a		50/54
DS8*					37-50		36/56
EM2		30	30	40	30-44		24/30
EMB	50	50	50	50	50		50
Bae-146*					88-100		
F50*	50	50	50	50	N/a		
F70*	70/80	70	70	70	N/a		
GAI	19	n/a	19	19	N/a		
J31*	18/19	19	19	19	N/a		

J41*					29-30	
S20*	50/58	50	50	50		
S35	20-39	36	36	36		
SF3*	34	34	34	34	34	
SWM	19	19	19	19		

Final EIR:

"As mentioned previously in this response to comment, the commentor uses alternative and questionable data sources to determine seat capacity for each aircraft. The results are inconsistent with the OAG seating configuration of aircraft used in the LAX market and therefore unacceptable for use in analysis." And *"...The portion of the comment related to a sensitivity analysis on aircraft seating capacities does not use OAG data and is, therefore, inconsistent with the Master Plan analysis."*

Response:

See the previous response and Table 1 here. Table 1 includes OAG seating and if anything shows the number used in the capacity analysis to be conservative. A strict adherence to OAG as the single source can only result in adjusting the capacity estimates upwards.

Final EIR:

"No reason is given for the use of mid-range values rather than the high ends of the ranges in relation to the sensitivity analysis."

Response:

If all airlines used high level seating configurations then the capacity of the system can well exceed 100 MAP. As to our choice of middle range, even the Master Plan does not specify which configuration they use for all aircraft types. Instead only ranges are given for some aircraft types. We reiterate that we have a conservative estimate of capacity.

Final EIR:

"... [an] activity level of 78.9 MAP,...is within the range of each table presented by the commentor which would appear to validate that this is a reasonable constrained activity level for the 153-gate LAX Alternative D."

Response:

A capacity number of 78.9 MAP can only be obtained using assumptions regarding the annualization, load factors, and seating configurations that are unrealistic and inconsistent with facts. The presence of this figure in the sensitivity analysis is intended to illustrate this very fact and to show that it is an erroneous estimate of capacity. Furthermore the FEIR mention of the 153 gate figure is not credible, since the plan phasing shows it carrying all 163 gates all the way to the very last phase!

Final EIR:

"The commentor's Tables 4 and 5 contain inaccurate information as described above. Incorrect seat capacites for the LAX market are contained in data presented in Tables 4 and 5."

Response:

For Table 4 we used LAX Master Plan assumption regarding seating for the stated "design aircraft" for each market group. Table 5 contains the same analysis for higher seat configurations, which are more likely if the airport gate capacity is constrained. As shown in Table 1 above, seating configurations used are consistent with current airline practice and are if anything on the conservative side.

Final EIR:

"Section 3.3 of the commentor's text, Capacity of Alternative D makes several peculiar statements. For example, the commentor accepts the 73.46 percent load factor presented in the Alternative D analysis but rejects the annualization factor of 300 and instead uses 310."

Response:

We accept that this load factor is in the range of likely load factors to occur in the future. We also include a range of load factors (70%- 76%) in our analysis, not only the mentioned 73.46%. Indeed we agree with the Master Plan that 73.6% is a reasonable load factor to work with especially as a factor that has been observed. The FEIR responses to comments confuse this and the annualization factor issue, which is totally different. Annualization observed at LAX has been in the 310-312 range for a number of years. As stated elsewhere in our comments, there is no rational reason or basis for reducing this to 300. If anything, as the traffic grows and capacity constraints presumably set in, the peaks will spread and the annualization factor will grow. We have again taken a conservative estimate of capacity based on the current 310 factor. To follow the Master Plan's and the FEIR's statements about de-peaking would mean to use an even larger annualization factor, such as 315 or 320, and to adjust the capacity upward.

Final EIR:

"The upper limit of potential passenger activity is consistently highlighted without acknowledging the commentor's complete results which illustrate a range of possible outcomes – including those presented in the Draft Master Plan Addendum. Furthermore, the commentor's results appear to illustrate the potential for activity levels even lower than those forecast in the Draft Master Plan."

Response:

The FEIR continues to confuse forecasts and market analysis with capacity analysis. We show all the results, as well as the value of variables, that would lead to the

specific result. The FEIR refers to the estimate of 87 MAP as the upper limit of capacity. In fact the upper limit is much higher than that. A figure of 93 MAP is possible with fairly likely values of load factors and seating configurations. For example if we accept the FEIR's statement about de-peaking and adjust load factors and annualization factors accordingly, to 76% and to 320 respectively, then the capacity of the system will reach 93 MAP.

Final EIR:

> *"The data presented by the commentor validates the constrained forecast passenger activity level of 78.9 MAP for LAX...."*

Response:

This is incorrect. See response above.

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June 22, 2004

VIA HAND DELIVERY

Ms. Angelica Espiritu
Environmental Planning Section
Los Angeles World Airports
7301 World Way West, 3rd Floor
Los Angeles, CA 90045

Re: Negative Declaration re: Terminal 2 In-Line Baggage Project
Case No. AD-317-04

Dear Ms Espiritu:

We write on behalf of the City of El Segundo to submit the following comments on the Los Angeles International Airport Terminal 2 In-Line Baggage Screening Initial Study and proposed Negative Declaration which was circulated for a brief comment period starting June 3, 2004.

We appreciate LAWA's decision to conduct an initial study as mandated by the California Environmental Quality Act ("CEQA"). However, LAWA's negative declaration regarding the overhaul of the baggage facility at Terminal 2 ("T2") raises a number of concerns for the City of El Segundo.

CEQA is a public disclosure statute. See CEQA Guidelines, § 15002(a)(1) (one of CEQA's "basic purposes" is to "[i]nform governmental decision makers and the public about the potential, significant environmental effects of proposed activities"). The T2 Initial Study fails to provide any details about the baggage facility project and, therefore, precludes a meaningful public review of the project's impacts. Additional information about, for example, the details of the proposed facilities, the need for 21,494 additional square feet, and the anticipated construction timeframe, must be provided to permit meaningful public review of anticipated impacts.

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Moreover, an environmental impact report ("EIR"), rather than a negative declaration, should have been prepared here. Negative declarations are to be prepared only when the "initial study shows that there is no substantial evidence, in light of the whole record before the agency, that the project may have a significant effect on the environment." CEQA Guidelines, § 15070 (emphasis added). In contrast, "an environmental impact report should be prepared whenever the action arguably will have an adverse environmental impact." No Oil, Inc. v. City of Los Angeles, 13 Cal.3d 68, 85 (1974) (emphasis in original).

This project will arguably have an adverse effect on the environment. The addition of more than 21,000 square feet to a single terminal will have associated environmental effects, both from the construction of this facility and from the impacts of the increased airport operations that this expansion will allow. As the Supreme Court of California has noted, "A simple resolution or Negative Declaration that the project will have no significant environmental effect" cannot accomplish the "major purpose of an EIR [] to inform other government agencies and the public generally, of the environmental impact of a proposed project ... and to demonstrate to an apprehensive citizenry that the agency has in fact analyzed and considered the ecological implications of its action." 13 Cal.3d at 86.

In addition, this project evidences a piecemeal approach to expansion at LAX. LAWA claims that it is not attempting to increase the capacity of LAX. Yet it has continued to offer projects that add a little more space here, and a little more efficiency there; collectively, these projects lay the groundwork for increasing LAX's capacity and, accordingly, increasing the adverse effects on the environment.

LAWA's statement that this project will result in "small additions" to T2 is refuted by its own calculations. In the same section, the agency states that the baggage renovation will result in a 21,494 square feet, or five percent, expansion of T2- hardly a "small change." This is not the type of project envisioned by CEQA as "small." See, e.g. CEQA Guidelines, § 15303(c). Moreover, the type of baggage project proposed for T2 is also being considered at several other LAX terminals. Initial Study at 4. If similar projects are implemented at all of these terminals, the combined result could be hundreds of thousands of new square feet at LAX terminals. LAWA's presentation of this project on its own obscures the cumulative impact that will result from similar expansions at other terminals.

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LAWA suggests that this project is necessary to comply with federal mandates issued by the Transportation Security Administration ("TSA"). However, although new federal security requirements mandate screening of all passengers and baggage for explosives and weapons, LAX is already in compliance with this federal mandate: "LAX was the only major U.S. airport to meet the Dec. 31, 2002, federal mandate to electronically screen 100 percent of all checked bags." (LAWA News Release, Sept. 2, 2003.) LAX thus would appear not to need additional devices to comply with federal requirements. Rather, this project would move the screening machines out of the check-in facility, thereby increasing the capacity of the existing facilities.

The T2 project also goes far beyond addressing TSA's safety concerns. LAWA itself acknowledges its broad objectives are to: "provide the latest baggage conveying and sorting system at T2 to reduce baggage misdirection, provide bag storage for early check-in's, and provide airlines with efficient equipment for loading baggage to aircraft." Initial Study at 3. As if as an afterthought, the Initial Study notes that the project will also meet new federal security requirements by including in-line explosive detection system machines. Id. By presenting its significant proposed changes under the guise of complying with federal mandates, LAWA suggests they are necessary to increase public safety, when in fact only one small element of this project responds to TSA policy. The main result of the project appears to be increasing the capacity of T2 to process baggage.

In addition to these general concerns about the proposed negative declaration, we are troubled by some of the more specific assertions of the Initial Study. For example, in the "Air Quality" section of the Environmental Checklist, LAWA relies on the thresholds set by the South Coast Air Quality Management District ("SCAQMD") to conclude that the project will result in "Less Than Significant Impacts" regarding violations of air quality standards or substantial contributions to existing or projected air quality violations. Initial Study at 16. Assuming LAWA's calculations are accurate, it appears that the expected daily emissions for all pollutants during construction falls short of the daily thresholds established by SCAQMD. Yet this does not mean they should be ignored. This project would result in the emission of hundreds of pounds per day of various pollutants, which are known to be hazardous to human health and the environment. LAWA should make every reasonable effort to mitigate these effects; instead, it dismisses these emissions as "less than significant" and avoids any mention of possible mitigation measures.

Though LAWA has maintained that it does not intend, via the Master Plan or through individual projects, to increase capacity, this project appears to expand the airport in the name of public safety, with the ultimate effect of increasing the number of passengers that the airport can accommodate. Even if the impacts on air quality, noise, traffic, and other environmental factors from specific projects are not individually significant - which we believe they often are - their cumulative impact is substantial.

Please feel free to contact me if you have any questions.

Very truly yours,

SHUTE, MIHALY & WEINBERGER LLP

Christy H. Taylor

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July 30, 2004

Karen Hoo
Los Angeles World Airports
Environmental Planning Section
7301 World Way West, 3rd Floor
Los Angeles, CA 90045

Re: Mitigated Negative Declaration re: Tom Bradley International Terminal Improvements and Baggage Screening Facilities Project, Case No. AD-211-04

Dear Ms. Hoo:

We write on behalf of the City of El Segundo to submit the following comments on the Los Angeles International Airport ("LAX") Tom Bradley International Terminal Improvements and Baggage Screening Facilities Project ("TBIT project") and the proposed Mitigated Negative Declaration ("MND") circulated for public comment. We appreciate the decision of Los Angeles World Airports ("LAWA") to conduct an initial study of the TBIT project as mandated by the California Environmental Quality Act ("CEQA"). However, the results of LAWA's initial study and the MND for the TBIT project raise a number of concerns for the City of El Segundo. The following sections, together with the attached exhibits referenced herein, describe the legal and technical problems with the proposed MND and illustrate why LAWA cannot legally approve the TBIT project based on the MND. Instead, LAWA should prepare and circulate an EIR for the project.

A. The MND Improperly Segments the TBIT Project from LAWA's Larger Program of Expansion of LAX and Accommodation of NLA's.

The TBIT project is another example of LAWA's ongoing practice of pursuing piecemeal expansion at LAX. Although LAWA claims that it is not attempting to increase the capacity of LAX, it has continued to advance projects that add a little more space here, and a little more efficiency there. Collectively, these projects lay the groundwork for increasing LAX's capacity and, accordingly, increasing the airport's adverse impacts on the environment.

The proposed TBIT project appears to be an integral element of LAWA's larger plan to modify LAX facilities to accommodate additional passengers, and specifically to accommodate the so-called New Large Aircraft ("NLAs"). The first NLA, the Airbus A-380, is slated for delivery and operations beginning in 2006 or 2007. MND at page A-24. Other elements of LAWA's plans to accommodate NLAs are described in the LAX Master Plan and the LAX Southside Airfield Improvement Program (which includes the following elements: Runway 25L Relocation, Center Taxiway, Airfield Intersection Improvements, Remote Boarding Facilities Modifications). Documents describing the LAX Southside Airfield Improvement Program are attached hereto as Exhibit A. These documents demonstrate that the TBIT project is an integral element of LAWA's overall effort to accommodate NLAs and should not be segmented from that program. In fact, the HNTB report produced on the Southside Airfield Improvement Program specifically calls for the NLA parking configurations proposed as part of the TBIT project. *See* HNTB Report at Exec. Summ. 2-3, Section 7.

The massive increase in TBIT's baggage handling capacity appears to be geared to accommodating baggage that would be produced by the planned West Satellite Concourse that Master Plan Alternative D proposes to add west of and connected to the TBIT. *See* MND at A-28. As such, the addition of baggage handling facilities as part of the proposed TBIT project would ultimately serve (and appears designed to serve) the new gates proposed as part of the Master Plan. LAWA's attempt to proceed with the baggage facilities separate from any evaluation of the proposed West Satellite Concourse violates CEQA's prohibition on segmentation.

Segmenting the TBIT project from the other aspects of LAWA's NLA accommodation efforts and the West Satellite Concourse is problematic because it precludes decision-makers and the public from understanding LAWA's complete plan for LAX and downplays the impacts associated with that plan. Instead of segmenting its NLA accommodation and other plans as it has, LAWA should analyze the proposed TBIT project together with the LAX Southside Airfield Improvement Program and the rest of the LAX Master Plan proposals. Failure to do so is inconsistent with CEQA's mandate that environmental review documents consider the whole of the proposed action. *See* CEQA Guidelines § 15378.

B. The MND Fails to Acknowledge and Analyze the Capacity Enhancing Aspects of the TBIT Project and Systematically Understates the Impact of the TBIT Project.

LAWA's MND repeatedly insists that the project will result only in "small additions" to TBIT and should not, therefore, be viewed as increasing the overall capacity of TBIT or LAX. MND at IS-1, A-2, A-7. This argument is without merit because the proposed project will allow TBIT to do much more than simply accommodate existing passenger loads. In fact, a number of project elements, including those discussed below, will allow TBIT, and LAX generally, to accommodate additional passengers and aircraft operations. The MND is fatally flawed because it fails to evaluate and disclose the environmental impacts associated with those increases. *See* CEQA Guidelines, § 15002(a)(1).

1. The MND's Analysis of NLA Parking is Flawed.

The MND asserts that the proposed new gate configurations for NLAs are temporary in nature and will accommodate the NLAs only on a "short-term basis." MND at IS-1, A-2, A-5. The MND further indicates that the proposed NLA parking arrangements are designed to accommodate the aircraft only until permanent terminal facilities are planned and constructed consistent with the proposed LAX Master Plan. MND at A-5. This assumption that the NLA parking situation proposed as part of the TBIT project will be temporary is problematic because the long-term (Master Plan) arrangements for NLA parking are presently unknown and speculative. For example, it is possible that the Master Plan components dealing with NLA parking will not be adopted and/or implemented. As such, LAWA's environmental document for the TBIT project must either: (1) analyze impacts of the proposed NLA parking configuration in the reasonably foreseeable event that the arrangement is permanent rather than temporary in nature; or (2) commit to a specific end date for the use of the NLA parking.

In the context of its discussion of the proposed NLA parking configuration, the MND also notes that the practical capacity of LAX in its existing configuration is determined and limited by its ground transportation system, which LAWA characterizes as the airport's "weakest link" from a capacity perspective. MND at A-29. The MND concludes that the TBIT project would not increase the overall capacity of LAX based on the assumption that LAX capacity is and will remain constrained by its ground transportation system. *Id.* This is a faulty assumption, however, because the Master Plan now under consideration would quickly and dramatically increase the capacity of LAX's ground transportation system. Once that constraint on LAX capacity is removed, the TBIT improvements would clearly contribute to the growth of LAX capacity.

2. The MND's Analysis of Bus Gate Hold Room Capacity is Flawed.

According to the MND, TBIT currently includes 31,917 square feet of bus gate hold room space. MND Table 1. This area accommodates passengers waiting to be shuttled by bus to aircraft parked at the remote gates west of TBIT. MND at A-21. LAWA indicates that these bus gate hold rooms are overcrowded and proposes to expand those facilities by approximately 12 percent (i.e., 3,956 square feet). MND at A-21 to 22.

The MND fails to explain, however, that the bus gate hold rooms have become increasingly crowded due to LAWA's own policy of developing, improving, and expanding the use of the remote aircraft gates, which must be accessed by shuttle bus. LAWA's development and expanded use of the remote gates has proceeded outside of the Master Plan process and without any environmental review. Simply stated, TBIT bus gate hold room overcrowding is a problem of LAWA's own making and can be attributed in large part to LAWA's historic refusal to evaluate the impacts associated with the development of the remote gates. In light of this history, it is inappropriate for LAWA to take the position that it is proposing to expand the TBIT bus gate hold rooms simply to improve passenger comfort and safety. The reality is that LAWA has itself caused this overcrowding and is now seeking to rely on that overcrowding as a justification for increasing the capacity of TBIT/LAX facilities.

LAWA's environmental review of the TBIT project must include an assessment of how increased hold room space will impact the use of gates, including the environmental impacts associated with the expanded operations that would be made possible by the new hold room space. For example, the proposed increase in hold room space will permit an increase in the number and/or size of flights using such hold room as well as an increase in the number of passengers served. This will, in turn, result in additional bussing between the hold rooms and the remote gates. Increased flights and bus trips will have environmental impacts in areas including air quality, noise and traffic. The environmental analysis must acknowledge and disclose these impacts.

In the MND, LAWA attempts to deny the capacity enhancing nature of enlarging the bus hold rooms by characterizing that expansion as necessary to accommodate existing passenger loads and overcrowding, and to improve passenger comfort and safety. MND at A-6, A-22. The strategy fails, however, because although increasing available space in areas such as bus gate hold rooms may improve passenger comfort in the short-term, the high demand for passenger facilities at LAX will quickly lead to renewed crowding and an overall increase in the airport's capacity to accommodate passengers and aircraft operations. This natural trend is borne out by the history of LAX and of TBIT specifically. The MND is seriously flawed for its failure to recognize and evaluate the impacts and increased capacity associated with the use and inevitable crowding of expanded facilities such as bus hold rooms.

3. The MND's Analysis of Office Space is Flawed.

LAWA acknowledges that the TBIT project calls for the addition of nearly 14,000 square feet of office space. However, it claims that the additional space will not result in an associated increase in staff. The additional space, it says, will be utilized by existing employees. Moreover, LAWA fails to evaluate the potential increase in passenger handling space (and capacity) resulting from the office space relocation proposal.

The MND fails to substantiate LAWA's positions with respect to office space. Fourteen-thousand square feet is a sizable addition to the terminal, and could certainly accommodate many more workers. History has revealed that any space added to LAX quickly gets utilized to its outer limits. Although the new office space may, in the beginning, alleviate the crowding currently seen in TBIT office space, it is reasonably foreseeable that airlines will take advantage of the new available space to increase operations and staff. LAWA's environmental analysis must, therefore, consider all of the impacts that would result if the proposed new office space is occupied at the same employee density as existing office space. Thousands of additional square feet of office space will almost certainly result in more employees, with associated traffic and environmental impacts.

In addition, given the scarcity of information provided by LAWA, it is impossible to analyze the true implications of the increase in office space. It is not clear from the MND, for example, where the existing 200 international airline employees are currently working, how much space they occupy, and what will happen to the space they now occupy once they move to the proposed facility. The move will presumably free up office and non-office space that is now being used by these employees, and this space will not go unused. LAWA must identify the location, extent and configuration of existing office space and must reveal how that space will be reused or reconfigured in connection with the TBIT project. Further, LAWA must evaluate the environmental impacts and increased capacity resulting from this aspect of the TBIT project.

4. The MND's Analysis of Baggage Handling Facilities is Flawed.

CEQA mandates that lead agencies evaluate the significance of the impacts of a proposed project based on the direct and indirect physical changes to the environment that would be caused by the proposed project. CEQA Guidelines § 15064. Existing physical conditions at the proposed project site serve as the "baseline" for this evaluation and must be represented accurately. Although existing conditions at TBIT feature federal screening facilities located in the ticketing area, LAWA's MND for the TBIT Project does not treat that existing condition as the baseline for purposes of its environmental analysis. Instead, LAWA treats these existing conditions as temporary, suggesting that pre-9/11 conditions are the proper basis for evaluating the impacts of the proposed baggage facility expansion. MND at A-6. The proper baseline for

LAWA to use when considering all of the environmental effects of this project is the set of conditions that existed when the environmental review process began. LAWA cannot pick and choose different baselines to use in different analyses, based on which set of conditions will downplay the significance of the proposed project.

By suggesting that pre-9/11 conditions are the proper baseline for comparison, LAWA conveniently avoids an honest assessment of the capacity increasing implications of the baggage facility expansion. When compared with an accurate baseline, the baggage screening facility expansion's potential for increasing capacity is revealed. Freeing up space in the ticketing area – the obvious outcome of moving the baggage screening facilities into a newly constructed area – will result in more available space for passengers. This increase in available space will increase the overall capacity of LAX to accommodate passengers and will result in increased environmental impacts in areas such as air quality, traffic and noise.

CEQA's Guidelines state the general rule for selecting the proper baseline to use for evaluating a project's environmental impacts: "In assessing the impact of a proposed project on the environment, the lead agency should normally limit its examination to changes in the *existing physical conditions in the affected area as they exist at the time the notice of preparation is published....*" CEQA Guidelines § 15126.2(a) (emphasis added).[1] Courts have widely held that specific, unusual circumstances must exist to justify deviation from this general rule. *Save our Peninsula Comm. v. Monterey County Bd. of Supervisors*, 87 Cal.App.4th 99, 125-126 (2001); *Fat*, 97 Cal.App.4th at 1281. This case presents no reason to depart from the general rule for baseline selection. The environmental conditions as they existed at the time the environmental review began, not as they existed before 9/11, constitute the proper baseline.

LAWA also misrepresents the necessity of the baggage screening additions. Though LAWA suggests that this project will assist LAX in complying with federal mandates issued by the Transportation Security Administration, LAX is already in compliance with these requirements. *See* Press Release attached hereto as Exhibit C. Thus, LAX does not need any additional screening machines to comply with federal mandates. Rather, it appears that LAWA would like to move the existing screening machines to more than 31,000 square feet of newly developed space in order to free up floor space in the check-in facility, thereby increasing the capacity of the existing facilities. The environmental review must accurately reflect this aspect of the TBIT project.

[1] Though the Guidelines discuss the question of baseline selection in the context of an EIR, they have been held to apply in the negative declaration context as well. *Fat v. County of Sacramento*, 97 Cal.App.4th 1270, 1278 (2002).

5. The MND's Analysis of Concession Space is Flawed.

LAWA's claims that TBIT level 4 concession additions will not increase capacity are untenable. In its description of the project, LAWA states that it will provide 12,018 new square feet of concessions and 6,952 square feet of walkway space. Attachment A at 29. However, statements elsewhere in the document confuse the issue of the extent of new concession space. Table 1, which breaks down the square footage additions of the TBIT project proposal by use, and elsewhere, LAWA maintains that these modifications will occur in "existing" space, suggesting that the expansion of concessions will not involve the addition of new square footage in the terminal. Attachment A at 29, 8. The footnotes in Table 1 reveal that the proposed level 4 concessions will not truly occupy existing space, however, but rather space that was included in the original terminal construction permit but never developed.

LAWA's attempt to characterize the level 4 concessions location as existing rather than new space greatly distorts the impact, not only of the concessions project, but of the entire TBIT proposal as it understates the total additional, and overstates the total existing, square footage by almost 20,000. In other words, the TBIT project will result in an addition of over 67,000 square feet, which represents a nearly 13% increase to TBIT. This expansion must be clearly disclosed and its impacts analyzed.

Finally, LAWA again suggests that existing conditions do not comprise the proper baseline, by emphasizing concessions reductions that have occurred since 1995. MND at A-29. As discussed at length above, the TBIT project does not present a situation that justifies deviating from CEQA's general rule of using existing conditions for the baseline. Current conditions are the appropriate baseline for evaluating the impact of the concessions additions. Thus, this plan involves an increase of nearly 20,000 square feet from the baseline – a substantial addition that would likely result in significant environmental impacts.

6. The MND's Analysis of Air Quality Impacts is Flawed.

The MND fails to acknowledge significant air quality impacts associated with the construction and operation of TBIT project. These significant impacts necessitate preparation of an EIR for the project. Moreover, LAWA has failed to identify and require adequate mitigation measures for air quality impacts. These and other flaws in the MND are documented in detail in the technical comments prepared by Dr. J. Phyllis Fox, which are attached hereto as Exhibit B. Dr. Fox's technical report analyzes the modeling done to estimate emissions and points out numerous inconsistencies between the modeling assumptions and the project description, which inconsistencies resulted in an understating of the TBIT project's air quality impacts.

C. The MND Fails to Analyze the Cumulative Impacts of the TBIT Project.

The impacts of this project cannot be considered in isolation from the larger context of proposed changes and additions at LAX. LAWA continues to present projects such as this one and the Terminal 2 In-Line Baggage Screening overhaul as separate from the Master Plan process.[2] This approach understates the impacts of these additional projects. When considered in relation to other LAX projects, the cumulative impacts of the TBIT project require preparation of an EIR. *See* Dr. Fox's technical report attached hereto as Exhibit B.

CEQA requires preparation of an EIR whenever substantial evidence suggests that a project will have a significant effect on the environment. Pub. Res. Code § 21100; CEQA Guidelines § 15002(f). A mitigated negative declaration can be prepared only when "there is no substantial evidence" that the project with mitigation measures incorporated "may have a significant effect on the environment." Pub. Res. Code § 21064.5. Courts use a "fair argument" test to determine whether an EIR should be prepared: "whenever substantial evidence supports a fair argument that a proposed project may have a significant effect on the environment" the responsible public agency *must* prepare an EIR. *Laurel Heights Improvement Assoc. of San Francisco, Inc. v. Regents of the Univ. of Cal.*, 6 Cal.4th 1112, 1123 (1993) (internal citations omitted). This highly protective standard weighs decidedly in favor of preparing an EIR.

CEQA also sets out the requirements for cumulative impact considerations. Cumulative impacts are "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." CEQA Guidelines § 15355. If the "incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects," CEQA mandates a finding of significance and, therefore, preparation of an EIR. Pub. Res. Code § 21083(b)(2); CEQA Guidelines § 15065(c). Under CEQA, an EIR must be prepared even when an individual project's impacts are not significant if, when considered in the context of other past, current or future projects, its effects are cumulatively considerable. Given this framework, an EIR should be prepared for the TBIT project because a fair argument can be made that its cumulative effects are environmentally significant.

In the MND, LAWA acknowledges that the cumulative impacts of the project are potentially significant when considered in conjunction with the Master Plan. MND at IS-11. LAWA's explanation of its "potentially significant" cumulative impacts determination

[2] *See* June 22, 2004 comment letter "Negative Declaration re: Terminal 2 In-Line Baggage Project, Case No. AD-317-04" for more comments about this project.

essentially dismisses its own finding of potential significance by suggesting that the temporal overlap between the TBIT project and projects associated with the Master Plan will not be significant and, to the extent that the projects do overlap and create cumulative impacts, the contributions to these impacts from the TBIT project are minor relative to the contribution from the Master Plan. MND at B-43, B-44.

This explanation applies too narrow an approach to considering project impacts. The TBIT project should be analyzed as one element of the larger LAX picture, not as a unique project that is unrelated to LAWA's bigger plans for the airport. LAWA's an approach results in a misleading portrayal of small, seemingly insignificant projects rather than a single, large and significant program. Moreover, it is improper for LAWA to ignore cumulative impacts simply because the TBIT project's contributions are smaller than those of the LAX Master Plan. If the cumulative effect of all of the projects is significant, CEQA requires preparation of an EIR.

Under these circumstances, CEQA requires preparation of an EIR unless "revisions in the project plans or proposals [are] made by, or agreed to by, the applicant before the proposed negative declaration and initial study are released for public review [that] would avoid the effects or mitigate the effects to a point where clearly no significant effect on the environment would occur." Pub. Res. Code § 21064.5. LAWA's proposed mitigation measures do not satisfy this requirement.

Only two mitigation measures are offered, and both address solely air quality impacts. No noise, construction, traffic or other mitigation measures are included. Instead, LAWA depends on mitigation measures that might be included in the Master Plan and requirements to create a Haul Route Plan and a Work Traffic Control Plan pursuant to City of Los Angeles, Department of Transportation practices. LAWA cannot legally rely on this kind of deferred mitigation to satisfy the TBIT mitigation requirements. Given the likelihood of significant cumulative impacts resulting from the TBIT project, and the lack of sufficient mitigation measures envisioned to offset them, LAWA cannot approve the TBIT project based on the proposed Mitigated Negative Declaration.

D. LAWA Conducted its Environmental Review for the TBIT Project Too Late and Has Improperly Pre-Committed to that Project.

CEQA requires a lead agency such as LAWA to conduct environmental review for a proposed project "as early as feasible in the planning process to enable environmental considerations to influence project program and design..." CEQA Guidelines § 15004(b). Environmental considerations are to be incorporated into project conceptualization, design and planning. *Id.* An agency may not "take any action which gives impetus to a planned or foreseeable project in a manner that forecloses alternatives or mitigation measures." *Id.*

The CEQA process employed by LAWA for the TBIT project runs afoul of CEQA's mandate of early and meaningful environmental review. By the time LAWA finally prepared its environmental review for the TBIT project it had already invested so much in the design and implementation of the project that it had essentially committed itself to taking the proposed action. As the documents attached hereto as Exhibit D reveal, LAWA has been working on the design and implementation of the TBIT project since 1988, has spent/authorized more than $20 million for planning and design services, and has developed 100 percent complete construction documents for the project. Recently, LAWA actually went so far as to retain a construction management services contractor for the project. All of these activities appear to have inextricably committed LAWA to the TBIT project and have occurred prior to the completion of any environmental review of that project.

Under CEQA, it was improper for LAWA to make these extraordinarily large investments of time and money in the TBIT project before conducting any environmental review. Its massive investment in the project evidences an illegal pre-commitment to implementing a project. This approach improperly relegates CEQA review to afterthought status and all but ensures that the review will provide a post hoc rationalization for the project rather than an objective evaluation. This approach is clearly inconsistent with the requirements of CEQA.

Thank you for your consideration of these comments. Please feel free to contact me if you have any questions.

Very truly yours,

SHUTE, MIHALY & WEINBERGER LLP

E. Clement Shute, Jr.

Attachments: Exhibits A-D

cc: Mayor McDowell and Members of the El Segundo City Council

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Recent research indicates that the health impacts of ozone are more severe than formerly believed and that existing ambient air quality standards are not adequate to protect public health. California has recently reviewed the large body of research on health impacts of ozone and has recommended that the state ozone standard, which is more stringent than federal standards, be lowered and that current air quality should not be degraded from present levels in any air basin that currently attains ambient air quality standards.[7]

The South Coast Air Basin exceeded the national and state 1-hour ozone standard on 32 and 81 days, respectively, in 2002 at most monitoring locations. Some areas exceeded these standards more frequently. Thus, emissions from Project construction and operation will aggravate these exceedances, contributing to a significant impact.

In short, in light of the regional nature of the ozone problem, the failure of the Los Angeles area, including the area in the immediate vicinity of LAX (Master Plan DEIR, Sec. 4.6.3.4), to meet ozone standards and the public health threat presented by ozone pollution, ozone is precisely the type of pollutant that must be analyzed for both its Project-specific and cumulative impacts. Thus, LAWA must prepare an EIR for the Project to fully analyze, disclose to the public and consider mitigation measures to address this important public health problem.

I.C. Cumulative Construction Impacts Are Significant

The MND estimated that construction of the Project would increase emissions of CO by 91 lbs/day; ROC by 51 lb/day; NOx by 60 lb/day, and PM10 by 6 lb/day. (MND, Table 2, p. B-9.) The PM10 emissions are significantly underestimated, as discussed in Comment I.A.3. The MND argues that Project construction would not be cumulatively considerable because daily emissions would fall well below the SCAQMD significance thresholds. (MND, p. B-10.) However, this is not an adequate cumulative impact analysis. As demonstrated below, Project construction would result in cumulatively significant air quality impacts for CO, ROC, NOx, and PM10 when properly analyzed.

A project may have a significant effect on the environment if "the possible effects of a project are individually limited but cumulatively considerable. . . . 'Cumulatively considerable' means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past

[7] California Air Resources Board and Office of Environmental Health and Hazard Assessment, Review of the California Ambient Air Quality Standard for Ozone, Public Review Draft, June 21, 2004.

projects, the effects of other current projects, and the effects of probable future projects." "Cumulative impacts" are defined as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." "Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time." CEQA Guidelines Sec. 15355(a).

"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. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time." *Communities for a Better Environment v. Cal. Resources Agency*, 103 Cal. App. 4th 98, 117 (2002). A legally adequate "cumulative impacts analysis" views a particular project over time and in conjunction with other related past, present, and reasonably foreseeable probable future projects whose impacts might compound or interrelate with those of the project at hand.

The MND's cumulative impact analysis for air quality impacts is merely one short paragraph, in which the document concludes that since the Project itself will not have significant air quality impacts, then its cumulative impacts will also be insignificant. (MND, p. B-10.) In other words, the MND contains no cumulative impact analysis at all.

The MND cumulative impact analysis is deficient for at least three reasons. First, there is no cumulative impacts analysis at all. Second, as discussed in detail above, Project construction will have significant air quality impacts – therefore, the basis for the MND's failure to consider cumulative impacts (*i.e.* that the Project will not have significant impacts) is erroneous. Third, even if the Project had "de minimis" air quality impacts, a cumulative impacts analysis would still be required. In *Communities for a Better Environment v. Calif. Resources Agency*, 103 Cal. App. 4th at 118, the court struck down an attempt by the California Resources Agency to create a "de minimis" exception to CEQA's cumulative impacts analysis requirement. The court held that even if a Project had only de minimis impacts, it may still have a significant cumulative impact when viewed in conjunction with other past, present and reasonably foreseeable future projects. The court explained that the de minimis approach:

> would turn cumulative impact analysis on its head by diminishing the need to do a cumulative impact analysis as the cumulative impact problem worsens. The reason for this incongruity is that the de minimis approach of Guidelines sections 15064(i)(4) and 15130(a)(4) compares the incremental effect of the proposed project against the collective cumulative impact of all relevant projects. This comparative approach is contrary to CEQA section 21083 and to the Guidelines section 15355 definition of cumulative impacts, set forth above; this approach also contravenes CEQA case law.

Communities for a Better Environment v. Calif. Resources Agency, 103 Cal. App. 4th at 118. Thus, the court struck down the provisions as revised by the Resources Agency. The Court held that "the guiding criterion on the subject of cumulative impact is whether any additional effect caused by the proposed project should be considered significant given the existing cumulative effect." *Id.* at 118. The *CBE* court agreed with the *Kings County* court that "The relevant question to be addressed in the EIR is not the relative amount of precursors emitted by the project when compared with preexisting emissions, but whether any additional amount of precursor emissions should be considered significant in light of the serious nature of the ozone problems in this air basin." *Id.*

The MND makes absolutely no attempt to consider the Project's impact in conjunction with emissions from other past, present and reasonably foreseeable future projects. Portions of the LAX Master Plan would be under construction and/or operational over the same time frame that this Project would be constructed and operated. CEQA prohibits the LAWA from viewing this Project in a vacuum. The emissions from this Project will be combined with Master Plan emissions plus emissions from numerous other projects currently underway or being proposed throughout the region, e.g., low sulfur diesel project at refineries, new residential and commercial construction. CEQA requires a cumulative impacts analysis to analyze these combined impacts and to consider alternatives and mitigation measures. Without such analysis, the MND fails to perform its public information purpose.

The cumulative air quality impacts of this Project are significant. Construction would occur over the period 2005 through 2008. (MND, p. A-30.) The emissions from this Project plus those from only constructing preferred Alternative D of the LAX Master Plan (MND, p. A-28) compared to the SCAQMD's CEQA significance thresholds are as follows:

Table 1
Cumulative Construction Emissions in 2005
(lb/day)

Pollutant	Project Construction (MND, Table 2)	LAX Master Plan Alt. D[a]	Total	SCAQMD CEQA Significance Threshold
CO	91	5,476	5,567	550
ROC	51	847	898	75
NOx	60	11,203	11,263	100
SOx	<1	31	31	150
PM10	6	3,265	3,271	150

[a] LAX Master Plan Supplement to Draft EIS/EIR, Table S4.6-21.[8]

This table shows that the increase in emissions of CO, ROC, NOx, and PM10 from constructing this Project, starting in early 2005 (MND, p. A-30), plus the emissions from constructing Alternative D of the LAX Master Plan in the same year, would exceed the SCAQMD CEQA significance thresholds relied on in the MND, Table 2. Cumulative construction emissions would also be significant if Alternatives A, B, or C were included in Table 1 instead of Alternative D.

Thus, emissions from constructing the Project would be cumulatively significant, requiring that the increase in emissions from the Project be mitigated. Generally, construction emissions, especially NOx, cannot be mitigated to insignificance. Thus, an EIR is required to analyze the cumulative impacts of the Project together with other past, present and reasonably foreseeable future projects in the region and to mitigate the significant impacts to the extent feasible.

These emissions are highly significant because the region already exceeds state and federal health-based standards for ozone, PM10, and CO. The region is classified as in "extreme" nonattainment with ozone standards and serious nonattainment with CO and PM10 standards. ROC and NOx are ozone precursors. The emissions of the Project will combine with emissions from numerous other Projects to exacerbate regional ozone, CO, and PM10 problems. This impact must be analyzed and mitigation measures proposed in an EIR.

[8] LAX Master Plan Supplement to Draft EIS/EIR, Table S4.6-21.

If the Project were to occur at the same time as construction of the LAX Master Plan, the MND requires that the Project be coordinated through LAWA staff and the Ground Transportation/Construction Coordination Office "to consolidate construction activities and to schedule heavy duty outdoor construction activities at different times so as to reduce the amount of overlap of outdoor construction activities to the extent feasible." (MND, Mitigation Measure 2, p. B-46.) This does not mitigate the significant cumulative impacts calculated in Table 1 for at least four reasons.

First, cumulative impacts occur from past, present, and future projects, not just projects that occur simultaneously. Thus, even if it were possible to schedule construction activities so there was no overlap whatsoever, which is unlikely, cumulative impacts would still occur because the subject air quality impacts are regional in nature and delayed in time and space, e.g., ozone forms downwind, after NOx and ROC are emitted.

Second, this measure does not commit to mitigating significant impacts to less than significance, but only "to the extent feasible." An EIR must be prepared unless the impacts are mitigated to less than significance.

Third, the Master Plan is not the only cumulative project that would be constructed at the same time as the Project.

Fourth, the MND presents no evidence that it is feasible to schedule the required activities so there is no overlap. Scheduling is clearly an issue since the mitigation measure itself acknowledges that this measure can only be implemented to the "extent feasible" and elsewhere, the MND admits that it must perform some construction activities for the much smaller Project itself during the second and third shifts to avoid interference issues with airport operations.

The MND also includes a few other air quality mitigation measures to reduce exhaust emissions from on-road and off-road mobile equipment. (MND, p. B-45 – B-46.) These are:

- Have construction employees work during off-peak hours
- Prohibit construction vehicle idling in excess of 10 minutes
- Specify combination of construction equipment using cleaner burning diesel fuel and exhaust emissions controls

- Specify a combination of electricity from power poles and portable diesel- or gasoline fueled generators using cleaner burning diesel fuel and exhaust emission controls.
- Suspend use of all construction equipment during a second-stage smog alert
- Utilize construction equipment having the minimum practical engine size
- Require that all construction equipment be properly maintained
- Prohibit tampering to increase horsepower
- Designate a person or persons to ensure all construction mitigation measures are implemented.

These mitigation measures would not reduce the cumulatively significant construction emission impacts to a less than significant level.

First, most are assumed in the Urbemis model used to calculate construction emissions. Some, for example, reducing excess idling, using the minimum practical size engine and maintaining construction equipment, are routinely performed by the contractor to minimize costs and are assumed in the emission factors used to estimate emissions. The calculations do not, for example, assume over-sized engines, assume that engine tampering has inflated horsepower, or include diesel generators, presumably because electricity is available at the site.

Second, the measures that require a combination of equipment using cleaner burning diesel fuel and exhaust emission controls are too general and nonspecific to implement. These measures do not specify the number of equipment subject to the requirement, the types of controls that would be required, an emission reduction target, nor the definition of "cleaner burning diesel fuel." Cleaner burning compared to what? The construction calculations already assume CARB diesel. Which exhaust emission controls? Some reduce a tiny percent of the pollutants of concern, others much more.

Third, suspending operations on smog alert days would do nothing to reduce emissions on other days.

Finally, there are many additional mitigation measures that could and should be required. Even if all feasible mitigation measures were required, it is unlikely that NOx emissions from Project construction could be reduced to less than significance. Thus, an EIR must be prepared to assure that all feasible mitigation is identified, evaluated, and required

I.D Feasible Diesel Exhaust Control Measures

The analysis in Comment I.A indicates that emissions of ROC and NOx from the Project itself are significant. Further, Comment I.C indicates that emissions of CO, ROC, NOx, and PM10 from constructing the Project are cumulatively significant. These pollutants arise from combustion of diesel and gasoline in construction equipment. Thus, the Project's contribution to these emissions must be mitigated.

All feasible mitigation must be imposed to reduce the significant cumulative CO, ROC, NOx, and PM10 impacts from equipment exhaust to a less than significant level. There are numerous feasible mitigation measures that should be evaluated and required in an EIR to address these significant cumulative construction emission impacts.

The CEQA guidelines of the South Coast Air Quality Management District (SCAQMD 1993, pp. 11-3, 11-4, 11-13 to 11-15) and other California air districts contain feasible mitigation measures for construction exhaust emissions that are routinely required in EIRs. These include the Bay Area Air Quality Management District (BAAQMD 1999, pp. 12-14), the Ventura County Air Pollution Control District (VCAPCD 2003, pp. 7-2 to 7-4),[9] the San Luis Obispo County Air Pollution Control District (SLOCAPCD 2003, Sec. 6.3.1),[10] the Sacramento Metropolitan Air Quality Management District (SMAQMD 1994, pp. 10, 20),[11] the Santa Barbara County Air Pollution Control District (SBCAPCD 2002, pp. 16-18),[12] Butte County Air Quality Management District (BCAQMD 1997),[13] the Yolo-Solano Air Quality Management District (YSAQMD 1996, Appx. D),[14] the

[9] Ventura County Air Pollution Control District (VCAPCD), Ventura County Air Quality Assessment Guidelines, April 1980, Revised October 2003.

[10] San Luis Obispo Air Pollution Control District ("SLOAPCD"), CEQA Air Quality Handbook, A Guide for Assessing the Air Quality Impacts for Projects Subject to CEQA Review, April 2003.

[11] Sacramento Metropolitan Air Quality Management District ("SMAQMD"), Air Quality Thresholds of Significance, 1994.

[12] Santa Barbara County Air Pollution Control District, Environmental Review Guidelines for the Santa Barbara County Air Pollution Control District, October 19, 1995, Revised November 16, 2000.

[13] Butte County Air Quality Management District ("BCAQMD"), Indirect Source Review Guidelines, March 20, 1997.

[14] Yolo-Solano Air Quality Management District, Air Quality Handbook, May 1996 (Construction mitigation is identical to SMAQMD).

Monterey Bay Unified Air Pollution Control District (MBUAPCD 2002),[15] and the San Joaquin Valley Air Pollution Control District (SJVAPCD 1/10/02).[16] All of these measures should be discussed in an EIR. These agency guidelines are feasible and therefore should be considered for adoption under CEQA Guidelines §§ 15126.4, 15091. Examples of such feasible mitigation measures are listed below:

- Limit the hours of operation of heavy-duty equipment and/or the amount of equipment in use. (SJVAPCD)
- Replace fossil-fueled equipment with electrically driven equivalents (SJVAPCD)
- Curtail construction during period of high ambient pollutant concentrations; this may include ceasing of construction activity during the peak-hour of vehicular traffic on adjacent roadways. (SJVAPCD)
- Implement activity management, e.g., rescheduling activities to reduce short-term impacts. (SJVAPCD)
- Configure construction parking to minimize traffic interference. (SCAQMD)
- Provide temporary traffic control during all phases of construction activities to improve traffic flow. (SCAQMD)
- Schedule construction activities that affect traffic flow to off-peak hours. (SCAQMD)
- Develop a trip reduction plan to achieve a 1.5 AVR for construction employees. (SCAQMD)
- Implement a shuttle service to and from retail services and food establishments during lunch hours. (SCAQMD)
- Develop a construction traffic management plant that includes rerouting construction trucks off congest streets, consolidating truck deliveries, providing dedicated turn lanes for movement of construction trucks and equipment on- and off-site. (SCAQMD)
- Prohibit truck idling in excess of 2 minutes. (SCAQMD)
- Use methanol-fueled pile drivers. (SCAQMD)

[15] Monterey Bay Unified Air Pollution Control District ("MBUAPCD"), CEQA Air Quality Guidelines, revised September 2002.

[16] San Joaquin Valley Air Pollution Control District (SJVAPCD), Guide for Assessing and Mitigating Air Quality Impacts, Adopted August 20, 1998, Revised January 10, 2001.

- Use electricity from power poles rather than temporary diesel power generators. (SCAQMD)
- Use biodiesel,[17] PuriNOx or equivalent alternative fuels.
- Fuel all off-road and portable diesel powered equipment, including but not limited to bulldozers, graders, cranes, loaders, scrapers, backhoes, generator sets, compressors, auxiliary power units, with ARB-certified diesel fuel (non-taxed version suitable for use off-road.) (SLOCAPCD)
- Install diesel oxidation catalysts (DOC), catalyzed diesel particulate filters or other District approved emission reduction retrofit devices. (SLOCAPCD, SBCAPCD, MBUAPCD)
- Maximize to the extent feasible, the use of diesel construction equipment meeting the ARB's 1996 or newer certification standard for off-road heavy-duty diesel engines. (SLOCAPCD)
- CARB-certified engines[18] in construction fleet (SCAQMD, ADEQ)[19]
- Use alternative diesel engines, including turbocharged engines with or without aftercooler or CTS Version I or II rebuilds. (MBUAPCD)
- Construction equipment operating on-site shall be equipped with two to four degree engine timing retard or precombustion chamber engines. (SBCAPCD)

[17] For equipment with engines built in 1994 or later, use B100 fuel, which is 100 percent biodiesel fuel. In pre-1994 engines, use B20 fuel (a mixture of 20 percent biodiesel and 80 percent fossil fuel). If B20 is used, the fossil diesel component should be CARB low-sulfur fuel (less than 15 ppmw).

[18] Both the U.S. EPA and CARB have established emission limits on new off-road engines. CARB-certified off-road engines are engines that are 3 years old or less at the time of use and which comply with these new low emission limits. This equipment is widely available in the construction fleet and specified as a control measure in the BAAQMD's Revised Ozone Attainment Plan.

[19] Both the U.S. EPA and CARB have established emission limits on new off-road engines. CARB certified off-road engines are engines that are 3 years old or less at the time of use and which comply with these new low emission limits. This equipment is widely available in the construction fleet. Construction exhaust emissions of all criteria pollutants could be substantially reduced by requiring the use of at least 20% CARB-certified off-road engines in the mix of construction equipment operating on-site, or alternatively, setting a NOx, ROG, and/or PM10 emission reduction goal for the construction fleet. This measure has been required by the SMAQMD and other agencies to mitigate construction emissions. A similar measure has been adopted by the Texas Natural Resource Conservation Commission ("TNRCC") for the Dallas/Fort Worth and Houston-Galveston areas. (Rennie et al, 2001.) The Arizona Department of Environmental Quality ("ADEQ") has also recommended this measure to address air quality problems in the Phoenix area. (ADEQ 11/9/00, pp. 19-24.)

- Use equipment that has Caterpillar pre-chamber diesel engines. (SLOCAPCD)
- Locally posted and advertised number to report gross-emitting vehicles. (ADEQ)
- Snap acceleration test for heavy-duty diesel vehicles. (ADEQ)
- Require pre-1988 heavy-duty diesel commercial vehicles to meet 1988 federal emission standards. (ADEQ)
- Construction worker trips should be minimized by requiring carpooling and by providing for lunch onsite. (SBCAPCD)
- Use electricity from power poles rather than temporary diesel power generators and electrify equipment where feasible. (SCAQMD, SLOCAPCD)
- During smog season, the construction period should be lengthened to minimize the number of vehicles and equipment operating at the same time. (VCAPCD)
- Emission offsets if ROG or NOx emissions exceed 6.0 tons/quarter. (SLOCAPCD)
- Use ultra low sulfur diesel (15 ppm).[20] (CEC)[21]
- The project shall demonstrate that the heavy-duty (> 50 horsepower) off-road vehicles to be used in the construction project, including owned, leased and subcontractor vehicles, will achieve a project wide fleet-average 20% NOx reduction and 45% particulate reduction1 compared to the most recent CARB fleet average at time of construction. (SMAQMD)
- The project shall ensure that emissions from all off-road diesel powered equipment used on the project site do not exceed 40% opacity for more

[20] The U.S. EPA and CARB have adopted stringent fuel regulations that limit the sulfur content of on-road diesel fuel to 500 ppm at the present. This limit will be lowered to 15 ppm in June 2006. However, some California refineries, including the Equilon Refinery, in Martinez, and the Arco Refinery in the South Coast, already comply and could supply 15 ppm diesel fuel for Project construction. CARB diesel, which is not required for off-road equipment, and 15-ppm sulfur, ultra-low-sulfur diesel, are currently used in vehicle fleets and have been widely required as CEQA mitigation. These fuels not only reduce sulfur, but also NOx, CO, and PM10 and could be adopted here to further reduce construction exhaust emissions, especially significant NOx emissions.

[21] The California Energy Commission ("CEC") has required the use of ultra low sulfur fuel where available. The CEC follows a CEQA-equivalent process in licensing of new power plants larger than 50 MW. Ultra-low-sulfur diesel was required in the recently decided cases of the Three Mountain Power Project, the Huntington Beach Generating Station Retool Project, and others. See Final Commission Decisions at www.energy.ca.gov.

than 3 minutes in any one hour. Any equipment found to exceed 40% opacity (or Ringelmann 2.0) shall be repaired immediately, and district shall be notified within 48 hours of identification of non-compliant equipment. A visual survey of all in-operation equipment shall be made at least weekly, and a monthly summary of the visual survey results shall be submitted throughout the duration of the project, except that the monthly summary shall not be required for any 30-day period in which no construction activity occurs. The monthly summary shall include the quantity and type of vehicles surveyed as well as the dates of each survey. The district and/or other officials may conduct periodic site inspections to determine compliance. (SMAQMD)

While some of these measures are similar to those proposed in the MND, the differences are sufficient to warrant listing them here. For example, the MND proposes suspending the use of construction equipment during a second-stage smog alert (MND, p. B-45), while the comparable measure from the above list proposes curtailing construction during periods of high ambient pollutant concentrations, including ceasing construction activity during the peak-hour of vehicular traffic on adjacent roadways. Similarly, the MND proposes limiting idling in excess of 10 minutes while the comparable SCAQMD measures limits idling in excess of 2 minutes.

These and other measures are routinely required as CEQA mitigation. See, for example, the construction exhaust mitigation measures for the NASA Ames Development Plan,[22] for the Stanford University Community Plan,[23] and for Boronda Crossing.[24] The City of San Diego, for example, required that exhaust emissions from equipment used to construct the Padres Ballpark and ancillary projects be reduced by 95% using a range of measures, including alternative fuels and post-combustion controls. The SMAQMD and the U.S. EPA also routinely recommend mitigation for construction exhaust emissions. Other agencies have also required the use of low-sulfur diesel fuels in construction equipment as CEQA mitigation. The El Toro Reuse IS/MND[25] requires the

[22] NASA Ames Research Center, NASA Ames Development Plan, Draft Programmatic EIS, November 2001.

[23] Santa Clara County, DEIR Stanford University Draft Community Plan and General Use Permit Application, June 23, 2000.

[24] City of Salinas, Boronda Crossing, General Plan Amendment, Zoning Change, Salinas Auto Center Precise Plan Amendment, Draft Subsequent Environmental Impact Report, July 2003

[25] County of Orange, Draft Environmental Impact Report No. 573 for the Civilian Reuse of MCAS El Toro and the Airport System Master Plan for John Wayne Airport and Proposed Orange County International Airport, Draft Supplemental Analysis, April 2001.

exclusive use of 15 ppm diesel in "all on-site construction equipment and all construction material delivery trucks."

The applicant must prepare and circulate an EIR that includes sufficient construction exhaust mitigation to reduce the Project's contribution to the cumulatively significant emissions in Table 1 to a less than significant level. If it is not feasible to reduce these impacts to a less than significant level, the EIR should include a full list of all feasible construction exhaust mitigation measures and a discussion of any measures that are eliminated based on feasibility or other reasons.

5.E Feasible Fugitive PM10 Mitigation Measures

The PM10 emissions from the Project are cumulatively significant when all projects that will be built over the same time frame in the general vicinity of LAX are included in the analysis. The majority of these emissions arise from fugitive dust. (MND, Appx. A.) Thus, an EIR must be prepared to impose all feasible fugitive dust PM10 mitigation measures to reduce this impact to a less than significant level.

The SCAQMD has sponsored research, passed regulations (*e.g.*, Rule 403),[26] and published guidelines that identify best management practices for controlling fugitive dusts at construction sites. The *Rule 403 Implementation Handbook*[27] contains a comprehensive list of such measures.

Clark County, Nevada, has also sponsored research, passed regulations (Rule 94), and published best management practices for controlling fugitive dust from construction activities.[28] Clark County's *Construction Activities Notebook* contains a comprehensive list of best management practices.[29] Similarly, Arizona has developed guidance to control fugitive PM10 emissions. (ADEQ 6/5/01[30])

[25] South Coast Air Quality Management District, Revised Final Staff Report for Proposed Amended Rule 403, Fugitive Dust and Proposed Rule 1186, PM10 Emissions from Paved and Unpaved Roads, and Livestock Operations, February 14, 1997.

[27] South Coast Air Quality Management District, Rule 403 Implementation Handbook, January 1999.

[28] P.M. Fransioli, PM10 Emissions Control Research Sponsored by Clark County, Nevada, Proceedings of the Air &Waste Management Association's 94th Annual Conference & Exhibition, Orlando, FL, June 24-28, 2001

[29] Clark County Department of Air Quality Management, Construction Activities Dust Control Handbook, March 18, 2003.

[30] Arizona Department of Environmental Quality (ADEQ), Air Quality Exceptional and Natural Events Policy PM10 Best Available Control Measures, June 5, 2001.

The CEQA guidelines of California air districts, including the SCAQMD, also contain feasible mitigation measures for fugitive dust that are routinely required in EIRs. The measures identified in these agency guidelines are feasible and therefore should be considered for adoption here. Examples of such feasible mitigation measures are listed below:

- Limit traffic speeds on unpaved roads to 15 mph
- Install sandbags or other erosion control measures to prevent silt runoff to public roadways from site with a slope greater than 1 percent (SJVAPCD) .
- Install wheel washers for all exiting trucks, or wash off all trucks and equipment leaving the site (SJVAPCD)
- Install wind breaks at windward side(s) of construction areas (SJVAPCD)
- Suspend excavation and grading activity when winds exceed 20 mph (SJVAPCD)
- Limit area subject to excavation, grading and other construction activity at any one time (SJVAPCD)
- For backfilling during earthmoving operations, water backfill material or apply dust palliative to maintain material moisture or to form crust when not actively handling; cover or enclose backfill material when not actively handling; mix backfill soil with water prior to moving; dedicate water truck or large hose to backfilling equipment and apply water as needed; water to form crust on soil immediately following backfilling; and empty loader bucket slowly; minimize drop height from loader bucket. (CCHD)[31]
- During clearing and grubbing, prewet surface soils where equipment will be operated; for areas without continuing construction, maintain live perennial vegetation and desert pavement; stabilize surface soil with dust palliative unless immediate construction is to continue; and use water or dust palliative to form crust on soil immediately following clearing/grubbing. (CCHD)

[31] The following acronyms are used in this listing of mitigation measures: ADEQ = Arizona Department of Environmental Quality; BCAQMD = Butte County Air Quality Management District; CCHD = Clark County (Nevada) Health Department; MBUAPCD = Monterey Bay Unified Air Pollution Control District; SBCAPCD = Santa Barbara County Air Pollution Control District; SJVUAPCD = San Joaquin Valley Unified Air Pollution Control District; SLOCAPCD = San Luis Obispo County Air Pollution Control District.

- While clearing forms, use single stage pours where allowed; use water spray to clear forms; use sweeping and water spray to clear forms; use industrial shop vacuum to clear forms; and avoid use of high pressure air to blow soil and debris from the form. (CCHD)
- During cut and fill activities, prewater with sprinklers or wobblers to allow time for penetration; prewater with water trucks or water pulls to allow time for penetration; dig a test hole to depth of cut to determine if soils are moist at depth and continue to prewater if not moist to depth of cut; use water truck/pull to water soils to depth of cut prior to subsequent cuts; and apply water or dust palliative to form crust on soil following fill and compaction. (CCHD)
- For large tracts of disturbed land, prevent access by fencing, ditches, vegetation, berms, or other barriers; install perimeter wind barriers 3 to 5 feet high with low porosity; plant perimeter vegetation early; and for long-term stabilization, stabilize disturbed soil with dust palliative or vegetation or pave or apply surface rock. (CCHD)
- In staging areas, limit size of area; apply water to surface soils where support equipment and vehicles are operated; limit vehicle speeds to 15 mph; and limit ingress and egress points. (CCHD)
- For stockpiles, maintain at optimum moisture content; remove material from downwind side; avoid steep sides or faces; and stabilize material following stockpile-related activity. (CCHD)
- To prevent trackout, pave construction roadways as early as possible; install gravel pads; install wheel shakers or wheel washers, and limit site access. (CCHD, SLOCAPCD)
- Where feasible, use bedliners in bottom-dumping haul vehicles. (Rule 403 Handbook)
- Grade each phase separately, timed to coincide with construction phase or grade entire project, but apply chemical stabilizers or ground cover to graded areas where construction phase begins more than 60 days after grading phase ends. (Rule 403 Handbook)
- Following the addition of materials to, or the removal of materials from, the surface of outdoor storage piles, said piles shall be effectively stabilized of fugitive dust emissions utilizing sufficient water or chemical stabilizer/suppressant. (ADEQ)
- During initial grading, earth moving, or site preparation, projects 5 acres or greater may be required to construct a paved (or dust palliative treated) apron, at least 100 ft in length, onto the project site from the adjacent site if applicable. (BCAQMD)

- Post a publicly visible sign with the telephone number and person to contact regarding dust complaints. This person shall respond and take corrective action within 24 hrs. (BCAQMD, CCHD)
- Prior to final occupancy, the applicant demonstrates that all ground surfaces are covered or treated sufficiently to minimize fugitive dust emissions. (BCAQMD)
- Gravel pads must be installed at all access points to prevent tracking of mud on to public roads. (SBCAPCD)
- Prior to land use clearance, the applicant shall include, as a note on a separate informational sheet to be recorded with map, these dust control requirements. All requirements shall be shown on grading and building plans. (SBCAPCD, SLOCAPCD)
- All roadways, driveways, sidewalks, etc., to be paved should be completed as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used. (SLOCAPCD)
- Barriers with 50 percent or less porosity located adjacent to roadways to reduce windblown material leaving a site. (Rule 403 Handbook)
- Prohibit all grading activities during periods of high wind (over 15 mph). (MBUAPCD)
- Pave all roads on construction sites. (MBUAPCD)
- Replant vegetation in disturbed areas as quickly as possible. (BAAQMD)
- Permanent dust control measures in an approved project revegetation and landscape plan should be implemented as soon as possible following completion of any soil disturbing activities. (SLOAPCD)
- Exposed ground areas that are planned to be reworked at dates greater than 1 month after initial grading should be sown with a fast-germinating native grass seed and watered until vegetation is established. (SLOPACD)
- Require a dust control plan for earthmoving operations. (ADEQ)

All of these measures are feasible and various combinations of them are routinely required elsewhere to reduce fugitive PM10 emissions. See, for

cancer.[35] The exhaust of vehicles contains a large number of toxic compounds, including dioxin, benzene, formaldehyde, and 1,3-butadiene, all of which cause cancer. Measurements made in vehicles in Los Angles detected concentrations of benzene ranging from 10 to 22 $\mu g/m^3$.[36] These concentrations of benzene alone are high enough to cause a significant cancer risk in workers in the outdoor concessions, assuming a 40 hour workweek and a 20 year job duration. The resulting cancer risk would be 19 to 42 excess cancers per million exposed,[37] which exceeds the significance thresholds of 1 in one million. Therefore, the Project would cause a significant public health impact by exposing increased numbers of patrons and workers to toxic vehicle exhaust fumes.

[35] World Health Organization, International Agency for Research on Cancer, IARC Monographs on the Evaluation of Carcinogenic Risks to Humans, Diesel and Gasoline Engine Exhausts and Some Nitroarenes, IARC Monograph, v. 46, 1989.

[36] Charles Rodes and others, Main Study Report: Measuring Concentrations of Selected Air Pollutants Inside California Vehicles, Report Prepared for CARB, December 28, 1998, Table 5-1.

[37] Cancer risk to workers: $(2.9 \times 10^{-5}/ug/m^3)(10\ ug/m^3)(20\ yrs)(40\ hrs/wk)(50\ wk/yr)/(70\ yrs)(8760\ hr/yr) = 18.9 \times 10^{-6}$

EXHIBIT C

FAL00003

News

NEWS RELEASE

MAYOR HAHN AND CONGRESSWOMAN ROYBAL-ALLARD ANNOUNCE HOMELAND SECURITY DEPARTMENT AGREEMENT TO PROVIDE $256.5 MILLION FOR INSTALLING PERMANENT EXPLOSIVE DETECTION BAGGAGE SCREENING SYSTEMS AT LOS ANGELES AIRPORTS

9/2/03

CONTACT : Julie Wong,
Mayor's Office
(213) 978-0741
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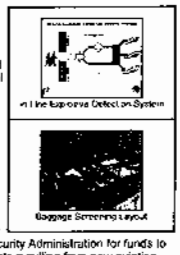
Federal Grant Is Largest Received In LAX History



(Los Angeles, California – September 2, 2003) Los Angeles Mayor Jim Hahn and U.S. Congresswoman Lucille Roybal-Allard today announced that Mayor Hahn and the U.S. Department of Homeland Security (DHS) have signed a Letter of Intent to reimburse Los Angeles World Airports (LAWA) $256,467,000 to defray the cost of installing permanent explosive detection systems integrated in-line with the checked baggage conveyor systems at Los Angeles International Airport (LAX) and Ontario International Airport (ONT).

The federal reimbursement represents 75 percent of the total costs at both airports estimated at $313,408,000 and $28,548,000 for LAX and ONT, respectively. The LAX portion of the reimbursement ($235,056,000) is the largest federal grant received for a single project at LAX in the airport's 75-year history.

"This agreement gives Los Angeles World Airports much-needed resources to meet the security challenges our airports face in the post-Sept. 11 world," said Mayor Hahn, who, as chairman of the U.S. Conference of Mayors Airport Safety and Security Task Force, lobbied senior DHS officials and its Transportation Security Administration for funds to assist LAX and ONT – as well as all other U.S. airports – on capital improvements resulting from new aviation security laws passed after the terrorist attacks of Sept. 11, 2001.

LAX and ONT serve more than a combined 83 million passengers annually, generating over $65 billion in economic activity, and providing nearly 470,000 jobs.

"These funds will allow our City's airports to improve security measures with state-of-the-art, in-line explosive detection systems at the two airports and complement my Master Plan efforts to make LAX the safest, most secure airport in America," Mayor Hahn added.

Congresswoman Lucille Roybal-Allard, representing California's 34th District and a member of the House Appropriations Committee's Subcommittee on Homeland Security, said, "These grants provide critically needed federal funds to increase security in our region. With this money, local officials can lessen the vulnerability of aviation transportation and increase passenger safety at our airports. By safeguarding LAX and Ontario, this project will protect two critical links in our regional economy." Congresswoman Roybal-Allard used her position on the Subcommittee on Homeland Security to urge the Administration to allocate these much-needed funds to the Los Angeles airports.

Los Angeles Board of Airport Commissioners Ted Stein stated, "We are committed to ensuring LAX and ONT are the safest and most secure airports in America." He welcomed the news, adding that LAWA has expended a combined $100.4 million to date in Sept. 11-related security costs at the two airports, primarily for additional law enforcement personnel and explosive detection canines, increased insurance coverage, security equipment and supplies, and capital improvements to the airports' perimeter fencing, surveillance systems and passenger terminals. However, he noted that the federal government mandating new security measures has to date

reimbursed LAWA only $15.6 million for these costs.

The Letter of Intent is the result of an agreement negotiated between LAWA and the TSA outlining the federal agency's intent to reimburse LAWA, from TSA's future appropriations over the next four years, 75 percent of LAWA's cost of capital improvements to install the in-line explosive detection systems, while LAWA agrees to cover the remaining 25 percent. LAWA agrees to initially fund the projects at both airports. The TSA will reimburse LAWA $55 million for federal Fiscal Year 2004, and $67,155,666.67 for each of the three subsequent years. These figures do not include the cost of the explosive detection equipment, which TSA will purchase, install and test, according to a schedule agreed upon with LAWA.

Permitted capital improvement costs include: preliminary site preparations, structural reinforcement to support new equipment, electrical work, heating and air conditioning and other environmental improvements, as well as conveyor belts and tables, and physical enhancements necessary to operate an in-line system.

LAX Terminals 1 through 8 and ONT will be completed within 24 months. LAWA officials said. The Tom Bradley International Terminal at LAX is expected to be completed within 36 months.

LAX was the only major U.S. airport to meet the Dec. 31, 2002, federal mandate to electronically screen 100 percent of all checked baggage. The interim solution currently operating in the passenger terminals includes nearly 60 explosive detection systems and 270 explosive trace detection machines, almost all of which are located in the passenger terminal ticketing lobbies.

As the world's busiest origin-and-destination airport, more passengers and checked baggage are screened at LAX than any other airport in the world. On average, more than 150,000 bags are checked daily at the airport - more bags than any other U.S. airport.

FAL00003

EXHIBIT D

FAL00003

ITEM 18. RESOLUTION NO. 22416 - APPROVAL TO NEGOTIATE A CONTRACT WITH PARSONS TRANSPORTATION GROUP, AS THE BEST QUALIFIED FIRM, TO PROVIDE CONSTRUCTION MANAGEMENT SERVICES FOR THE PROJECT ENTITLED "TBIT INTERIOR IMPROVEMENTS" AT LOS ANGELES INTERNATIONAL AIRPORT

RECOMMENDATION: Adoption of the Report requesting that the Board of Airport Commissioners approve negotiation of a Contract with Parsons Transportation Group, as the best qualified firm, to provide construction management services for the project entitled "TBIT Interior Improvements" at Los Angeles International Airport, find that this work can be performed more economically or feasibly by an independent contractor than by City employees, and authorize the Executive Director to negotiate a Contract with Parsons Transportation Group. (Rick Wells, 310-646-7116)

RECOMMENDATION APPROVED

Moved by: Commissioner Voss
Seconded by: Commissioner Vergara

Ayes: Commissioners Contreras, Stanley, Vergara, Voss and Zifkin
Nays: None
Absent: Commissioner Petersen
Discussion: None

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Los Angeles World Airports

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BOARD OF AIRPORT COMMISSIONERS

Meeting Date: 7-6-04

APPROVED BY: Division Head – Intissar Durham

REVIEWED BY: Deputy Executive Director- Rick Wells

REVIEWED BY: Chief Operating Officer – Paul Green

CAO Report [ ] Completed [ ] Pending [X] N/A

CITY ATTORNEY:

EXECUTIVE DIRECTOR:

Reviewed by:
Budget 5/18/04
Environmental Mgt. 5/18/04
Procurement 5/17/04

SUBJECT:

APPROVAL TO NEGOTIATE A CONTRACT WITH PARSONS TRANSPORTATION GROUP, AS THE BEST QUALIFIED FIRM, TO PROVIDE CONSTRUCTION MANAGEMENT SERVICES FOR THE PROJECT ENTITLED "TBIT INTERIOR IMPROVEMENTS" AT LOS ANGELES INTERNATIONAL AIRPORT (LAX).

RECOMMENDATION:

Management RECOMMENDS that the Board of Airport Commissioners:

1. ADOPT the staff report.
2. DETERMINE that this project is exempt from the California Environmental Quality Act pursuant to Article II, Section 2 (f) of the amended Los Angeles City CEQA Guidelines.
3. FIND that this work can be performed more economically or feasibly by an independent contractor than by City employees.
4. AUTHORIZE the Executive Director to negotiate a contract with Parsons Transportation Group for the project entitled "TBIT Interior Improvements" at Los Angeles International Airport (LAX).

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DISCUSSION:

1. Prior Related Actions

The Tom Bradley International Terminal (TBIT) was originally constructed in 1984 and is currently handling a number of passengers that is at twice its design capacity. With continued growth, the level of service provided to the passengers utilizing this facility has degraded. In order to provide a complete upgrade of the interior spaces at TBIT, Los Angeles World Airports (LAWA) commenced a project to renovate, develop and/or upgrade the following: airline club rooms, departures lobby, departures concourses, arrivals concourses, meeters-greeters areas, in-transit lounge, in-bound and out-bound baggage systems (including In-Line EDS equipment), bus holdrooms, the building's aging paging system, among other interior improvements. The proposed renovation work will upgrade approximately 600,000 square feet of public area and provide a state-of-the-art baggage screening facility, which will comply with new federal security requirements.

On July 14, 1998, the Board of Airport Commissioners (Board) authorized a contract with Leo A Daly for the planning, design and construction support services of this project. The planning and design effort is well underway and it is now necessary to retain a qualified construction management consultant. This contract with Leo A Daly has been since amended six times.

Staff developed a Request for Proposals (RFP) seeking the services of qualified firms to provide construction management services for this project. The scope of work contained in the RFP outlined requirements for firms to furnish all professional, technical, and expert services as may be required to manage the construction of this complex project.

By Resolution No. 22253, dated December 15, 2003, the Board authorized the Executive Director to advertise and issue the RFP to qualified firms for this project at LAX.

The RFP was released in December 2003, and advertised in the Los Angeles Times, Los Angeles Daily Journal, La Opinion and Los Angeles Sentinel. The RFP was also posted on the City of Los Angeles Business Assistance web-site. A pre-proposal conference was held on January 22, 2004. On February 12, 2004, proposals were received from the following eight companies: AMEC Construction Management, Inc.; Austin Commercial, LP; Bovis Land Lease; CH2MHill; Hanscomb Faithful & Gould; Jacobs; Parsons Transportation Group; and Tishman + URS, a Joint Venture.

Procurement Services Division reviewed the administrative requirements submitted by the eight teams and determined that all eight satisfied the administrative requirements stated in the RFP. The eight submitted proposals were evaluated for technical merit by a Review Committee comprised of three LAWA staff members from the Engineering and Project Management and Project Planning and Development Divisions. The Review Committee thoroughly evaluated the eight proposals for technical merit based on the evaluation criteria listed in the RFP, and conducted reference checks of the firms and of key individuals of the proposed teams. The Review Committee selected the following four firms to be invited to a proposer interview: AMEC Construction Management, Inc.; CH2MHill; Parsons Transportation Group; and Tishman + URS, a Joint Venture.

The four selected firms were interviewed on April 28, 2004 by a panel consisting of Richard Wells (Interim Deputy Executive Director, Project and Facilities Development), William Bruce (Director of Airports Administration), Raymond Atkinson (Chief of Terminal Operations), Intissar Durham (Chief Airports Engineer), and Ken Giles (Retired Chief Airports Engineer).

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The proposers were evaluated on the following criteria:

- Capabilities/Project Understanding: Demonstrated understanding of the scope of work and its needed organization, coordination, phasing, and scheduling challenges. Experience with timely and on-budget completion on comparable projects.
- Organization: Key management/staff experience, capabilities and functions on similar projects, especially the experience of the designated Project Manager. Owner/Client references.
- Project Team Experience and Capabilities: Team members with experience and qualifications that relate to the scope of this project. Experience on building renovation projects of similar scope and complexity.
- Construction Management Approach/Team Approach and Methodology: Effectively integrating, controlling and managing all aspects of complex construction in a fully functioning environment. The significance of creating /maintaining positive public image to passengers. The importance of effectively managing passengers concerns, airline interests, local/state and federal government regulations and concerns. Flexibility and ability to handle a wide range of complex coordination issues and conflicting agenda so that the project stays on track.
- Compliance with stated Administrative Requirements.

Following the review of the written proposals and conclusion of the oral interviews, Parsons Transportation Group was selected as the most qualified proposer to provide Construction Management Services for this project. Parsons Transportation Group has proposed a strong construction management team and they had demonstrated a good understanding of the scope of the TBIT renovation project and its complex challenges. Their proposed team was organized effectively and had extensive experience on comparable projects.

2. Current Action

The scope of services and fees for the project will be negotiated with Parsons Transportation Group. Upon completion of contract negotiation, Management will report to the Board and request approval to execute the contract. The scope of construction management services for this project may include, but are not limited to, overall management of the construction contract (s), project scheduling, cost/budget controls and management, negotiation and preparation of change orders and monthly progress payments, maintenance of project records and documents, on-site technical personnel, oversight of the fire/life safety system, third party plans and constructibility review, complete coordination with LAWA, tenants and other stakeholders in TBIT, and other services as needed and/or required during construction. It is anticipated that the construction management consultant may manage at least two concurrent construction projects in TBIT and work closely with LAWA's System Integration/Program Implementation (SI/PI) consultant for the overall coordination of the in-line baggage improvements.

If a contract with Parsons Transportation Group for any reason cannot be successfully negotiated, staff will return to the Board for authorization to negotiate with the next highest ranked firm.

The three firms that were interviewed but were not selected, were notified of staff's selection of Parsons Transportation Group. These three firms have been invited to present any information to the Board prior to action.

Procurement Services Division has reviewed this item and established the level of participation of 20% combined MBE/WBE/DBE for this project. Parsons Transportation Group proposes 21.12% DBE level of participation

Approval is requested of staff's recommendation to select Parsons Transportation Group as the best qualified firm to provide Construction Management for the project entitled " TBIT Interior Improvements" at LAX and authorization for the Executive Director to negotiate a contract with Parson's Transportation Group.

FISCAL IMPACT STATEMENT:

No allocation of funds will be required at this time.

STANDARD PROVISIONS:

1. This action, as a continuing administrative activity, is exempt from the requirements of the California Environmental Quality Act ("CEQA") as provided by Article II, Section 2 (f) of the Los Angeles CEQA Guidelines.
2. Parsons Transportation Group will comply with the provisions of the Living Wage Ordinances.
3. Procurement Services has reviewed this item and established a 20% Disadvantaged Business Enterprise level of participation for this project. Parsons Transportation Group proposes 21.12% DBE level of participation. Procurement Services confirms that based on documents submitted, Parsons Transportation Group has made a good faith effort to outreach to DBE/OBE subcontractors.
4. Parsons Transportation Group has submitted an Affirmative Action Plan and will comply with the provisions of the Affirmative Action Program.
5. Parsons Transportation Group has been assigned Business Tax Registration Certificate number 0148161-74.
6. Parsons Transportation Group has submitted the Certification of Compliance with Child Support Obligations and will comply with the provisions of the Child Support Obligations Ordinance.
7. Parsons Transportation Group will have approved insurance documents, in the terms and amounts required, on file with the City of Los Angeles prior to issuance of a Notice to Proceed.
8. Pursuant to the provision of City Charter Section 1022, the work specified in the contract can be performed more economically and feasibly by independent contractors than by City employees.
9. The contract, when negotiated, will be approved as to form and legality by the City Attorney.
10. Action taken on this item by the Board of Airport Commissioners will become final pursuant to

the provisions of the Los Angeles City Charter Section 245.

11. Parsons Transportation Group has submitted the Contractor Responsibility Program Questionnaire and Pledge of Compliance and will comply with the provisions of the Contractor Responsibility Program.

ITEM 11 RESOLUTION NO. 22289 -APPROVAL OF SIXTH AMENDMENT TO CONTRACT NO. DA-3334 WITH LEO A. DALY COMPANY TO EXTEND THE TERM OF THE CONTRACT AND TO PROVIDE ADDITIONAL DESIGN AND CONSTRUCTION ADMINISTRATION FOR THE PROJECT ENTITLED "TBIT INTERIOR IMPROVEMENTS" AT LOS ANGELES INTERNATIONAL AIRPORT

RECOMMENDATION: Adoption of the Report requesting that the Board of Airport Commissioners approve a Sixth Amendment to Contract No. DA-3334 with Leo A. Daly Company to extend the term of the Contract to July 24, 2008 and to provide for additional design and construction administration services. Find that this work can be performed more economically or feasibly by an independent contractor than by City employees, and authorize the Executive Director to execute the Sixth Amendment upon approval as to form by the City Attorney. (Rick Wells, 310-646-7393)

RECOMMENDATION APPROVED

Moved by: Commissioner Petersen
Seconded by: Commissioner Levine

Ayes: Commissioners Levine, Llorens, Petersen, Vargas, Well and President Stein

Nays: None

Discussion: None

Los Angeles World Airports

BOARD OF AIRPORT COMMISSIONERS

11

Meeting Date: February 17, 2004

APPROVED BY: Division Head

REVIEWED BY: Deputy Executive Director

REVIEWED BY: Chief Operating Officer

CITY ATTORNEY:

EXECUTIVE DIRECTOR:

CAO Report ☐ Completed ☐ Pending ☐ N/A

Reviewed by:

Budget	12/29/03
Environmental Mgt.	12/29/03
Procurement	12/29/03

SUBJECT:

APPROVAL OF A SIXTH AMENDMENT TO CONTRACT NO. DA-3334 WITH LEO A DALY COMPANY TO EXTEND THE TERM OF THE CONTRACT AND TO PROVIDE ADDITIONAL DESIGN AND CONSTRUCTION ADMINISTRATION FOR THE PROJECT ENTITLED, "TBIT INTERIOR IMPROVEMENTS" AT LOS ANGELES INTERNATIONAL AIRPORT.

RECOMMENDATION:

Management RECOMMENDS that the Board of Airport Commissioners:

1. ADOPT the staff report.
2. DETERMINE that this action is exempt from the California Environmental Quality Act pursuant to Article III, Class 11 (6) of the amended Los Angeles City CEQA Guidelines.
3. APPROVE a Sixth Amendment to Contract No. DA-3334 with Leo A Daly Company to extend the term of the contract to July 24, 2008, and to provide for additional design and construction administration services.
4. FIND that this work can be performed more economically or feasibly by an independent contractor than by City employees.
5. AUTHORIZE the Executive Director to execute the Sixth Amendment after approval as to form and legality by the City Attorney.

DISCUSSION:

1. Prior Related Actions

On July 14, 1998, by Resolution No. 20312, the Board of Airport Commissioners approved contract DA-3334 with Leo A Daly, which included Program/Conceptual Design and Extra Services for the site surveys, geotechnical investigations, special presentations and reports for the expansion of Tom Bradley International Terminal (TBIT) at the Los Angeles International Airport (LAX). Leo A Daly completed the Program/Conceptual Design phase, and the final scope of work was defined.

On February 22, 1999, by Resolution No. 20558, the First Amendment to Contract DA-3334 with Leo A Daly was approved to provide for design development, preparation of final construction documents, and construction administration as required.

On April 3, 2001, by Resolution No. 21350, the Second Amendment to Contract DA-3334 with Leo A Daly was approved to allocate additional funding to revise the construction documents as the scope of the project changed. The project changed from expanding the terminal to the west to making interior improvements to existing areas within TBIT.

On June 6, 2001, by Resolution No. 21426, the Third Amendment to Contract DA-3334 with Leo A Daly was approved to extend contract time to July 23, 2004. No funds were added at this time.

On August 7, 2001, by Resolution No. 21497, the Fourth Amendment to Contract DA-3334 with Leo A Daly was approved for the design of a new outbound baggage system in TBIT to replace the existing baggage system constructed with the Terminal in 1983.

On October 5, 2001, Los Angeles World Airports (LAWA) gave written notice to Leo A Daly Architects postponing the TBIT Interior Improvements project indefinitely due to the events of September 11, 2001. At that time, the TBIT Interior Improvements design was halted at approximately 30% design completion. With the support of the tenants Airlines, the design of the TBIT Interior Improvements project was re-instated on October 24, 2002. Subsequently, TSA mandated that all outbound passenger checked baggage be screened for explosives by December 31, 2002. To meet this deadline, Explosive Detection System machines (EDS) were placed in the ticketing lobbies of TBIT.

In April 2003, Transportation Security Administration (TSA) completed a concept study for a LAWA in-line Baggage screening system solution in all passenger terminals at LAX and Ontario (ONT), including TBIT. On September 2, 2003, LAWA and TSA signed a Memorandum of Agreement (MOA) and a Letter of Intent (LOI) to cover partial reimbursement and a schedule for implementation of this in-line solution. The MOA obligates the TSA, if Federal funds are allocated for this purpose, to reimburse LAWA for up to 75%, or such greater share as may be provided by law, of the costs at LAX, including the TBIT system, and ONT. Also, on September 2, 2003, by Resolution No. 22142, the Fifth Amendment to Contract DA-3334 with Leo A Daly was approved to include the design of the in-line 100% checked baggage screening outbound baggage system in TBIT, as conceptually approved by the TSA, in order to move the EDS machines from the ticketing lobbies to baggage processing rooms.

1. Current Action

Approval of the Sixth Amendment to Contract No. DA-3334 with Leo A Daly is now requested for continuation of design and construction administration support services and for the design and construction administration services of several project elements that were not specifically covered in the original contract with Leo A Daly or in any of its subsequent amendments.

Construction on this project is tentatively scheduled to commence in November of 2004 and be

complete in November 2007. Therefore, it is requested that this amendment extend Leo A Daly's contract by four (4) years to July 24, 2008, which will ensure that their services, as the overall project Architect and Engineer of Records, are available through the end of construction and contract closeout. This amendment will require approval by the Los Angeles City Council.

In addition to the time extension, this contract amendment provides for the design and construction administration of several project elements as follows:

Under Basic Services, this contract amendment will include: (1) The design of three additional stories for the new north baggage screening facility. This additional space may be used to satisfy some of the heavy and ever changing demands for security related administrative support space and baggage screening rooms that is continuously being requested/redefined/programmed by the TSA in the Terminal building; (2) The design of replacement elevators, escalators, moving walks, and passenger loading bridges. The upgrading of these systems will better facilitate the increased security demand for egress/ingress placed upon the Terminal. In addition, these new systems will be designed to meet the most recent Americans with Disabilities Act (ADA) code requirements; (3) To address the lack of tenant concession spaces as originally scoped in the 2001 Airport Capital Improvement Program (CIP) and addressed in the initial project RFP, the two 'flag well' areas in the ticketing lobby with appropriate access, located on either side of the center isle above the airline ticketing offices, will be developed into new concession spaces; (4) The existing HVAC systems in TBIT are obsolete, not energy efficient and will be adversely impacted with the additional new security screening systems programmed for the Terminal. The HVAC systems in TBIT will be upgraded to meet current demands and codes using state of the art technology; and (5) To improve conditions for the arriving passengers and better utilize the limited floor space, preliminary planning only for upgrades to the public area of the FIS level as identified in the Initial project RFP and requested by the US Department of Homeland Security will be provided.

In addition to Basic Services, Leo A Daly may be called upon to provide Extra Services on an as-needed basis. These Extra Services may include, but not be limited to: Airline and Airport coordination/presentations, scheduling, re-packaging of the plans into two different bid sets as may be mandated by TSA, Public Art program coordination, advertising program coordination, new code compliance revisions, design revisions required to accommodate airline fleet changes and DHS required changes and other items.

LAWA previously entered into a Project Labor Agreement (PLA) with labor unions for the TBIT Interior Improvements project to secure optimum productivity, eliminate delay and ensure that the construction be done in an efficient and economical manner. However, since up to ninety percent of the in-line baggage system element of the TBIT project is eligible for Federal reimbursement; federal guidelines prohibit the use of a PLA on federally-funded contracts. Although staff is investigating the possibility of LAWA being granted a waiver allowing the use of a PLA, funds are being requested to separate into individual bid sets the in-line baggage screening improvements from the main TBIT Interior Improvement project in the event a waiver is not granted. Failure to separate the in-line baggage screening improvements from the rest of the project may jeopardize the project's eligibility for Federal reimbursement.

It is staff's recommendation that Leo A Daly's contract be extended and that their services be utilized on the added scope of work. Leo A Daly's extensive knowledge of the Terminal building, their working relationship with the airlines and other tenants in the building, and the strong technical knowledge that their entire team of subconsultants brings to this complex renovation project will enable them to efficiently and effectively deliver these added services in ways where both time and money savings will be realized. Also, as further enhancements to the scope of services are identified, the Board shall approve future contract amendments.

The fee for these Amendment No. 6 consulting services is as follows:

Basic Services (not to exceed)	$ 1,573,205
Extra Services	$ 1,580,573
Total Contract Cost (Sixth Amendment)	$ 3,153,778

Overall contract amount with Leo A Daly is now as follows:

	Basic Services	Extra Services	Total
Original Contract Amounts	$ 639,924	$ 160,000	$ 799,924
1st Amendment	$ 9,044,340	$ 2,823,450	$ 11,867,790
2nd Amendment	$ 2,900,000	$ 0	$ 2,900,000
3rd Amendment (time ext. only)	$ 0	$ 0	$ 0
4th Amendment	$ 1,459,416	$ 0	$ 1,459,416
5th Amendment	$ 749,860	$ 0	$ 749,860
6th Amendment	$ 1,573,205	$ 1,580,573	$ 3,153,778
TOTAL	$ 16,366,745	$ 4,564,023	$ 20,930,768

Contract DA-3334 has $2,517,743 in allocated and budgeted construction administration services that have not yet been spent.

FISCAL IMPACT STATEMENT:

It is requested that funds for this contract amendment in the amount of $3,153,778 be allocated from the LAX Airport Revenue Fund to WBS Element 1.00.00011A-700 and 1.01.00003E9-700 as required.

STANDARD PROVISIONS:

1. This action is exempt from the California Environmental Quality Act pursuant to Article III, Class 11 (6) of the amended Los Angeles City CEQA Guidelines.
2. This Contract Amendment is subject to the provisions of the Service Contract Worker Retention and/or Living Wage Ordinances.
3. The level of participation established by the Procurement Services Division for this contract was 30% combined MBE/WBE/DBE. Leo A Daly will continue to meet or exceed 30% combined MBE/WBE/DBE sub-consultant participation for this Amendment.
4. Leo A Daly Company has approved an Affirmative Action Plan on file with the City.
5. Leo A Daly Company has been assigned Business Tax Registration Certificate No. 867966-51, Fund L, Class 190.
6. Leo A Daly Company has an approved Child Support Program Statement on file with the City of Los Angeles.
7. Leo A Daly Company has approved insurance documents on file with the City of Los Angeles.

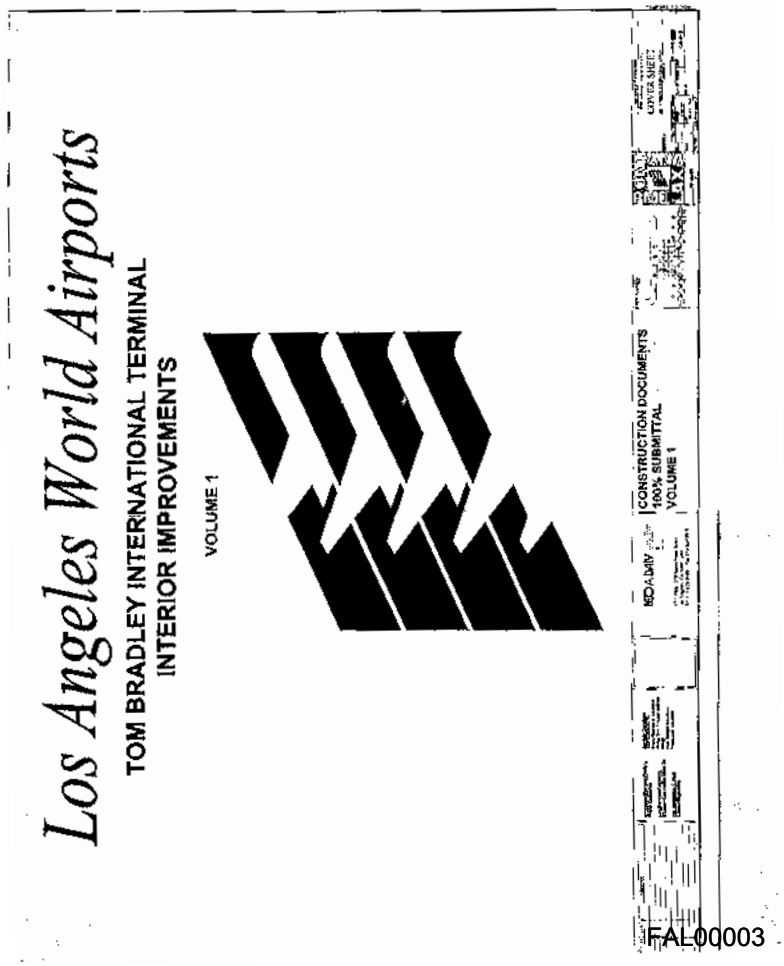

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EXHIBIT A

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ITEM 4. RESOLUTION NO. 22300 – APPROVE THE SECOND AMENDMENT TO CONTRACT DA-3739 WITH HNTB CORPORATION TO PROVIDE COMPLETE PROFESSIONAL DESIGN SERVICES FOR THE "SOUTHSIDE AIRFIELD IMPROVEMENTS & NEW LARGE AIRCRAFT (NLA) STUDIES PROGRAM" AT LOS ANGELES INTERNATIONAL AIRPORT

RECOMMENDATION: Adoption of the Report requesting that the Board of Airport Commissioners approve the Second Amendment with HNTB Corporation (HNTB), find that this work can be performed more economically or feasibly by an independent contractor than by City employees, and authorize the Executive Director to execute the Second Amendment to Contract DA-3739, upon approval as to form by the City Attorney. (Richard Wells, 310-646-7393)

RECOMMENDATION APPROVED

Moved by: Commissioner Weil
Seconded by: Commissioner Petersen

Ayes: Commissioners Contreras, Levine, Llorens, Petersen, Vergara, Weil and President Stein

Nays: None

Discussion: None

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Los Angeles World Airports

APPROVED BY: Division Head	Meeting Date: March 1, 2004
REVIEWED BY: Deputy Executive Director	CAO Report ☐ Completed ☐ Pending ☒ N/A
REVIEWED BY: Chief Operating Officer	
CITY ATTORNEY:	Reviewed by: Budget ____ Environmental Mgmt. ____ Procurement ____
EXECUTIVE DIRECTOR:	

SUBJECT:

APPROVAL OF THE SECOND AMENDMENT TO CONTRACT DA-3739 WITH HNTB CORPORATION TO PROVIDE COMPLETE PROFESSIONAL DESIGN SERVICES FOR THE "SOUTHSIDE AIRFIELD IMPROVEMENTS & NEW LARGE AIRCRAFT (NLA) STUDIES PROGRAM" AT LOS ANGELES INTERNATIONAL AIRPORT.

RECOMMENDATION:

Management RECOMMENDS that the Board of Airport Commissioners:

1. ADOPT the staff report.
2. DETERMINE that this action is exempt from the California Environmental Quality Act pursuant to Article II, Section 2(d) of the amended Los Angeles City CEQA Guidelines.
3. APPROVE the Second Amendment with HNTB Corporation (HNTB).
4. FIND that this work can be performed more economically or feasibly by an independent contractor than by City employees.
5. AUTHORIZE the Executive Director to execute the Second Amendment to Contract DA-3739, after its approval as to form and legality by the City Attorney.

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DISCUSSION:

1. Prior Related Actions

On January 22, 2002, by Resolution No. 21644, the Board of Airport Commissioners (Board) authorized the Executive Director to prepare, advertise, and release a Request for Proposal (RFP) to qualified firms to provide consulting services related to the study (Phase I) and design (Phase II) of infrastructure improvements to optimize the safe and efficient movement of aircraft at LAX, as well as to accommodate the operations of New Large Aircraft (NLA).

On December 17, 2002, by Resolution No. 21912, the Board authorized the Executive Director to execute a Contract (DA-3739) with HNTB for professional consultant services in connection with Phase I of the project entitled "Southside Airfield Improvements and New Large Aircraft (NLA) Studies Project" at Los Angeles International Airport. Phase I services included research and development of alternatives to increase airfield safety, to reduce the potential for runway incursions, and to accommodate the NLA. HNTB has completed the Phase I services. Based on the results of the Phase I study, LAWA and the Federal Aviation Administration (FAA) have determined that relocation of Runway 25L and the addition of a Center Taxiway are critical to improving airfield safety and reducing the potential for runway incursions on the south airfield at LAX.

On June 4, 2003, by Resolution No. 22045, the Board authorized the Executive Director to negotiate and execute the First Amendment to Contract DA-3739 between the City of Los Angeles and HNTB Corporation, for professional consulting services in connection with Phase II. Phase II of the project consisted of the preparation of complete redesign plans for the relocation of Runway 25L, the preliminary design plans for a new center taxiway, design and preparation of construction documents, the preparation of construction phasing and schedules needed for the initial projects developed under the program. The Phase II services for design of the Runway 25L Relocation were completed in January 2004, and the remainder of the Phase II services will be completed by late June 2004.

All consulting services performed and/or are still on-going by HNTB as part of Phases I and II of this project are in accordance with the Request for Proposals (RFP) issued by LAWA for this project in July 2002.

2. Current Action

Authorization is requested for the Executive Director to negotiate and execute a Second Amendment to Contract DA-3739 with HNTB for Phase III services to complete the design of the Center Taxiway project and to address additional program requirements that were recently identified by the LAX Master Plan Team, FAA, Airlines, and LAWA Divisions during the Phase II design. The Second Amendment to Contract DA-3739 will not affect the 3-year term of the contract and the scope of services defined therein continue to be in accordance with the original RFP dated July 2002.

Professional services required under Phase III will be as follows:

- Basic Services that will include, but not be limited to, complete design of the Center Taxiway project; complete design of new Taxiway C-2, remote boarding facilities modifications, service road modifications, and airfield intersection improvements to accommodate the NLA; and design support to FAA for the development of an Airport Surface Detection Equipment Model X (ASDE-X) System to be implemented on the south airfield. HNTB will be required to submit progress

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reports and plans, conduct meetings and make presentations to LAWA management and the Board, community groups, Airlines, FAA, and advisory committees, as necessary and as determined by LAWA.

- In addition to Basic Services detailed above, HNTB will be called upon to provide Additional Services that may include, but are not limited to, additional airfield design, additional geotechnical investigations, survey, field utility potholing, development and design of project-related, but not yet identified, mitigation measures and commitments required by the proposed LAX Master Plan, additional NASA/Ames simulations for the proposed airfield operating plan, preparation of documents for procurement and installation of an ASDE-X System, additional project-related studies and reports, and special presentations. Even though there is a high likelihood that HNTB will be requested to work on all Identified Additional Services elements, these services will be utilized on an as-needed basis and will require the prior approval of the Executive Director. Furthermore, the Executive Director may adjust the individual Additional Services amounts as necessary, as long as the total Additional Services amount is not exceeded.

The proposed fees for these Phase III services are as follows:

Item	Basic Services	Additional Services
Center Taxiway Design	$ 1,062,140	
Airfield Intersection Improvements	$ 609,720	
Remote Boarding Facilities Mods.	$ 223,442	
ASDE-X Design Support	$ 55,000	$ 150,000
NASA/Ames Simulations		$ 350,000
Airline Coordination		$ 20,000
Misc. MP Mitigation Measures		$ 50,000
Geotech/Potholing		$ 100,000
Survey		$ 80,000
Subtotals	$ 1,950,302	$ 750,000

Total fee for this Second Contract Amendment is **$2,700,302**. This negotiated fee is consistent with industry standards for these types of professional services.

Approval of this Second Amendment does not provide authorization for commencement of any LAX Master Plan construction activity prior to the issuance of the Record of Decision (ROD) on the proposed LAX Master Plan.

Construction Administration (CA) services are not included in this or in prior phases of the work. Therefore, a Third Amendment to Contract DA-3739 will be necessary to cover CA services once these projects become ready for construction. Furthermore, the level of environmental clearance required for this project has not been clearly defined and it may be necessary to amend Contract DA-3739 to provide for the preparation of additional project-level environmental assessments. The Contract may also need to be amended to provide additional design for remote gates modifications. These gates are to the west of the remote boarding facilities at LAX.

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The amended total Contract cost will be as follows:

	Basic Services	Additional Services	Total
Contract DA-3739:	$ 1,186,330	$ 185,000	$ 1,381,330
First Amendment:	$ 4,408,480	$ 590,000	$ 4,998,480
Second Amendment:	$ 1,950,302	$ 750,000	$ 2,700,302
Total Cost	$ 7,545,112	$ 1,445,000	$ 8,990,112

FISCAL IMPACT STATEMENT:
It is requested that funds for this contract amendment in the amount of $2,700,302 be allocated from the LAX Airport Revenue Fund to WBS Elements 1.03.00007B-700, 1.03.00007C-700, 1.03.00007D-700, and 1.03.00007E-700. It is anticipated that the projects associated with the Southside Runway Improvement Program will be eligible for AIP grant funding.

STANDARD PROVISIONS:

1. Feasibility and planning studies for possible future action that include consideration of environmental factors is exempt from the requirements of the California Environmental Quality Act as provided by Article II, Section 2 (d) of the amended Los Angeles City CEQA Guidelines.
2. HNTB will comply with the provisions of the provisions of the Service Contract Worker Retention and/or Living Wage Ordinances.
3. The level of participation established by the Procurement Services Division for this contract is 15% DBE and HNTB has committed to attaining this level of DBE subconsultants' participation. HNTB Corporation has achieved 14.6% participation to date.
4. HNTB has an approved Affirmative Action Program on file with the City of Los Angeles and will comply with the provisions of the Affirmative Action Program.
5. HNTB Corporation has been assigned City of Los Angeles Business Tax Registration Certificate No. 061910-638, Fund L, Class 199.
6. HNTB has submitted the Certification of Compliance with Child Support Obligations and will comply with the provisions of the Child Support Obligations Ordinance.
7. HNTB will have approved insurance documents, in the terms and amounts required, on file with the City of Los Angeles prior to execution of the contract amendment.
8. Pursuant to the provision of City Charter Section 1022, the work specified in the contract can be performed more economically and feasibly by independent contractors than by City employees.
9. This Second Amendment will be approved as to form and legality by the City Attorney.
10. Action taken on this item by the Board of Airport Commissioners will become final pursuant to the provisions of the Los Angeles City Charter Section 245.

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11. HNTB has submitted the Contractor Responsibility Program Pledge of Compliance and will comply with the provisions of the Contractor Responsibility Program.

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EXHIBIT B

FAL00003

Comments on Draft Mitigated Negative Declaration Analysis of Air Quality and Related Health Impacts

TOM BRADLEY INTERNATIONAL TERMINAL

IMPROVEMENTS AND BAGGAGE SCREENING FACILITIES PROJECT

LOS ANGELES WORLD AIRPORTS

Prepared by

J. Phyllis Fox, Ph.D., P.E.
Consulting Engineer
Berkeley, CA

July 19, 2004

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Table of Contents

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COMMENTS

I. CONSTRUCTION EMISSIONS ARE SIGNIFICANT AND UNMITIGATED

I.A Construction Emissions Are Underestimated And Significant

The MND used Urbemis 2002 to estimate emissions from constructing the Project. (MND, Appx. A.) These calculations include a number of assumptions that, if not achieved, would result in significant impacts. The MND does not require that any of these assumptions be met. Further, some of these assumptions used in the Urbemis modeling are inconsistent with the Project description. Finally, all applicable significance thresholds were not included in the analysis.

I.A.1 Overlap Of Construction Phases

The construction emission calculations assume that construction would take place in three phases -- demolition, grading, and building construction - during each of three years, 2004, 2005, and 2006. (MND, Appx. A.) However, this is not consistent with the construction schedule in the Project Description. (MND, Sec. 5.3). This schedule indicates that construction would commence in 2005 and run through 2008. It also indicates that there would be considerable overlap among the phases that are assumed to be separate in the construction emission calculations. For example, in 2006, the following would be constructed simultaneously: baggage screening facilities, offices for international airlines, interior building improvements, outdoor and/or partially enclosed concessions, NLA parking, new concessions and walkway. (MND, p. A-31.) In fact, all of the construction would overlap, except construction of the exterior/emergency exit stair towers, which would occur in early 2005. Thus, there is clearly overlap in building construction.

Daily construction emissions are presented by phase and year in Appendix A. If there is overlap in the various building construction phases, emissions of NOx and ROC would be significant. For example, if Phase I demolition and site grading occurred on the same day, the total NOx emissions (51.78 + 59.84 = 111.62 lb/day) would exceed the significance threshold of 100 lb/day and be significant. Similarly, if building construction currently shown as occurring in separate years overlapped for as little as one day, ROC impacts would be significant. For example, if 2004 building construction and 2005 building construction occurred simultaneously for as little as one day, the total ROC emissions (51.24 + 50.92 = 102.16 lb/day.) would exceed the significance

threshold of 75 lb/day and be significant. Thus, emissions of NOx and ROC from constructing the Project are significant, requiring that an EIR be prepared.

I.A.2 Incorrect Hours Of Operation

The construction emission calculations assume that construction would occur for 8 hours per day. (MND, Appx. A, p. 2.) However, the Project Description states that construction would occur 24 hours per day. "The majority of the construction activities would occur during daytime hours, with the second and third shifts used for those work activities that cannot be accomplished on the daytime shift due to coordination and interference issues (i.e., airport operations, safety, delivery of materials and equipment.)." (MND, p. A-31.) If the workday were increased from 8 hrs to 12 hrs, the ROG emissions from building construction alone would increase to 77 lb/day in 2004,[1] which exceeds the ROC significance threshold of 75 lb/day and is a significant impact. Similarly, if the workday were increased from 8 hrs to 14 hrs, the NOx emissions from site grading would increase to 105 lb/day,[2] which exceeds the NOx significance threshold of 100 lb/day and is a significant impact. Thus, emissions of NOx and ROC from constructing the Project are significant, requiring that an EIR be prepared.

I.A.3 Fugitive Dust Construction Mitigation Assumed In Emission Calculations Not Required As Mitigation

The construction emission calculations assume that six mitigation measures are used to control fugitive dust and achieve the control efficiencies noted in parentheses, as follows:

- Apply soil stabilizers to inactive areas (30%)
- Replace ground cover in disturbed areas quickly (15%)
- Water exposed surface three times daily (50%)
- Cover all stockpiles with tarps (9.5%)
- Water all unpaved haul roads three times daily (45%)
- Reduce speed on unpaved roads to less than 15 mph (40%)

There are three problems with the MND's fugitive dust construction mitigation

[1] 2004 ROG emissions from building construction assuming 12 hr workday: (51.24)(12/8) = 76.86 lb/day.

[2] 2004 NOx emissions from site grading assuming 14 hr workday: (59.85)(14/8) = 104.72 lb/day.

First, all of the mitigation measures assumed in the construction emission calculations to control fugitive dust, i.e., fugitive PM10, were not required as mitigation. The MND includes some mitigation for construction emissions even though it concluded construction air quality impacts were not significant. (MND, p. B-45.) However, the MND only includes one of the six fugitive dust measures assumed in the calculations, the first listed, apply soil stabilizers. The MND does not require the other five as mitigation.

Second, the Urbemis model that was used to calculate emissions incorrectly applies the fugitive dust control factors. The control factors only apply to the listed source of dust. For example, applying soil stabilizers to inactive areas would only control 30% of the PM10 from inactive areas. Similarly, replacing ground cover would only control 15% of the PM10 generated from replacing the ground cover, watering haul roads would only control 45% of the PM10 from unpaved hauls, etc. However, the Urbemis model applied these control factors to the total amount of PM10 generated by grading, rather than each component of the PM10 emissions. Thus, the MND substantially underestimated controlled PM10 emissions.

Third, most of the sources of dust that would be controlled by these measures were not included in the calculations. The emission factors used to estimate site grading emissions do not include wind erosion.[3] Thus, applying soil stabilizers to inactive areas (which are only disturbed by wind) would not reduce the emissions estimated by the model. Similarly, Urbemis does not include emissions from soil stockpiles. Thus, covering the piles will not reduce emissions calculated by the model. The construction site will not include unpaved haul roads (the entire airport is paved), and Urbemis did not estimate emissions from unpaved haul roads. Thus, watering unpaved haul roads and reducing the speed on unpaved haul roads would not reduce emissions calculated by the model. Finally, the landscaped areas would be covered with pavement and/or buildings and thus this measure cannot be implemented. The only mitigation measure that would actually reduce fugitive PM10 emissions calculated by Urbemis is watering exposed surfaces three times daily. This measure reduces about 50% of the fugitive PM10.

[3] The site grading emission factors were taken from: Midwest Research Institute, Improvement of Specific Emission Factors (BACM Project No. 1), Final Report, Prepared for SCAQMD, March 29, 1996, Table ES-2. Section 5.3 explains that these emission factors do not include wind erosion.

The controlled fugitive PM10 emissions, assuming a typical total control efficiency of 50%, would be 19.1 lb/day.[4] While these PM10 emissions plus those from other sources, totaling about 23 lb/day, are not individually significant, they are cumulatively significant, and thus must be mitigated. An EIR should be prepared that correctly calculates PM10 emissions from grading and demolition and requires mitigation for these emissions.

I.A.4 Fugitive Dust From Site Grading Underestimated

The MND used Urbemis to calculate fugitive dust emissions from constructing the Project. This program allows you to select four different options for calculating fugitive dust - default, low, medium, and high detail - depending upon the amount of information that is known about site grading. The calculations in the MND are based on the default, which assumed that only the disturbed area and duration are known. These calculations used an uncontrolled emission factor of 38.2 lb/day plus control factors discussed in Comment I.A.3 to estimate that only 3.39 lb/day of PM10 would be generated by site grading, which is inconsistent with the Project description.

The Project description in the MND indicates that grading would generate 4,000 cubic yards ("cy") of soil, which would be exported off-site. (MND, p. A-31.) The low detail site preparation option should be used when both the area and amount of earthmoving are known, as here. Thus, I re-ran Urbemis, changing only the site grading option from default to low detail and using 4,000 cy of soil. The resulting uncontrolled fugitive PM10 emissions increase from 38.2 lb/day to 203.0 lb/day. Assuming a total control efficiency of 50% based on Comment I.A.3, the controlled fugitive PM10 emissions increase from 19.1 lb/day to 101.5 lb/day. The total site grading PM10 emissions increase from 6.01 lb/day to 104.1 lb/day. While the revised Project emissions are less than the significance threshold of 150 lb/day, they are cumulatively significant, requiring that an EIR be prepared. (Comment I.C.)

I.A.5 Demolition Emissions Underestimated

The MND used Urbemis to calculate fugitive PM10 emissions and exhaust emissions from off-road vehicles used to haul away the debris. These calculations assumed that 673 cy[5] of debris would be generated per day.

[4] Controlled fugitive PM10 emissions: 3.39/[(1-0.3)(1-0.15)(1-0.5)(1-0.095)(1-0.45)(1-0.4)] = 38.2 lb/day. This is the default fugitive PM10 emission factor for site grading from Urbemis, which comes from Table ES-2 of MRI (3/29/96), cited in footnote 3.

[5] Amount of debris assumed in Urbemis modeling: (200,000 ft²)/27 yd³/ft²)(11 days) = 673 yd³/day.

However, the Project description in the MND indicates 20,000 cy of debris would be generated from buildings and pavement and 500 cy from landscape removal. (MND, p. A-31.) The MND assumed that demolition would occur over a 0.5 month period, or 11 days. (MND, Appx. A, p. 1.) Therefore, 1,864 cy of debris would be generated on an average day. Considerably more could be generated on a peak day, unless a mitigation measure is added that sets a limit on the amount of debris that can hauled away on any given day. This change increases the maximum daily NOx emissions from 60 lb/day (MND, Table 2) to 69 lb/day. While the revised Project emissions are less than the significance threshold of 100 lb/day, the emissions are cumulatively significant. (Comment I.C.)

I.B Ozone Impacts Are Significant

The MND admits that Project construction would increase both NOx and ROC, which are ozone precursors. (MND, Table 2.) The SCAQMD currently violates both state and federal ozone standards and is classified by the U.S. EPA as in "extreme" nonattainment of the federal standards. Thus, the Project would contribute to an existing significant impact.

An understanding of the nature of ozone pollution will help to clarify why an impacts analysis is so vitally important to assessing the impacts of Project construction. Ozone, the principal element of smog, is a secondary pollutant produced when two precursor air pollutants -- ROC and NOx -- react in sunlight. *American Petroleum Institute v. Costle*, 665 F.2d 1176, 1181 (D.C. Cir. 1981). ROC and NOx are emitted by a variety of sources, including cars, trucks, industrial facilities, petroleum-based solvents, and diesel engines.

Ozone is a powerful oxidant that can kill human cells upon contact. The human health and associated societal costs from ozone pollution are extreme. In proposing a new rulemaking limiting emissions of NOx and particulate matter from certain diesel engines, EPA summarized the effects of ozone on public health:

> A large body of evidence shows that ozone can cause harmful respiratory effects, including chest pain, coughing and shortness of breath, which affect people with compromised respiratory systems most severely. When inhaled, ozone can cause acute respiratory problems; aggravate asthma; cause significant temporary decreases in lung function of 15 to over 20 percent in some healthy adults; cause inflammation of lung tissue, produce changes in lung tissue and structure; may increase hospital admissions and emergency room visits; and impair the body's immune system defenses,

> making people more susceptible to respiratory illnesses. (66 Fed. Reg. 5002, 5012 (Jan. 18, 2001).)

Moreover, ozone is not an equal opportunity pollutant, striking hardest the most vulnerable segments of our population: children, the elderly, and people with respiratory ailments. (*Id.*) Children are at greater risk because their lung capacity is still developing, because they spend significantly more time outdoors than adults -- especially in the summertime when ozone levels are the highest, and because they are generally engaged in relatively intense physical activity that causes them to breathe more ozone pollution. (*Id.*)

Ozone has severe impacts on millions of Americans with asthma. While it is as yet unclear whether smog actually causes asthma, there is no doubt that it exacerbates the condition. (*See* 66 Fed. Reg. 5002, 5012 (Jan. 18, 2001) (EPA points to "strong and convincing evidence that exposure to ozone is associated with exacerbation of asthma-related symptoms").) Moreover, as EPA observes, the impacts of ozone on "asthmatics are of special concern particularly in light of the growing asthma problem in the United States and the increased rates of asthma-related mortality and hospitalizations, especially in children in general and black children in particular." (62 Fed. Reg. At 38864.) In fact:

> [A]sthma is one of the most common and costly diseases in the United States. . . . Today, more than 5 percent of the US population has asthma [and] [o]n average *15 people died every day* from asthma in 1995. . .. In 1998, the cost of asthma to the U.S. economy was estimated to be $11.3 billion, with hospitalizations accounting for the largest single portion of the costs. (66 Fed. Reg. at 5012.)

The health and societal costs of asthma are wreaking havoc here in California. There are currently 2.2 million Californians suffering from asthma.[6] In 1997 alone, nearly 56,413 residents, including 16,705 children, required hospitalization because their asthma attacks were so severe. Shockingly, asthma is now the leading cause of hospital admissions of young children in California. *Id.* at 1. Combined with very real human suffering is the huge financial drain of asthma hospitalizations on the state's health care system. The most recent data indicate that the statewide financial cost of these hospitalizations was nearly $350,000,000, with nearly a third of the bill paid by the State Medi-Cal program. (*Id.* at 4.)

[6] California Department of Health Services, California County Asthma Hospitalization Chart Book, August 1, 2000.

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Comments

On

AIR QUALITY

And

PUBLIC HEALTH

Los Angeles International Airport
Proposed Master Plan Improvements
Final Environmental Impact Report

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AIR QUALITY

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COMMENTS

The City of Los Angeles ("City") through its Department of Airports, known as Los Angeles World Airports ("LAWA"), developed a plan for an extensive modernization of Los Angeles International Airport ("LAX") ("Project"). In April 2004, the City, as the lead agency under the California Environmental Quality Act ("CEQA"), published a Final Environmental Impact Report[1] ("Final EIR"), which analyzes four build alternatives, Alternatives A, B, C, and D, and a No Action/No Project ("NA/NP") alternative for the Project.

This Final EIR also includes Responses to Comments ("RTCs") received on the Draft Environmental Impact Statement/Environmental Impact Report[2] ("Draft EIS/EIR") and the Supplement to the Draft EIS/EIR[3] ("Supplement"). In September 2004, the City decided to prepare an Addendum to the Final EIR[4] ("Addendum") "to provide additional information that clarifies and amplifies the contents of the Final EIR." (Addendum, p. 1-1.)

The comments at hand discuss the failure of the Final EIR and its Addendum to satisfy the requirements of CEQA. We previously commented on the inadequate environmental review presented in the Draft EIS/EIR and its Supplement and the failure of these documents to meet the requirements of CEQA and identified and discussed a number of issues including air quality and human health and safety. (Fox 2001[5]; Fox & Pless 2003.[6]) Our comments below demonstrate that the Final EIR not only falls short of resolving most of these issues—identified not just by us but also by a large number of other commenters—but further carries forth and exacerbates the inadequacy of the environmental review process for the Project and introduces a host of new problems. The Final EIR presented to the public is incomplete and fragmented in such a way that it obscures public review, thereby effectively preventing an essential element of the CEQA process. (*See* Comment I.) The responses to our previous comments on the Draft EIS/EIR and Supplement have for a large part not been addressed in LAWA's responses to comments. (*See* Comment II.) The emission estimates presented in the Final EIR are flawed. (*See* Comment IV.) The air quality impacts from the Project are underestimated and not adequately mitigated. (*See* Comments V and VI.) Similarly, the public health risks are underestimated and not adequately mitigated. (*See* Comment VII.) In sum, the Final EIR falls short of satisfying the requirements of CEQA, requiring extensive revisions and recirculation for public review.

[1] City of Los Angeles, Los Angeles International Airport (LAX), Proposed Master Plan Improvements, Final Environmental Impact Report (Final EIR), State Clearinghouse No. 1997061047, April 2004.

[2] LAX Master Plan, Draft Environmental Impact Statement/Environmental Impact Report, January 2001.

[3] LAX Master Plan, Supplement to the Draft Environmental Impact Statement/Environmental Impact Report, July 2003.

[4] City of Los Angeles, Los Angeles International Airport (LAX), Proposed Master Plan Improvements, Final Environmental Impact Report (Final EIR), State Clearinghouse No. 1997061047, Addendum, September 2004.

[5] J. Phyllis Fox, Ph.D., Comments on Air Quality and Human Health and Safety, LAX Master Plan Draft EIS/EIR, July 13, 2001; Attachment C to September 18, 2001 Comments submitted on behalf of the City of El Segundo by Shute, Mihaly & Weinberger LLP.

[6] J. Phyllis Fox, Ph.D., and Petra Pless, D.Env., Comments on Air Quality and Human Health and Safety, LAX Master Plan Supplement to the Draft Environmental Impact Statement/Environmental Impact Report, November 2003; Attachment 3 to November 4, 2003 Comments submitted on behalf of the City of El Segundo by Shute, Mihaly & Weinberger LLP.

I. FRAGMENTED AND INCOMPLETE PRESENTATION OBSCURES PUBLIC REVIEW

The Final EIR claims to provide "a comprehensive investigation, analysis, and disclosure of the reasonably foreseeable potential impacts of the alternatives being considered for the proposed LAX Master Plan..." (Final EIR, p. 2.) The Final EIR further claims to present a "comprehensive and complete side-by-side evaluation of all five alternatives ... within a single integrated document" that "integrates the information and analyses of the Draft EIS/EIR with that of the Supplement to the Draft EIS/EIR." (Final EIR, pp. 11/12.) Regrettably, the Final EIR does not even come close to achieving this laudable goal.

Instead of the promised "comprehensive and complete" review "within a single integrated document," the Final EIR in reality is a disjointed and poorly organized document whose utter lack of transparency and availability frustrates an integral part of the CEQA process, i.e. public disclosure, thereby effectively preventing the public review CEQA seeks to encourage. (CEQA Guidelines[7], Section 15201.) The Final EIR, as presented, is not a single coherent and up-to-date document with associated up-to-date appendices but consists of a multitude of documents in various stages of revisions, which severely obstructs any review. The fact that some of the documents comprising this Final EIR are not readily available for public review presents an additional hurdle to the reviewer.

[7] Title 14, California Code of Regulations, Chapter 3, Guidelines for Implementation of the California Environmental Quality Act.

I.A Final EIR Components Are Not Readily Available

The main body of the Final EIR including the results and conclusions has been updated and five new appendices, Appendices F-1 through F-E, were prepared. These new appendices, including environmental justice materials, new and revised air quality data and methodologies, errata to the Draft EIS/EIR and Supplement, a revised traffic impact assessment, and the Biological Opinion from the U.S. Fish and Wildlife Service, are essential for a review of the Final EIR, yet they are not posted on LAWA's website and are only available as hard copies or on the CD-ROM set that accompanies the hard copy, both of which must be purchased.

Further, several links to documents on LAWA's website are inaccessible—at least temporarily—or link to corrupted documents, e.g., Final EIR, Part II - Volume 2 through Volume T1, which contain LAWA's responses to comments on the Draft EIS/EIR and the Supplement.[8] While the complete print version is available for public review at a number of public libraries within the Los Angeles Basin, a document of this importance should be made available in its entirety to all members of the public seeking electronic access.

And finally, the Final EIR claims that "appendices and technical reports for this Final EIR include, in their original form, all of the appendices and technical reports from the Draft EIS/EIR and from the Supplement..." (Final EIR, p. 14.) Yet, the hardcopy of the Final EIR distributed by LAWA does not contain any of these appendices. While these documents can be found on the CD-ROMs accompanying the hard copy or, alternatively, can be accessed under the "Past Publications" link on LAWA's website, not everyone who desires to review the Final EIR can be expected to have access to or knowledge about how to use a computer. Further, while these appendices and technical reports are posted on LAWA's website, there are no direct links from the Final EIR for the reviewer to follow. Access to these documents therefore requires familiarity with prior documents and revisions published in this environmental review process.

Considering the large regional impact of the Project and the enormous public participation of the public that this project has drawn to date – including more than 5000 individual comment letters submitted on the Draft EIS/EIR and Supplement (Final EIR, p. 1-1) – LAWA ought to make every reasonable effort to make the Final EIR in its entirety available to the public in as many forms as possible, including as complete hard copies and as electronic copies on its website.

[8] Unsuccessful attempts to download these documents from two independent, not networked computers on November 11, 12, 15, 16, 18, 19, and 22, 2004.

I.B Final EIR Relies On Outdated Documents

As discussed above, the Final EIR is presented as a main revised document with five new appendices and a large number of appendices and technical reports in their original form from the Draft EIS/EIR (11 appendices and 17 technical reports) and the Supplement (8 appendices and 10 technical reports). In other words, instead of revising and consolidating these appendices and technical reports from the Draft EIS/EIR and the Supplement to support the results and conclusions in the main text, the Final EIR attaches outdated appendices and technical appendices in duplicate, and merely adds new appendices containing yet another layer of additional information and errata.

Further, the Final EIR itself has been revised with publication of the Addendum in September 2004, which contains additional discussion of environmental consequences, refinements to the preferred alternative – Alternative D—a feasibility analysis of three additional alternative proposals – Alternatives ARSAC E, ARSAC E-1 and Parks E-1—and an errata to the Final EIR. The Addendum also presents a revised Environmental Action Plan, summarizing the Master Plan commitments and proposed mitigation measures, which replaces and supersedes the version of the Environmental Action Plan presented in the Final EIR. (Addendum, pp. 1-2 and 5-1.)

This disjointed and confusing presentation—of what is supposed to be a "complete and comprehensive" review "within a single integrated document"—requires the reviewer to continually go back and forth between a large number of documents in various stages of revision. Every one of these documents—each several hundreds to thousands of pages long with multiple references to prior, largely outdated documents—contain only a piece of the information the reviewer seeks. To analyze the information, the reviewer must continually check whether the information found in one document has not been revised and superseded by information in a newer document. Moreover and most importantly, it requires the reviewer to compare information and methodology contained in outdated documents with the revised results and conclusions in the Final EIR. This fragmented presentation in conjunction with the multiple revisions of the analyses and conclusions presented in the previous iterations of this environmental review process make it next to impossible for even experienced technical experts with prior in-depth knowledge of the Project to comprehensively review the methodologies, assumptions, and data upon which the Final EIR is based. Consequently, the results presented in the Final EIR and the conclusions drawn from these results are largely removed from public review.

The following description of the air quality impact assessment presented in the Final EIR exemplifies and illustrates this general problem; however, it should be kept in mind that this problem is not restricted to air quality but is also encountered in other areas including, but not limited to, human health and safety, biology, hydrology and water quality, and noise. This example is, however, illustrative of the type of information weaknesses present throughout the document. The main body of the Final EIR contains a revised air quality impact analysis in Section 4.6, Air Quality, with considerably different results and conclusions for the five Project alternatives than those presented in the Supplement, or prior to that in the Draft EIS/EIR. (See Comment I.C.) The Final EIR presents additional information, revised data and refined methodology in Appendix F-B. The Addendum further presents refinements to Alternative D. All other information, data and methodologies, however, are only incorporated by reference. These referenced documents include the Draft EIS/EIR Appendix G, *Air Quality Impact Analysis*, Draft EIS/EIR Technical Report 4, *Air Quality Technical Report*, subsequently revised with the Supplement Appendix S-E, *Supplemental Air Quality Impact Analysis*, and Supplement Technical Report S-4, *Supplemental Air Quality Technical Report*. (Final EIR, p. 4-653.) What's more, the Master Plan commitments and the mitigation measures for the Project's air quality impacts are presented in the Final EIR and further updated in the Addendum. The associated timing of implementation, the monitoring frequency, and the performance standards are found in yet another document – the Mitigation Monitoring and Reporting Program[9] ("MMRP") – published by the City in April 2004 and revised in September 2004.

As a result, the reviewer, rather than being able to examine one coherent, revised document with associated appendices, is forced to flip back and forth between tables and segments of text in *nine* voluminous (and in large portions obsolete or revised) documents.

I.C Final EIR Is Not Transparent

We previously commented on the inadequacy and lack of transparency of the Draft EIS/EIR and Supplement and the lack of supporting calculations and modeling. (Fox 2001) In response to a similar comment on the Draft EIS/EIR and Supplement, the Final EIR simply states that the documents "are clearly organized with extensive use of summaries and explanatory charts and diagrams so that it can be useful and understandable to the reader." (Final EIR, RTC AL00033-9.) Nothing could be further from the truth. In sum, in our many years of experience reviewing CEQA documents for similarly large projects, including

[9] City of Los Angeles, LAX Master Plan, Mitigation Monitoring and Reporting Program, April 2004 and September 2004.

several airports, we have never come across a document that was as obscure and difficult to review as this Final EIR.

For example, the Final EIR presents considerably different results for on-airport emission estimates from those previously presented in the Supplement for the baseline and all alternatives evaluated for the Project. Yet the document provides no discussion of these differences nor does it alert the reviewer to their existence. The main text of the Final EIR air quality section contains no indication that any of the methodology, data or assumptions were changed or that emission estimates have been considerably revised since publication of the Supplement. The reviewer only finds out about these differences by painstakingly comparing the corresponding tables of emission estimates between the two documents. Appendix F-B to the Final EIR discusses some of the data and methodology revisions, yet the main text of the air quality analysis does not even contain a single reference to this appendix. As previously discussed, the appendix is only available as a hard copy and not posted on LAWA's website and, thus, not readily available for review.

Another example of this general lack of transparency relates to the air dispersion modeling of emissions presented in the Final EIR, which summarizes the maximum mitigated, combined operational and construction air pollutant concentrations including the background reported at any receptor location for each alternative in the interim year as well as in 2015 and lists National Ambient Air Quality Standards ("NAAQS") and California Ambient Air Quality Standards ("CAAQS") for each pollutant. (Final EIS, p. 4-732 and Table F4.6-24.) This kind of summary table is insufficient to illustrate the air quality impacts of the Project. The reviewer is required to study the results for each pollutant and compare them to the baseline as well as the NAAQS and CAAQS to decide if the Project causes or contributes to an existing violation. Typically, the results of air dispersion analyses are visually interpreted in the form of isopleth charts, which illustrate where in relation to the project boundaries ambient air concentrations exceed AAQS. The Final EIR instead provides a summary table, which indicates exceedance of standards by acronyms (LS = less than significant, S = significant), however, if the results are split into on-airport operational plus construction air quality impacts and off-airport air quality impacts. This kind of fragmented presentation makes it very difficult for the reviewer to assess the overall impacts of the Project.

Likewise, the presentation of mitigated Project emissions is equally insufficient and obscure. The Final EIR presents a table summarizing total operational and construction emissions for each pollutant and source for all four build alternatives and the NA/NP alternative for the interim year and the horizon year 2015. Absent from this table are the South Coast Air Quality

Management District ("SCAQMD") CEQA significance thresholds, against which the significance of Project operational and construction emissions are measured. The Final EIR lacks a summary table comparing the incremental Project emissions over the baseline to the significance thresholds. Rather, the Final EIR presents the significance of the Project alternatives using the same fragmented approach as for resulting ambient air concentrations. This approach deprives the reviewer of an unambiguous presentation of the magnitude of Project emissions that remain after all mitigation has been implemented. For a discussion of the inappropriate use of two different baselines and the resulting erroneous conclusions regarding the significance of Project emissions see Comment V.H below.

I.D Information Contained In Final EIR Is Incomplete

The appendices to the air quality impact analysis of the Final EIR and Draft EIS/EIR and Supplement provide endless lists of data, assumptions, and modeling input parameters as well as summary tables presenting the results of emissions estimates, yet all these documents wholly lack a demonstration of intermediate calculation steps, i.e. exactly how these emission estimates were derived. For example, the Final EIR contains summary tables of unmitigated and mitigated construction emissions, Tables F4.6-11 and Table F4.6-23. Attachment 1 to Appendix F-B contains more construction parameters and emission factors, mostly equipment and schedule-related. Neither these documents nor the Draft EIS/EIR and Supplement technical reports and air quality impact analyses upon which the Final EIR relies for methodology includes a step-by-step demonstration for emission estimates. All documents lack a demonstration of how construction emissions were derived.

Another example relates to the estimated ranges of emission reductions for construction-related air quality mitigation measures, presented in Table F4.6-18. The Final EIR contains no information whatsoever about how these ranges were derived, nor does it contain any information about which value from each range had been applied.

The same criticism holds for the emission reductions for operational emissions from the Project. Table F4.6-9 presents emission reductions for eight new flyaway terminals for 2015. The Final EIR contains no explanation of how these values were derived beyond stating that they are based on EMFAC emission factors for 2015. The document contains no information on the amount of traffic that is expected to be reduced by these flyaway terminals. Further, Table F4.6-20 shows ranges of emission reductions for conversion of ground-support equipment ("GSE") to zero emission or extremely low emission

equipment by 2015. No support is provided demonstrating how these values were derived.

The Final EIR also lacks a table summarizing the operational emission reductions applied to the alternatives as well as an explanation of which emission reductions from implementation of mitigation were applied to the alternatives in the interim year. In a response to a comment on discrepancies in claimed emission reductions, the Final EIR provides the unhelpful answer that "[i]n general, emission reductions were revised to maintain a similar percent reduction across all alternatives." (Final EIR, RTC AL00033-324.) It is exactly those "similar percent reduction" values that should have been provided in a summary table for each alternative and for each year, detailed by the contribution of each mitigation measure.

These are just some of the many examples where the Final EIR fails to provide sufficient information to allow a reviewer to retrace the steps taken in the Final EIR to derive emission estimates and perform air quality dispersion modeling.

II. RESPONSES TO COMMENTS ARE NOT RESPONSIVE

Rather than addressing specific comments individually, the Final EIR provided so-called "topical responses," which allegedly address the same comments from several commenters. However, review of these topical responses reveals that most are nothing more than summaries of information already presented in the Final or Draft EIS/EIR and Supplement. Our specific comments, as well as those submitted by other commenters, often remain unaddressed. When specific responses to comments were provided they often do fail to address and/or resolve the concerns of the comment. In this case, our comments were typically addressed superficially only by repeating the information already contained in the Draft EIS/EIR or Supplement. Some of the most blatant examples relating to air quality and public health are relayed in the comments below. (*See* Comments IV.B, IV.D, V.B, V.C, V.F, V.G, and VII.B and VII.C.)

III. AIR QUALITY IMPACT ANALYSIS IS INADEQUATE BECAUSE PM2.5 IMPACTS ARE NOT ADDRESSED

We previously commented on the failure of the Draft EIS/EIR and the Supplement to evaluate PM2.5 impacts based on the new NAAQS and CAAQS. (Fox 2001, Comment III.D, pp. 18/19; Fox & Pless 2003, Comment II.A.) These comments are herewith incorporated by reference.

In response, the Final EIR acknowledges that the U.S. Environmental Protection Agency ("U.S. EPA"), the California Air Resources Board ("CARB") and the SCAQMD now recognize PM2.5 ambient air quality standards. (Final EIR, RTC AL00033-329.) However, the Final EIR claims that, due to a lack of sufficient PM2.5 monitoring data, at the present time it is difficult to establish whether the area near LAX is in compliance with the NAAQS and CAAQS. (*Ibid.*) This conclusion is invalid for a several reasons. First, CARB has designated the entire South Coast Air Basin ("SoCAB") as non-attainment for PM2.5 standards in 2003.[10] Second, this argument is irrelevant because emissions from the Project likely result in regionally significant contributions to PM2.5 ambient air concentrations, not just local impacts. Currently, there are 16 PM2.5 monitoring stations in the South Coast Air Basin and all but one had been collecting data since 1999.[11]

Combustion emissions from LAX constitute a considerable contribution to the regional particulate matter load, irrespective of whether the ambient air quality standards are exceeded in the immediate vicinity of the airport or not. Most of the Project's operational emissions originate from combustion sources, *e.g.*, aircraft, ground support equipment, passenger cars. The major fraction of the particulate matter emissions from combustion sources is typically smaller than 2.5 microns in size, i.e. PM2.5, rather than PM10. For example, the PM2.5 fraction of particulate matter emissions is 92% for diesel vehicle exhaust, 93% for gasoline vehicle with catalysts exhaust, and 99% for aircraft exhaust. The PM2.5 fraction of particulate matter emissions from stationary internal combustion engines firing gasoline or diesel, *e.g.*, heaters, typically range from 87% to 99%.[12] Thus, well over 90% of the operational particulate matter emissions from the Project are PM2.5. PM10 standards are therefore an inadequate substitute for evaluation of compliance with PM2.5 standards. PM2.5 must be properly analyzed, and standards appropriate to this more prevalent pollutant should be used, to assure that the adverse environmental and health impacts of PM 2.5 emissions are properly disclosed.

[10] California Environmental Protection Agency, Air Resources Board, Updated Informative Digest, www.arb.ca.gov/regact/area04/iud.pdf; California Environmental Protection Agency, Air Resources Board 2003 Area Designations for State Ambient Air Quality Standards, PM2.5, November 17, 2003, www.arb.ca.gov/desig/adm/s_pm25.pdf.

[11] California Environmental Protection Agency, Air Resources Board, 2002 Particulate Monitoring Network Description, http://www.arb.ca.gov/aqd/pm25/pmnet02.htm, accessed November 23, 2004.

[12] California Environmental Protection Agency, Air Resources Board, Determination of Particle Size Distribution and Chemical Composition of Particulate Matter from Selected Sources in California, NTIS Report PB89-232805, June 30, 1989, Figure 5.2-2.

The Final EIR acknowledges that it is expected that U.S. EPA will designate the SoCAB as non-attainment for PM2.5 standards in 2004. The U.S. EPA does in fact intend to so designate the SoCAB.[13] As mentioned above, CARB has designated the SoCAB as non-attainment for PM2.5, effective July 3, 2003, over a year ago. Yet, the Final EIR continues to decline analyzing PM2.5 impacts, citing a 1997 U.S. EPA guidance document that "compliance with the PM10 standards be considered a surrogate for compliance with the PM2.5 standards before final designations are made and implementation guidance can be developed." (Final EIR, p. 4-656.) The Final EIR further states that the "SCAQMD has confirmed that, at this time, it would be premature to fully analyze PM2.5 since the SCAQMD has not yet developed CEQA significance emission thresholds or other guidance regarding PM2.5 analysis." (Final EIR, p. 4-656.)

It is irrelevant whether the SCAQMD has developed significance thresholds for project emissions or not. The State CEQA Guidelines clearly identify the criterion for a project to be considered of statewide, regional, or area-wide significance if it interferes with attaining the federal or state air quality guidelines. (CEQA Guidelines, Section 15206(b)(2).) As discussed above, the substantial operational emissions of the Project will contribute to already existing regional exceedances of NAAQS and CAAQS and therefore results in significant impacts that were not identified in the Final EIR and were not properly mitigated.

IV. EMISSION ESTIMATES ARE FLAWED

The following comments demonstrate that the emission estimates are erroneous, incomplete, and underestimated. This results in significant impacts that were not identified and discussed in the Final EIR and were not properly mitigated.

IV.A Use Of Two Baselines Inappropriately Segments Project Impacts And Results In Failure To Identify Significant Impacts

The Final EIR describes the methods for determining significance for the Project impacts as follows:

> *For purposes of CEQA, in general, significance was determined by comparison of* (1) estimated pollutant emissions from each build alternative in the interim year and 2015 to the pollutant emissions from the environmental baseline, (2) maximum predicted concentrations from each build alternative in the interim year and 2015 to the ambient air quality standards. . *The selection of the appropriate environmental baseline depends on whether*

[13] Letter from Wayne Nastri, U.S. Environmental Protection Agency, to Arnold Schwarzenegger, Governor of California, received June 29, 2004.

the sources were on airport or off-airport. On-airport source impacts were compared to the "environmental baseline" and off-airport source impacts were compared to the "adjusted environmental baseline," as described in the Introduction to Chapter 4. The difference in emissions between the environmental baseline and each build alternative was defined as the incremental project-related emissions. These incremental project-related emissions were then compared to the emission thresholds presented in subsection 4.6.4, Thresholds of Significance. Consistent with the SCAQMD CEQA Handbook, an air quality impact analysis (dispersion modeling) is included in the EIS/EIR for each alternative with incremental emissions rates that exceed the operations or construction emission threshold. (Final EIR, p. 4.6-668/669, emphasis added.)

The adjusted environmental baseline is based on future projected conditions against which project incremental impacts are measured. This type of analysis has been developed and used to evaluate traffic impacts for many years. The Final EIR justifies the use of an adjusted environmental baseline for air quality impacts for off-site emissions because it "build upon the cumulative traffic impacts analysis contained in the off-site surface traffic impacts analysis. Consequently," the Final EIR argues, the off-site air quality analysis too is "based on that 'adjusted baseline' methodology." (Final EIR, TR-GEN-1.)

Yet, the Final EIR fails to understand the difference between the way the traffic impact analysis and the air quality impact analysis are conducted. The Final EIR compares *the entire extent* of incremental traffic impacts against the adjusted environmental baseline. In contrast, the Final EIR *segments* the air quality impacts into a) on-airport operational and construction impacts measured against the 1996 environmental baseline and b) off-airport impacts measured against the adjusted environmental baseline. This segmentation of the Project's impacts, in effect, equates to segmenting the Project into two parts. This treats Project emissions/concentrations as if they resulted from two projects not from one. Consequently, the emissions/concentrations from a) operational and construction and b) off-airport that are compared to the respective baselines are individually lower than if the whole of the project emissions/concentrations had been compared to a baseline.

CEQA requires that a project's be evaluated as a whole and does not allow for segmentation of projects. CEQA mandates "that environmental considerations do not become submerged by chopping a large project into many little ones—each with a minimal potential impact on the environment—which cumulatively may have disastrous consequences." (*City of Santee v. County of San Diego*, 214 Cal.App.3d 1438, 1452 (1989), quoting *Bozung v. Local Agency Formation Comm'n*, 13 Cal.3d 249, 283-84 (1975).) Here, the City failed to analyze the whole of the proposed project due to the segmentation of the air quality impacts.

Due to the segmentation of the air quality impact analysis into two parts, the Final EIR finds significant impacts for some but not all criteria pollutants for

operational and construction impacts and for off-airport impacts. (*See* Final EIR, Tables F4.6-25 through F4 6-28.) Evaluation of the Project's *total* impacts, *i.e.* on-airport operational and construction plus off-airport emissions/concentrations, however, would result in significant project emissions *for all criteria pollutants*, no matter which baseline is used. Therefore, the Final EIR fails to identify significant Project impacts.

IV.B Ratio Method Is Invalid

On-airport emissions were calculated based on a ratio method to reflect revisions in FAA's Emissions and Dispersion Modeling System ("EDMS") from version 3.2 to version 4 11. (Final EIR, pp. 4-659/660 and Supplement pp. 4-357/358.) The Supplement had developed ratios for each pollutant for results obtained with EDMS version 4.11 and version 3.2 runs for Alternative D and applied these ratios to results from EDMS 3.2 runs for all other alternatives and the baseline. The Final EIR revised this approach and derived an average ratio for each pollutant for the Interim Year and for the Horizon Year 2015 derived from several model runs with both EDMS versions.[14] We previously commented on the improper use of this ratio method with a detailed discussion of the various reasons why this approach is scientifically flawed and will not yield reliable and comparable results. (Fox & Pless 2003, Comment I.A.) We herewith incorporate this comment by reference.

In sum, the differences in the EDMS model versions incorporate several technical changes that affect modeled emissions inventories including an updated emission factor database for aircraft; updated ground support equipment emission factors based on model year, power output, and fuel type; additional assessment of emissions from aircraft landing roll time-in-mode ("TIM"); inclusion of aircraft flight profile to model dispersion after takeoff and on approach; use of the most current dispersion modeling methods; and an improved characterization of aircraft plume dispersion behavior. Because the alternatives are based on greatly differing airport capacities and/or regional distributions, the annual total number of aircraft and fleet mix are substantially different under all alternatives. Thus, using a constant ratio for each pollutant applied across all scenarios and analyzed years results in incorrect emission estimates and invalidates any inter-alternative comparisons. Further, in applying the same ratio to mitigated and unmitigated emissions, the Final EIR blatantly disregards that some on-airport emission sources will be mitigated to a much

[14] EDMS 4.11 emission inventory runs were conducted for Alternative D 2015 mitigated, Alternative D 2015 unmitigated, NA/NP Alternative 2015, NA/NP Alternative 2005, Baseline 1996, Alternative D 2013 mitigated, Alternative D 2013 unmitigated. (Final EIR, Appx. F-B, Attachment 7, Table 7-1.)

greater extent than others and to a different extent under the different alternatives.

The Final EIR argues that the ratio approach is "reasonable since no changes were made to the assumed activity levels and source locations in the other alternatives." (Final EIR, p. 4-660.) This statement, which has also been provided as the sole response to our detailed comments on the Supplement, entirely misses the point. (Final EIR, RTC SAI.00013-115.) It is not a proposed change to the activity levels and source locations of the proposed alternatives that is of concern—those have, according to the Final EIR not changed—but the entirely different scenarios of flight activities and capacities these alternatives were based on to begin with. The alternatives are based on considerably different airport capacities and/or regional distributions, and, as a result, the annual total number of aircraft and fleet mix are substantially different.

Further, inspection of the ratios developed for the different model runs should have made abundantly clear that the ratios are *not even close* to being comparable for different scenarios, *i.e.* alternative/year combinations, and therefore cannot be used to derive an average ratio or be applied to another, entirely different scenario. For example, the total (all on-airport sources) carbon monoxide ("CO") ratio for the horizon year 2015 for Alternative D Mitigated is 1.06, for Alternative D Unmitigated it is 1.15, and for the NA/NP alternative it is 0.65. Based on these three values, the Final EIR derives an averaged ratio used to adjust emissions from Alternatives A, B, and C in 2015 from EDMS version 3.2 to version 4.11 of 0.95. Another example is the average ratio for VOCs in 2015 of 0.97 derived from these three EDMS 4 11 runs from the ratios 0.92, 0.91, and 0.79, respectively. (Final EIR, Appx. F-B, Attachment 7, Table 7-3.) Deriving an average value for such a ratio would only be justified if the base values were similar. Deriving an average from values that are as dissimilar as the ones presented in the Final EIR, is absurd. Further, the ratios for each pollutant applied to Alternatives A, B, and C for the Interim year are based on the ratios derived from the NA/NP alternative alone. Considering the wide range of ratios derived for the horizon year 2015, there is a high risk that this ratio for the Interim Year, based on only one set of data, is entirely unreliable and therefore renders any comparison of alternatives moot.

In sum, the ratio method has been demonstrated to be entirely unreliable for the purpose of "converting" emissions estimated with the outdated version of EDMS. Considering the magnitude of estimated on-airport emissions—several hundreds or thousands of tons per year for each pollutant—the continued use of this ratio method introduces the potential for massive errors. For instance, if emissions of CO are estimated at 10,000 tons per year ("ton/year") with EDMS

3.11[15], the averaged ratio of 0.95 would adjust CO emissions to 9,500 ton/year, a difference of 500 tons. However, if the upper range of the three ratios, 1.15, were used, the resulting CO emissions would be 11,500 ton/year, or a difference of 1,500 tons. Emissions of 1,500 ton/year translate to more than 8,000[16] pounds per day ("lb/day"). To put this value in perspective, the SCAQMD CEQA significance threshold for project operations is 550 lb/day. In other words, the uncertainty alone introduced by using this ratio method is at least an order of magnitude larger than the CEQA significance threshold to which any project operational emissions are typically compared. Such uncertainty in emission estimates is unacceptable for a project of the magnitude of LAX.

Elsewhere, the Final EIR takes great pains to list the various input parameters in enormous detail, *e.g.*, schedules and emission factors for each piece of construction equipment; aircraft taxi/idle TIM for every type and model of aircraft; emission factors for each and every piece of ground support equipment ("GSE"); etc. The detail of these assumptions, data, and calculations are entirely nullified by "adjusting" on-airport emissions with this ratio method. LAWA should not be allowed to introduce such enormous uncertainty into the emission estimates when reliable and, particularly, comparable data can be readily obtained by running the revised model EDMS 4.11 for all alternatives, the NA/NP alternative, and the baseline. Compared to the enormous amount of work that went into collecting baseline information and the preparation of the EIS/EIR, this is a minor effort.

The Final EIR devotes not a single word to why it chose to update some but not all EDMS model runs. Considering the fact that LAWA continues to deem this ratio method suitable for estimating "approximate EDMS 4.11 results," it is curious why LAWA updated emission estimates for selected alternatives only. (Final EIR, p. 4-66-.) Until Alternative D has been selected as the only alternative that will be pursued, all estimates for all alternatives must be revised and updated in the same manner to ensure directly comparable values.

IV.C Ratio Method Calculations Contain Numerous And Considerable Errors And Are Applied Incorrectly

Careful review of the ratios presented in the Final EIR further reveals that they contain numerous and considerable errors, exacerbating the above discussed errors introduced by the use of this ratio method. Appended Tables A2

[15] EDMS 3.2 CO emissions estimates for mitigated Alternatives A, B, and C in 2015 range from about 9,000 to about 9,500 ton/year. (Final EIR, Appx. F-B, Attachment 7, Table 7-4.)

[16] (1,500 ton/year) / (365 days/year) * (2,000 lb/ton) = 8,219 lb/day

to A6 illustrate and summarize these errors; Table A1 is a copy of the ratios presented in the Final EIR, Appendix F-B, Attachment 7, Table 7-3 for comparison.[17] The inset Table 1 below illustrates the glaring discrepancies for total on-airport emission ratios calculated based on the EDMS runs compared to the ratios presented in the Final EIR.

Table 1: Comparison of Ratios for Total On-airport Emissions Calculated from EDMS 4.11/EDMS 3.2 Emission Estimates with Values Presented in Final EIR

Scenario	Pollutant	Calculated	Final EIR
Alternative D Unmitigated 2015	SOx	1.70	1.00
	PM10	1.14	1.00
Alternative D Mitigated 2015	NOx	0.91	0.98
	SOx	1.71	1.00
	PM10	1.12	1.00
NA/NP Alternative 2015	SOx	1.78	1.00
	PM10	0.96	1.00
Horizon Year 2015*	NOx	0.93	1.00
	SOx	1.73	1.00
	PM10	1.07	1.00
Interim Year**	SOx	1.73	1.00
	PM10	1.10	1.00

* Average of ratios derived for Alternative D Unmitigated 2015, Alternative D Mitigated 2015, and NA/NP Alternative 2015.
** Ratio derived for NA/NP Alternative 2015.

It is not conceivable why a spreadsheet would calculate a simple ratio of two values correctly in some instances and not in others. A brief appraisal of the accurateness of the calculated ratio values for the totals on-airport sources and comparison with individual contributions should have alerted the reviewer that something must be wrong. Closer inspection of Tables A2 to A6 and comparison with the results presented in the Final EIR (*see* Table A1) suggests that the ratios might have been edited.

In addition, the values presented in the main text of the Final EIR air quality impact analysis for unmitigated operational emission inventories for on-airport sources, Table F4.6-9, do not match the values derived from the ratios and EDMS 3.2 model runs for Alternatives A, B, and C. They neither match the correctly calculated values nor those presented in the Final EIR.

[17] Ratios in Tables A2 through A6 were derived consistent with the method used in the Final EIR by dividing EDMS 4.2 emission estimates by EDMS 3.2 for those model runs provided in the Final EIR, Appendix F-B, Attachment 7, Table 7-1 and 7-2

Since this step—the modeling of on-airport emissions—is crucial to determining Project impacts, the entire modeling for all alternatives and the baseline should be revised to eliminate the errors discussed above using the most current model of EDMS, version 4.2[18], released in September 2004. These clear and unexplained discrepancies undermine the analytical integrity of the air quality analysis in general.

IV.D Rollback Procedure Is Not Warranted

Air quality impacts are evaluated by using dispersion models to convert project emissions into increases in ambient concentrations of each pollutant. These incremental concentrations are then added to background ambient concentrations to estimate ambient concentrations after the project is built. These projections are then compared with ambient air quality standards to determine if the project would cause a significant air quality impact.

It is standard practice to use the maximum measured existing ambient concentration at the nearest monitoring station as the background in these calculations. The Final EIR, however, deviated substantially from the accepted approach and estimated future background concentrations using a linear rollback approach used in the 1997 AQMP to determine if the proposed region-wide controls would bring the basin into compliance with standards. (Final EIR, p. 4-665; Draft EIS/EIR, Technical Report 4.) This approach assumes that changes in emissions will affect ambient air concentrations proportionally. The use of this approach resulted in very substantial reductions in future background concentrations, a factor of more than two for CO and nearly two for NOx. (*See* Final EIR, Tables 4.6-2 and 4.6-5.)

The use of this questionable approach obscured at least one major air quality impact of the Project. Inset Table 2 below demonstrates that if this approach were not used, both the federal and State 8-hour CO air quality standard would be exceeded.

[18] Federal Aviation Administration, Emissions and Dispersion Modeling System Updates http://www.aee.faa.gov/emissions/edms/edms_Updates/Updates.htm.

Table 2:
CO Ambient Air Concentrations (ppm)

8-hr NAAQS/ CAAQS	Alt D incl. Rollback Background 2015[2]	Future Rollback Background 2015[2]	Alt D excl. Rollback Background 2015	1996 Baseline[1]	Alt D plus 1996 Baseline	NAAQS/ CAAQS exceeded
9/9.0	4.33	3.4	0.93	8.5	9.43	yes/yes

[1] 1996 Baseline, Final EIR, Table F4.6-5
[2] Future Background 2015, Final EIR, Table F4.6-2
[3] Alternative D incl. Background 2015; Final EIR, Table F4.6-24

This impact is not discussed in the Final EIR. The South Coast currently violates the federal and State 8-hour CO standard. The Project would aggravate violations of this standard, preventing the South Coast from coming into compliance and resulting in serious economic and other penalties.

We previously commented on the inappropriate use of the linear rollback approach to estimate background concentrations. (Fox 2001, Comment II.A.) We herewith incorporate this comment by reference. We identified three reasons why a linear rollback approach is not warranted for determining background concentrations for the Project. The response to our comment, RTC AI.00033-326 *via* RTC AF0001-29, failed to address and resolve the following two points.

First, many of the emission reductions that are forecast to occur in the region are based on rules that have not been adopted and control technologies that do not yet, and may never, exist. Speculative improvements are not acceptable for use in a CEQA analysis.

Second, the appropriate amount of rollback, if any, depends on the emission reductions achieved by the AQMP in the immediate vicinity of the Project. The analysis presented in the Final EIR relies on an extrapolation from the 1997 AQMP for downtown Los Angeles. As the RTC correctly points out, "a substantial portion of emission decreases in future years is due to on-road mobile source emission reductions." The vicinity of LAX contains a number of very large stationary sources, *e.g.*, the El Segundo Refinery, which will not be substantially affected by the proposed AQMP control measures. Thus, predicted air quality concentrations in downtown Los Angeles are not a reasonable surrogate for the immediate vicinity of LAX.

In sum, a rollback procedure is not warranted. If the linear rollback procedure is not employed, the results would clearly indicate that the Project would significantly contribute to existing violations of CO CAAQS and NAAQS compared to the 1996 baseline, significant impacts that were not identified and

properly mitigated in the Final EIR. As discussed below, the Final EIR also significantly underestimates emissions of all pollutants, particularly NOx and PM10. Revisions of these emission estimate would likely result in new violations of the NOx CAAQS and NAAQS compared to the 1996 baseline and contribute to existing violations of the PM10 CAAQS and NAAQS.

IV.E Air Quality Analysis Is Riddled With Errors

We previously commented on the numerous erroneous assumptions, methodological flaws, and calculation and modeling errors of the air quality analysis contained in the Draft EIS/EIR and the Supplement. (Fox 2001, Fox & Pless 2003.) We hereby incorporate these comments by reference. As discussed in Comment I.B above, the Final EIR relies on the methodology, assumptions, and data presented in the technical reports and appendices to the Draft EIS/EIR and Supplement, except where it provides updates. While the Final EIR contains some updates, almost none of the issues we pointed out were addressed in the Final EIR, its appendices, RTCs or its Addendum. Consequently, the air quality analysis presented in the Final EIR is equally riddled with errors and as flawed as the one previously presented in the Draft EIS/EIR and Supplement.

V. AIR QUALITY IMPACTS ARE UNDERESTIMATED

The air quality impact analysis presented in the Final EIR considerably underestimates emissions from Project operation, as discussed in Comment V.1 below. The Final EIR also omits a number of sources from the emission estimates. (*See* Comments V.A through V.G.) While each of these individual contributions to total Project air quality emissions might be small compared to the total emissions from the Project, the cumulative impact of these sources will likely be substantial.

V.A Emissions Are Underestimated Because Airport Capacity Is Underestimated

The planning assumptions reflected in the Final EIR for Alternative D are based on the airport accommodating 78.9 MAP in 2015. (Final EIS, p. 3-15.) This estimated airport capacity—already exceeding the maximum allowable capacity in million annual passengers ("MAP") under the SCAQMD's air quality management plan ("AQMP") and the maximum capacity assumed for regional transportation planning by Southern California Association of Governments ("SCAG")—appears to be a substantial underestimate. The same criticism holds for the capacity estimates of the other alternatives.

An independent evaluation of the capacity of Alternative D by an expert in airport design and capacity determined that LAWA never conducted a proper capacity analysis of the proposed terminal and gate configuration. (Kanafani 2003[19] and 2004[20].) The Final EIR's capacity assumption was not based on the physical gate configuration but on a variety of market assumptions. Obviously, such an estimate cannot be used as a suitable representation of the capacity of Alternative D. The airport design expert concluded that a more realistic, though still conservative, estimate of the capacity of Alternative D, based on the proposed configuration, would be 87 MAP.

Most sources of emissions from Alternative D, except construction, would be expected to scale linearly with MAP and would therefore be about 10 percent higher[21] than reported in the Final EIR.

V.B LAX Northside Is Inappropriately Excluded From Alternative D

The Final EIR now considers the 340-acre LAX Northside Development part of the Master Plan for Alternative D. (Final EIR, RTC AL00013-15.) Yet the Final EIR does not include emissions from either construction or operations of LAX Northside in the air quality impact analysis for Alternative D. By not including construction and operational emissions from development of LAX Northside, the Final EIR significantly underestimates emissions associated with Alternative D compared to the baseline.

The Final EIR reasons that it "provides a program level of analysis for the LAX Master Plan" and that "[a]s each improvement advances as an individual project, it will be examined in light of the EIS/EIR to determine what additional analysis is required. If/as the new administration facility advances toward implementation, the appropriate project-level CEQA review will occur." (Final EIR, RTC AL00013-15.) The Final EIR deems this tiered approach consistent with the provisions of CEQA. (*Ibid.*) We strongly disagree.

CEQA specifically mandates "that environmental considerations do not become submerged by chopping a large project into many little ones – each with a ... potential impact on the environment – which cumulatively may have

[19] A. Kanafani, Capacity Analysis of Aircraft Gate Positions, Los Angeles International Airport, Master Plan Alternative D; submitted as Attachment 7 to November 3, 2003 Comments submitted on behalf of the City of El Segundo by Shute, Mihaly & Weinberger.

[20] A. Kanafani, Comments on the LAX Master Plan Final EIS/EIR Responses to Comments; attached as Exhibit C to Comments submitted by Shute, Mihaly & Weinberger on behalf of the City of El Segundo.

[21] (89 MAP)/(78.9 MAP) – 110%

disastrous consequences. (City of Santee v. County of San Diego, 214 Cal. App. 3d 1438, 1452 (1989).)

The development of LAX Northside is an integral part of Alternative D, without which the proposed on-airport improvements will not be possible and will not function. While the exact design of the facilities might not be known at this point in time, LAWA apparently has enough information to specify a total of 4.5 million square feet ("MSF") office space required for Alternative D.

The NA/NP alternative, on the other hand, includes emissions from construction and operation of LAX Northside. (Final EIR, TR-GEN-2.) Obviously, knowing that Alternative D would be *similar to the original LAX Northside Development* and knowing its approximate square footage for administrative purposes (4.5 MSF) would permit a "program level" assessment of its air quality impacts. The Final EIR must be revised to include construction and operational emissions in the air quality analysis for Alternative D and recirculated for public review.

V.C Reverse Thrust Emissions Are Inappropriately Excluded

The Final EIR estimates emission rates for four aircraft operational modes: taxi/idle, takeoff, climbout, and approach. The Final EIR omits emissions associated with aircraft reverse thrust operations from its air quality analysis because "adequate emission factors have not been developed for reverse thrust and regulatory guidance for calculation [sic] emissions from reverse thrust was not available. (Final EIR, RTC AF00001-21.) As demonstrated below, this is incorrect and, in fact, ignores FAA guidance. The Final EIR then deliberates that "[t]he relative time that aircraft use reverse thrust compared to the other time spent in other operational modes is minimal, thus emissions for this mode are assumed to have minimal impact on the emission inventories." (Final EIR, RTC AF00001-21.) We disagree with this speculative statement.

Engine thrust reversal is typically used after aircraft landing to slow the aircraft to taxi speed and occasionally to "power-back" away from a boarding bridge (a practice not employed at LAX because of the lack of space between terminal buildings.) Reverse thrust describes the practice of setting the engines to full power in the reverse direction and is essentially a high-thrust operating mode. High-thrust operating modes, such as aircraft takeoff, generate very high NOx emissions per unit time relative to other operating modes such as aircraft taxi. While the time in mode ("TIM") for reverse thrust operations is, in fact short, approximately 15 to 20 seconds, it can nevertheless be responsible for an

additional 15 percent or more of the on-airport NOx emissions. (Rice & Walton 2003.[22])

The Final EIR further claims that "since runway lengths at LAX are able to accommodate even the largest aircraft, use of reverse thrust would be expected to be minimal." (Final EIR, RTC AF00001-21.) The Final EIR ignores that reverse thrust is not only employed by large aircraft to land on short runways but also to reduce brake wear and more often during wet runway conditions. In May 2004, LAWA itself explained 6 out of 84, or 7 percent, of incidents of community noise complaints with the use of reverse thrust.[23] This suggests that reverse thrust use at LAX is not minimal.

Perplexingly, LAWA does not follow FAA's official guidance on this matter. The FAA recognizes the importance of including reverse thrust operations in air quality assessments in its Air Quality Handbook,[24] which provides guidance, procedures and methodologies for use in carrying out air quality assessments for proposed Federal actions that are required for compliance with the National Environmental Policy Act ("NEPA"), the federal Clean Air Act ("CAA") and other environment-related regulations and directives. This guidance was relied on in preparing the Final EIR. (Final EIR, p. 4-655.)

The Air Quality Handbook, published well before the publication of the Draft EIS/EIR was conducted, unambiguously states that "[r]everse thrust is now considered by EPA as an official mode *and should be included in calculation procedures*..." [Emphasis added.] It continues "[s]ince reverse thrust engine operating conditions are similar to takeoff, time spent in reverse thrust should be combined with takeoff mode emission indices and fuel flow as a means of accounting for reverse thrust mode emissions. Aircraft reverse thrust typically is applied for 15-20 seconds[25] on landing." It explicitly specifies that "[t]akeoff emission indices and fuel flow should be used as inputs for calculating emissions from reverse thrust (as well as takeoff) mode." (Air Quality Handbook,

[22] Colin Rice and C. Michael Walton, Restricting the Use of Reverse Thrust as an Emissions Reduction Strategy, Research Report SWUTC/03/167231-1, Southwest Regional University, Center for Transportation Research, University of Texas, Austin, TX, revised July 2003.

[23] Los Angeles World Airports, LAX, Aircraft Noise Community Response Report, May 2004.

[24] Federal Aviation Administration, Air Quality Procedures for Civilian Airports and Air Force Bases, April 1997.

[25] A recent study on reverse thrust usage at Bergstrom International Airport in Austin, Texas, demonstrated an average TIM for reverse thrust during landing of 16.0 seconds. (Rice & Walton 2003.)

Appendix D[26], pp. D-5/6.) Further, reverse thrust operations were recently included in the EDMS modeling for two other airports in the South Coast Air Basin – John Wayne and El Toro – by adding 15 seconds to the total takeoff time. (MCAS El Toro Final EIR,[27] p. 4.5-26.)

Of the four phases of the aircraft landing/takeoff operations ("LTO") cycle typically included in aircraft emissions modeling, the greatest NOx emissions are attributable to the takeoff mode. Thus, increasing the amount of time in takeoff mode will considerably increase NOx emissions. (NESCAUM[28], p. II-13.) Review of the Final EIR's aircraft emissions confirms that more than 50 percent of NOx emissions from turbofan engines, which are by far the most-used type of engine for aviation use, are due to takeoff. (Final EIR, Appx. F-B, Attachment 4.)

The average takeoff time for aircraft under Alternative D for the year 2015 assumed in the Project's EDMS input files is 0.96 minutes, or 58 seconds.[29] Increasing this average takeoff time by just two seconds – considerably lower than the average observed reverse thrust time – to account for emissions from reverse thrust, would increase the total takeoff TIM by 3.5 percent. Aircraft NOx emissions are directly proportional to the TIM for each LTO. Consequently, an increase of 3.5 percent in the takeoff TIM results in an increase of 3.5 percent in NOx emissions attributable to takeoff and reverse thrust. Assuming 5 or 15 seconds for average reverse thrust would increase takeoff TIM and NOx emissions by about 9 and 26 percent, respectively. Depending on the actual average TIM for reverse thrust at LAX, resulting NOx emissions could be considerable, on the order of thousands of tons per year.

Since the Final EIR does not propose any measures restricting reverse thrust operations at LAX, there is no supportable rationale for excluding reverse thrust emissions from the analysis.

[26] Federal Aviation Administration, Air Quality Procedures for Civilian Airports and Air Force Bases, Appendix D, Aircraft Emission Methodology, April 1997.

[27] County of Orange, Final Environmental Impact Report No. 573 for the Civilian Reuse of MCAS El Toro and the Airport System Master Plan for John Wayne Airport and Proposed Orange County International Airport, SCH No. 98101053, August 2001.

[28] Northeast States for Coordinated Air Use Management ("NESCAUM") and Center for Clean Air Policy, Controlling Airport-related Air Pollution, June 2003.

[29] EDMS File "AIR_TOP.dbf" (MODE 3 = takeoff TIM) for Alternative D in 2015 provided on CD-ROM by FAA on January 19, 2004. Average TIM for the NA/NP alternative in 2015 is 0.94 minutes.

V.D Fugitive Dust Emissions From Wind Erosion Of Graded Areas Are Not Included

Wind erosion from graded areas is a major source of fugitive dust emissions during construction. The construction emission estimates presented in the Final EIR include fugitive dust emissions associated with equipment operation, entrained road dust, and wind erosion emissions from storage piles but appear to omit wind erosion of graded, exposed areas. Considering the large expanse of graded and disturbed areas during construction of the Project, the Final EIR omits a major source of fugitive dust emissions.

V.5 VOC Emissions From Architectural Coatings And Asphalt Emissions During Construction Are Not Included

The construction emission estimates presented in the Final EIR do not include emissions from architectural coatings, solvents, hot-mix asphalt paving, and runway/taxiway striping and their application. The Supplement, upon which the Final EIR's methodology is based, states that these emissions were not quantified because they were "deemed to be insignificant relative to overall project emissions." (Supplement, Appx. S-E, p. 3.) The rationale for excluding architectural coating emissions is that most surface coatings are assumed to be water-based by 2005 in accordance with SCAQMD rules and regulations, thus minimizing VOC emissions. (Supplement, Appx. S-E, p. 3.) No rationale is given in either the Final EIR or the underlying Supplement for excluding asphalt paving emissions.

Even though most architectural coatings will likely be water-based by 2005, they will still contain a certain amount of VOCs. If applied over large surfaces, *e.g.* runway stripes or exteriors and interiors of new buildings, VOC emissions could be substantial and should be included in the emissions inventory.

Asphalt paving has the potential to produce VOC emissions. Roadbed preparation, such as for new runways, requires the use of either cutback or emulsified asphalts. The EPA emission estimating report, *Compilation of Air Pollutant Emission Factors* ("AP-42"), indicates that cutback asphalt is a major source of VOC emissions, while hot mix asphalts have much lower VOC emissions. (AP-42, Sec. 4.5.) The Draft EIS/EIR and the Supplement do not require the use of hot mix asphalt. Therefore, paving emissions could be substantial and should have been included in the emission inventories. Further, emissions from asphalt paving not only include direct emissions from hot asphalt, but also associated combustion emissions from asphalt paving equipment.

Considering the extensive construction activities associated with the Project, *viz.* "[i]mplementation of the LAX Master Plan would result in one of the largest public works construction projects in the history of the City of Los Angeles" (Final EIR, p. 10.), the deliberate exclusion of emissions from architectural coatings and asphalt paving appears to intentionally underestimate actual construction VOC emissions from the Project compared to the baseline.

V.E Urban Heat Island Effect Is Not Included

The Final EIR declines to analyze the urban heat island effect because it is a regional effect and "any increase in "black surfaces" at LAX would be minimal with respect to the entire LAX urban area. The contribution of construction included in the LAX Master Plan, the Final EIR claims, would be effectively zero. (Response to Comment AL00033-330.)

In matters of relative contributions, this might be true (though LAX with its large expanses of paved surfaces is certainly not a negligible contributor); however, the argument is completely beside the point. The urban heat island effect is a cumulative effect due to the increased number of paved surfaces in cities. Every surface that is paved, every removal of a shade tree, and every addition of a dark roof increases the urban heat island effect. There are many individual sources, which—each on their own--might have a negligible contribution. However, their cumulative contributions result in large-scale, regional and global effects. In order to address either problem—air pollution or urban heat island effect (which also results in increased air pollution)—it is precisely these individual contributions that must be targeted. Measures that decrease their relative contribution must be included in the mitigation plan.

The Heat Island Research Group ("HIG") at the Lawrence Berkeley National Laboratory ("LBNL"), jointly funded by the U.S. Department of Energy ("DOE") and the U.S. EPA, is studying measures to cool cities. The increased summertime temperatures causes increased cooling requirements. The HIG estimates that in Los Angeles about 1 to 1.5 Gigawatts ("GW") of power are used to compensate the impact of the heat island. This increased power costs the Los Angeles rate payers about $100,000 per hour, about $100 million per year. The impact of the heat island is also seen in smog. The formation of smog is highly sensitive to temperatures; the higher the temperature, the higher the rate of formation and, hence, the concentration of smog.

LAWA can not simply dismiss its contribution to the air pollution problems, when it can easily implement measures to help reduce the urban heat island effect. As the HIG points out:

> Measures to cool heat islands are simple and have been known to human beings for ages: reflective surfaces and trees. Reflective roofs on a building directly reduce the heat conduction into the building and reduce air-conditioning use. Similarly, trees shading a building reduce air-conditioning use. Furthermore, many reflective surfaces (roofs and pavements) and urban vegetation in a neighborhood alter the surface energy balance and result in a lower ambient temperature, in turn leading to further reduction in air-conditioning energy use and urban smog.[30]

The Project should include all feasible measures to mitigate its contribution to the urban heat island effect.

V.F Emissions From Electricity Generation Are Not Included

We previously commented on the failure of the Draft EIS/EIR to include secondary emissions from electricity generation, address impacts from increased electricity demand due to the Project, and analyze the increased electricity demand due to the proposed air quality mitigation program as required by CEQA . (Fox 2001, Comment I.C.) We herewith incorporate this comment by reference. The Final EIR responded to our detailed comments with the terse statement that "[t]he Supplement to the Draft EIS/EIR addressed air quality impats from increased electricity production in Section 4.6, Air Quality (subsection 4.6-10.)" (Final EIR, RTC AL00033-317.)

The Supplement and Final EIR, in fact, include a section quantifying the secondary air pollutant emissions due to electricity generation for Alternative D. (Final EIR, p. 4-749.) However, this section is little more than window-dressing without any consequences. For example, the Final EIR correctly points out that "[a]dding these numbers to the mitigated regional project-specific emissions … would result in increased regional emissions for Alternative D." (Final EIR, p. 4-749.) Yet the Final EIR fails to include these emissions in a summary table for total operational and construction emissions and also fails to include these emissions in the air quality dispersion modeling. Emissions were only calculated for the preferred Alternative D, not for any of the other proposed build alternatives or the NA/NP alternative or the baseline. None of the emissions are supported by any calculations or data, *e.g.* the projected increase in electricity demand for the Project in kilowatt-hours ("kWh"), the emission factors used to derive these regional emissions, etc. Further, this section does not address the increased demand for electricity due to the implementation of the proposed mitigation program as required by CEQA. And finally, the Final EIR's emission calculations are based on the assumption that 17.3 percent of the electricity needed would be produced locally and that 100 percent of this 17.3 percent of

[30] http://eetd.lbl.gov/HeatIsland/LEARN/Overview/index.html.

electricity is generated by natural gas-fired power plants. This analysis is fundamentally flawed because its emission estimates must include not only the 17.3 percent local generation but also the remainder of 82.7 percent regional electricity generation. Further, as we pointed out in previous comments, the LADWP currently produces 52 percent of its power from coal. (*See* Fox 2001, Comment I.C.) Emissions from coal-fired units are substantially higher than those from natural gas-fired units.

Consequently, the Final EIR has substantially underestimated secondary emissions from electricity generation due to the Project and its mitigation program.

V.G Final EIR Fails To Identify Significant Impacts From The Project

As discussed in Comment III, the Final EIR failed to address PM2.5 impacts and, consequently, failed to identify and properly mitigate significant PM2.5 impacts. Further, the above identified methodological flaws in the air quality analysis (*see* Comment IV), the underestimate of airport capacity, (*see* Comment V.A), and the failure to include several emission sources into the inventory (*see* Comments V.B through V.C) results in significant underestimates of air pollutant emissions. These issues likely result in significant impacts from the Project that have not been identified and/or not properly mitigated.

VI. PROPOSED MITIGATION PROGRAM IS INADEQUATE AND MUST BE REVISED

The Final EIR finds significant impacts after implementation of all proposed mitigation measures for the preferred Alternative D for NOx and SO_2 for on-airport emissions; for CO, VOC, NOx, and PM10 for off-airport traffic emissions; for CO, VOC, NOx, and PM10 for construction emissions; and for PM10 concentrations for on-airport operational and construction-related sources combined. (Final EIR, 478.) As discussed in Comment V, the Final EIR underestimates emissions and consequently fails to identify and adequately mitigate other significant impacts.

The study area is classified as nonattainment for both the NAAQS and CAAQS: ozone, CO, and PM10. Further, the study area is classified by EPA as "extreme" nonattainment for ozone under the CAA. (Final EIR, Table F4.6-4.) Because of the air basin's nonattainment status, it is particularly important to reduce emissions of these nonattainment pollutants to the greatest extent feasible. As discussed below, the Final EIR does not reduce operational or construction emissions to the greatest extent feasible. Consequently, the Final

EIR must be revised to mitigate all emissions to the extent feasible and recirculated for public review.

VI.A Emission Reductions Are Not Quantifiable

The goal of the mitigation measures identified in the Final EIS/EIR and the MMRP is to reduce air pollutant emissions associated with the Project to levels equal to those identified in the Final EIR Table F4.6-11a.

The Final EIR quantifies ranges of potential emission reductions for construction-related mitigation measures, the construction of eight new flyaway terminals, and conversion of ground support equipment. (Final EIR, Tables F4.6-18, F.4-19, and F4.6-20.) The Final EIR and the MMRP both claim that reliable emission reductions cannot be quantified for all of the proposed measures. (MMRP, p. 39 and Final EIR, p. 4-724.) Emission reductions for all other proposed mitigation measures are absent from both the Final EIR and the Addendum. It is unclear how LAWA on one hand intends to ensure that post-mitigation levels of emissions identified in the Final EIR are guaranteed when on the other hand it feels that it is impossible to quantify the emission reductions provided by the various mitigation measures.

Further the Addendum indicates that some mitigation measures might be found to be infeasible once the Master Plan process begins. The Addendum asserts that these determinations will not affect the projected post-mitigation emission levels. (Addendum, p. 2-12.) This is problematic because LAWA can not guarantee that only those mitigation measures for which emissions reductions were not quantified in the Final EIR, and which were not included to estimate post-mitigation emissions, will be found to be infeasible. Determining that proposed mitigation measures are infeasible, which LAWA apparently expects will occur, could considerably increase the level of post-mitigation emissions.

VI.B The MMRP Does Not Address Secondary Emissions From Electricity Generation

The MMRP does not address mitigation for secondary emissions from electricity generation. In fact, the MMRP is satisfied if emission reductions in Table A10.8 (which is identical to Table F4.6-23a in the Final EIR and presents combined construction and operational emissions from the Project *without* secondary emissions from electricity generation) are met. Consequently, the mitigation program fails to mitigate secondary emissions from electricity generation.

VI.C Additional Mitigation Exists And Is Feasible

In spite of the considerable Project impacts and the severe air quality problems in the SoCAB, the Final EIR does not require all feasible mitigation. Mitigation measures can take a variety of forms. They may avoid the impact altogether; minimize the impact by limiting its degree or magnitude; rectify the impact by repairing, rehabilitating, or restoring; reduce or eliminate the impact; or compensate for the impact by replacing or providing substitute resources or environments. (14 CCR § 15370; CEQA Guidelines, Section 20.22.) There are many feasible mitigation measures that fall into these categories of acceptable mitigation that are not included in the Final EIR or MMRP. Many of these are routinely required as CEQA mitigation in other projects.

The mitigation program LAWA proposes includes only mitigation that directly mitigates construction or operational emissions. However, numerous other indirect mitigation measures beyond those proposed in the MMRP are available that could help offset the enormous impacts of the Project. CEQA requires the implementation of "all feasible" mitigation to reduce significant impacts from a project. CEQA and the case law interpreting it, requires that "public agencies should not approve projects as proposed if there are feasible alternatives or *feasible mitigation measures* available which would substantially lessen the significant environmental effects of such projects ..." (Pub.Res. Code, Section 21002, emphasis added) and that "[e]ach public agency shall mitigate or avoid the significant effects on the environment of projects it approves or carries out whenever it is feasible to do so" (Pub.Res. Code, Section 21002.1.) For example, in *Orinda Association v. Board of Supervisors* (1986) 182 Cal.App.3d 1145, the court found that no agency can approve a project for which significant impacts have been identified without first adopting any and all feasible mitigation measures or feasible alternatives.

Considering the enormous impacts of the Project on air quality, LAWA must incorporate all feasible mitigation, direct and indirect, to mitigate impacts from the Project. We've previously commented on the availability of additional feasible mitigation measures and incorporate these comments here by reference. (Fox 2001, Comments IV.E, IV.F., and IV.G; Fox & Pless 2003, Comments V.C and V.D.) The Final EIR failed to consider and incorporate a large number of proposed feasible mitigation measures.

For example, as previously noted, the Final EIR fails to account for the urban heat island effect that the Project will create. Accordingly, the proposed mitigation plan does not include adequate mitigation for the urban heat island effect. Examples of feasible mitigation measures which have been included in a large number of other projects as CEQA mitigation include: a) reducing standard

asphalt paving with lighter-colored, reflective pavement materials or porous block pavement systems; b) requiring the installation of lowest emitting commercially available fuel-fired equipment (*e.g.*, boilers, furnaces) with a heat input greater than 0.3 MMBtu/hr, consistent with best available control technology; c) installation of energy star roof products; and d) installation of roof photovoltaic energy systems.

Furthermore, in our previous comments, we pointed out the numerous opportunities to offset emissions outside of LAX, *e.g.*, retrofitting heaters, boilers, furnaces, generators, and turbines in the SoCAB, or acquiring RECLAIM offsets. (Fox 2001, Comment IV.F.) The Final EIR declined to consider the retrofitting off-airport combustion sources, arguing that emission reductions elsewhere would not mitigate emissions from LAX and that the FAA has no legal authority over equipment that does not belong to it. (Final EIR, RTC AL.00033-336.) We disagree with this reasoning. The Final EIR does not address the option of acquiring RECLAIM offsets.

Offsetting project emissions with retrofits elsewhere is frequently required for large projects, where emission reductions cannot be achieved on site, particularly for projects with a considerable regional impact as is the case here. For example, the California Energy Commission ("CEC"), which follows a CEQA-equivalent to process to license power plants, frequently requires offsite mitigation. See, for example, the mitigation program required for the proposed Riverside Energy Resources Center ("RERC"), which requires as a Condition of Exemption ("Col:") that a specified amount of operational emission offsets be developed through the following measures:

> 1. The retrofit of emission controls on diesel powered school buses within the Riverside School District or directly adjacent school districts.
> 2. The retrofit of emission controls on diesel powered equipment under the direct or contracted control of the City of Riverside.
> 3. The reduction or elimination of other combustion sources within the city boundaries of the City of Riverside as approved by the CPM [Construction Project Manager].
> 4. Any remaining emission reductions not provided as specified above from their voluntary surrender and retirement of emission reduction credits or RECLAIM trade credits banked with the South Coast Air Quality Management District and approved by the CPM. [RERC Final Initial Study[3], Col: AQ 7.]

In sum, there are a large number of additional mitigation measures that could be implemented to reduce the enormous impacts of the Project.

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[3] California Energy Commission, Riverside Energy Resources Center, Final Initial Study, Application for Small Power Plant Exemption, 04-SPPE-01, August 2004; http://www.energy.ca.gov/sitingcases/riverside/documents/index.html.

VII. PUBLIC HEALTH IMPACTS

VII.A Human Health Risks Are Underestimated

The human health risk assessment is based on the quantity of air pollutant emissions and resulting ambient air concentrations as determined in the air quality section of the Final EIR. As discussed in Comments IV and V above, the emissions from the Project are considerably underestimated. Consequently, the human health risks resulting from the Project as presented in the Final EIR are also considerably underestimated. The health risk assessment must be revised based on a revised air quality impact assessment that includes all emission sources and corrects the methodological flaws. A revised health risk assessment will likely result in significant impacts that were not identified and properly mitigated in the Final EIR.

VII.B Acute Health Risks From Construction Were Not Assessed

We previously commented on the lack of an acute health risk impact assessment from construction emissions. (Fox 2001, Comment V.E.) We herewith incorporate this comment by reference. In response, the Final EIR reasons that "[c]onstruction emissions were not included in this assessment because of the difficulty in accurately projecting construction staging. Construction emission may be a contributor to short-term project impacts, and this issue will be considered in decisions of if and how to implement the Master Plan." (Final EIR, RTC AL.00033-346.) This is not acceptable.

Acute health impacts from construction are virtually always significant due to emissions of diesel exhaust and acrolein. The construction phase for the Project spans a decade and can therefore hardly be called short-term. The Final EIR acknowledges the extent of project construction, *inter.* "[I]mplementation of the LAX Master Plan would result in one of the largest public works construction projects in the history of the City of Los Angeles." (Final EIR, p. 10.). The Final EIR may not refuse to analyze acute health risks from construction simply because it is difficult to accurately project construction staging. If an accurate analysis cannot be produced, a worst-case scenario of potential maximum construction emissions at any one time must be analyzed.

VII.C Mitigation of Health Impacts Is Inadequate

We previously commented on the failure of the proposed mitigation program presented in the Draft EIR and Supplement to specifically address human health impacts, instead exclusively relying on air quality mitigation measures. (Fox 2001, Comment VI; Fox & Pless 2003, Comment VIII.) The Final

EIR still contains only air quality mitigation measures to address the significant and severe public health impacts due to the Project and entirely ignores other available and feasible mitigation measures.

We suggested a number of feasible mitigation measures to reduce toxic air pollutants ("TAPs") including upgrading the LAX ventilation system, installing efficient charcoal filters on the LAX intake air to remove TAPs, and treating the intake air of nearby sensitive receptors who would be most affected by TAP emissions from the Project. The Final EIR declines to consider these measures, reasoning that "[a]lthough ventilation systems. . could improve indoor air quality, indoor air is not a primary issue for exposure to TAPs." (Final EIR, RTC AL00033-351.)

Considering the magnitude of impacts resulting from the Project, the proposed mitigation plan should include *all feasible* mitigation to reduce exposure to TAPs, instead of only addressing the primary sources and exposure routes.

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Table A1: EDMS Ratios From Final EIR, Appx. F-B, Attachment 7, Table 7-3
- Alternative D Unmitigated 2015 -

NAME	CO_TONS	HC_TONS	NOX_TONS	SOX_TONS	PM10_TONS
Aircraft	1.01	[illegible]	[illegible]	1.74	1.00
APU	1.93	[illegible]	[illegible]	1.00	1.00
GSE	1.65	[illegible]	[illegible]	[illegible]	1.60
Roadways	1.65	1.00	1.00	[illegible]	[illegible]
Parking Lots	[illegible]	[illegible]	1.00	[illegible]	[illegible]
Stationary Sources	[illegible]	1.00	1.00	[illegible]	[illegible]
Total	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

NAME	CO_TONS	HC_TONS	NOX_TONS	SOX_TONS	PM10_TONS
Aircraft	1.00	[illegible]	[illegible]	[illegible]	[illegible]
APU	1.95	[illegible]	[illegible]	[illegible]	1.00
GSE	[illegible]	[illegible]	[illegible]	[illegible]	2.73
Roadways	1.65	[illegible]	[illegible]	[illegible]	1.65
Parking Lots	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Stationary Sources	[illegible]	1.00	1.05	1.00	[illegible]
Total	[illegible]	[illegible]	[illegible]	1.00	[illegible]

NAME	CO_TONS	HC_TONS	NOX_TONS	SOX_TONS	PM10_TONS
Aircraft	[illegible]	[illegible]	[illegible]	[illegible]	1.00
APU	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
GSE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Roadways	[illegible]	1.00	[illegible]	[illegible]	[illegible]
Parking Lots	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Stationary Sources	1.00	[illegible]	[illegible]	[illegible]	[illegible]
Total	[illegible]	[illegible]	[illegible]	[illegible]	1.00

NAME	CO_TONS	HC_TONS	NOX_TONS	SOX_TONS	PM10_TONS
Aircraft	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
APU	[illegible]	[illegible]	[illegible]	1.00	[illegible]
GSE	0.42	[illegible]	[illegible]	[illegible]	[illegible]
Roadways	[illegible]	1.00	[illegible]	1.00	[illegible]
Parking Lots	[illegible]	[illegible]	1.00	1.00	[illegible]
Stationary Sources	[illegible]	1.00	1.00	[illegible]	[illegible]
Total	[illegible]	[illegible]	[illegible]	[illegible]	1.00

NAME	CO_TONS	HC_TONS	NOX_TONS	SOX_TONS	PM10_TONS
Aircraft	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
APU	2.61	[illegible]	[illegible]	[illegible]	[illegible]
GSE	[illegible]	[illegible]	0.54	[illegible]	[illegible]
Roadways	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Parking Lots	1.00	[illegible]	[illegible]	[illegible]	[illegible]
Stationary Sources	1.00	[illegible]	[illegible]	[illegible]	[illegible]
Total	0.65	[illegible]	[illegible]	[illegible]	[illegible]

Table A2: Calculation of EDMS Ratios
- Alternative D Unmitigated 2015 -

Alt D Unmitigated 2015, EDMS 3.2*

(ton/year)	CO	VOC	NOx	SOx	PM10
Aircraft	6,242.97	1,114.73	5,586.22	235.51	59.08
APU	97.84	4.41	56.03	0.00	0.00
GSE	1,208.45	68.76	79.58	1.43	0.77
Roadways	1,140.53	252.58	102.38	10.22	42.52
Parking Lots	218.91	62.00	22.80	2.93	17.52
Stationary Sources	120.01	50.58	219.78	6.71	39.08
Total	**9,028.71**	**1,553.06**	**6,066.79**	**256.80**	**158.97**

Alt D Unmitigated 2015, EDMS 4.11**

(ton/year)	CO	VOC	NOx	SOx	PM10
Aircraft	6,284.71	1,068.07	4,865.18	409.39	59.08
APU	188.79	8.67	102.00	17.84	0.00
GSE	2,053.38	29.51	334.37	1.35	3.97
Roadways	1,133.98	120.29	210.60	1.05	49.97
Parking Lots	592.75	137.64	72.73	0.51	28.33
Stationary Sources	120.01	50.58	219.78	6.71	39.08
Total	**10,379.60**	**1,414.76**	**5,813.66**	**436.86**	**180.43**

Alt D Unmitigated 2015, Ratio EDMS 4.11/EDMS 3.2

	CO	VOC	NOx	SOx	PM10
Aircraft	1.01	0.96	0.87	1.74	1.00
APU	1.93	1.96	1.82	N/A	N/A
GSE	1.70	0.43	4.20	0.95	5.19
Roadways	1.00	0.48	2.14	0.10	1.18
Parking Lots	2.71	2.22	3.19	0.17	1.62
Stationary Sources	1.00	1.00	1.00	1.00	1.00
Total	**1.15**	**0.91**	**0.96**	**1.70**	**1.14**

Note: Totals may differ slightly from Final EIR due to rounding of significant digits.
Incorrect totals or ratios in the Final EIR are marked shaded with bold borders

* Final EIR, Appx. F-B, Attachment 7, Table 7-2
** Final EIR, Appx. F-B, Attachment 7, Table 7-1

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Table A3: Calculation of EDMS Ratios
- Alternative D Mitigated 2015 -

Alt D Mitigated 2015, EDMS 3.2*

(ton/year)	CO	VOC	NOx	SOx	PM10
Aircraft	6,242.97	1,114.73	5,586.22	235.51	59.08
APU	97.84	4.41	56.03	0.00	0.00
GSE	0.00	0.00	0.00	0.00	0.00
Roadways	1,157.98	270.63	104.51	10.13	42.65
Parking Lots	176.65	59.21	18.36	2.93	17.07
Stationary Sources	120.01	50.58	219.78	6.71	39.08
Total	**7,797.45**	**1,499.56**	**5,985.00**	**255.28**	**157.88**
Total Final EIR*	7,795.19	1,495.99	5,570.44	243.50	157.88
Difference	2.26	3.57	414.56	11.78	0.00

Alt D Mitigated 2015, EDMS 4.11**

(ton/year)	CO	VOC	NOx	SOx	PM10
Aircraft	6,284.71	1,068.07	4,865.18	409.39	59.08
APU	188.79	8.67	102.00	17.84	0.00
GSE	0.00	0.00	0.00	0.00	0.00
Roadways	1,128.02	117.79	217.49	1.06	50.77
Parking Lots	544.03	130.48	69.52	0.51	28.13
Stationary Sources	120.01	50.58	219.78	6.71	39.08
Total	**8,265.55**	**1,375.59**	**5,473.97**	**435.51**	**177.06**

Alt D Mitigated 2015, Ratio EDMS 4.11/EDMS 3.2

	CO	VOC	NOx	SOx	PM10
Aircraft	1.01	0.96	0.87	1.74	1.00
APU	1.93	1.96	1.82	N/A	N/A
GSE	N/A	N/A	N/A	N/A	N/A
Roadways	0.97	0.44	2.08	0.10	1.19
Parking Lots	3.05	2.20	3.79	0.17	1.65
Stationary Sources	1.00	1.00	1.00	1.00	1.00
Total	**1.06**	**0.92**	**0.91**	**1.71**	**1.12**

Note: Totals may differ slightly from Final EIR due to rounding of significant digits.
Incorrect totals or ratios in the Final EIR are marked shaded with bold borders

* Final EIR, Appx. F-B, Attachment 7, Table 7-2
** Final EIR, Appx. F-B, Attachment 7, Table 7-1

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Table A4: Calculation of EDMS Ratios
- No Action/No Project Alternative 2015 -

	NA/NP Alternative 2015, EDMS 3.2*				
(ton/year)	CO	VOC	NOx	SOx	PM10
Aircraft	6,668.71	1,204.13	5,154.91	232.46	70.20
APU	98.70	4.40	53.60	0.00	0.00
GSE	5,685.90	240.40	618.70	11.40	24.00
Roadways	1,698.90	184.50	243.00	2.10	41.70
Parking Lots	262.70	66.70	78.10	0.20	0.70
Stationary Sources	115.80	90.50	209.90	5.82	36.50
Total	**14,530.21**	**1,789.13**	**6,308.41**	**251.98**	**173.10**

	NA/NP Alternative 2015, EDMS 4.11**				
(ton/year)	CO	VOC	NOx	SOx	PM10
Aircraft	6,617.41	1,119.84	4,850.17	421.34	62.83
APU	197.97	8.86	102.74	18.45	0.00
GSE	1,113.91	40.22	331.92	1.27	11.83
Roadways	1,242.40	138.18	181.05	1.25	43.91
Parking Lots	159.25	53.43	44.07	0.39	9.04
Stationary Sources	120.01	50.68	219.76	5.71	39.06
Total	**9,450.94**	**1,411.11**	**5,729.08**	**449.41**	**166.69**

	NA/NP Alternative 2015, Ratio EDMS 4.11/EDMS 3.2				
	CO	VOC	NOx	SOx	PM10
Aircraft	0.99	0.93	0.94	1.81	0.90
APU	2.01	2.01	1.91	N/A	N/A
GSE	0.20	0.17	0.54	0.11	0.49
Roadways	0.73	0.75	0.75	0.60	1.05
Parking Lots	0.61	0.80	1.57	1.95	12.91
Stationary Sources	1.04	0.56	1.05	1.15	1.07
Total	**0.65**	**0.79**	**0.91**	**1.78**	**0.96**

Note: Totals may differ slightly from Final EIR due to rounding of significant digits
Incorrect totals or ratios in the Final EIR are marked shaded with bold borders

* Final EIR, Appx. F-B, Attachment 7, Table 7-2
** Final EIR, Appx. F-B, Attachment 7, Table 7-1

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Table A5:
Calculation of Average EDMS Ratios for 2015

	2015, Average Ratio EDMS 4.11/EDMS 3.2				
	CO	VOC	NOx	SOx	PM10
Aircraft	1.00	0.95	0.89	1.76	0.97
APU	1.95	1.98	1.85	N/A	N/A
GSE	0.95	0.30	2.37	0.53	2.84
Roadways	0.90	0.55	1.68	0.27	1.14
Parking Lots	2.12	1.75	2.85	0.77	5.39
Stationary Sources	1.01	0.85	1.02	1.05	1.02
Total	**0.95**	**0.87**	**0.93**	**1.73**	**1.07**

Note: Totals may differ slightly from Final EIR due to rounding of significant digits
Incorrect totals or ratios in the Final EIR are marked shaded with bold borders

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Table A6: Calculation of EDMS Ratios
- No Action/No Project Alternative 2005 -

	NA/NP Alternative 2005, EDMS 3.2*				
(ton/year)	CO	VOC	NOx	SOx	PM10
Aircraft	6,070.30	1,172.60	4,354.40	213.60	60.30
APU	91.60	4.30	49.40	0.00	0.00
GSE	6,219.80	248.50	603.30	12.10	22.60
Roadways	3,459.10	347.40	354.20	2.40	45.50
Parking Lots	493.40	113.90	40.20	0.20	0.90
Stationary Sources	111.90	81.70	198.80	5.70	34.10
Total	**16,446.30**	**1,988.40**	**5,160.30**	**233.40**	**163.40**

	NA/NP Alternative 2005, EDMS 4.11**				
(ton/year)	CO	VOC	NOx	SOx	PM10
Aircraft	5,817.95	916.67	4,428.90	377.33	50.76
APU	181.68	8.48	92.50	16.40	0.00
GSE	2,615.73	183.26	1,239.61	2.92	41.27
Roadways	2,510.34	338.88	342.44	1.71	44.53
Parking Lots	310.03	75.18	63.84	0.42	9.69
Stationary Sources	111.96	49.77	198.06	5.70	34.30
Total	**11,547.69**	**1,572.24**	**6,356.35**	**404.52**	**180.55**

	NA/NP Alternative 2005, Ratio EDMS 4.11/EDMS 3.2				
	CO	VOC	NOx	SOx	PM10
Aircraft	0.96	0.78	0.91	1.77	0.84
APU	1.98	1.97	1.87	N/A	N/A
GSE	0.42	0.74	2.04	0.24	1.83
Roadways	0.81	0.98	0.97	0.71	0.98
Parking Lots	0.63	0.66	1.58	2.10	10.77
Stationary Sources	1.00	0.61	1.00	1.00	1.01
Total	**0.72**	**0.80**	**1.04**	**1.73**	**1.10**

Note: Totals may differ slightly from Final EIR due to rounding of significant digits
Incorrect totals or ratios in the Final EIR are marked shaded with bold borders

* Final EIR, Appx. F-B, Attachment 7, Table 7-2
** Final EIR, Appx. F-B, Attachment 7, Table 7-1

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Tom Brohard and Associates

November 24, 2004

Ms. Christy H. Taylor, Attorney at Law
Shute, Mihaly, & Weinberger LLP
396 Hayes Street
San Francisco, California 94102

SUBJECT: Rebuttal to the Final Environmental Impact Report Regarding the Traffic Impacts of the Los Angeles International Airport Master Plan

Dear Ms. Taylor:

Over the last four years, Tom Brohard, PE, has reviewed various documents associated with the Los Angeles International Airport (LAX) Master Plan prepared for Los Angeles World Airports (LAWA) and the Federal Aviation Administration (FAA). Most recently, our October 28, 2003 report focused on the traffic impacts of Alternative D upon the City of El Segundo as identified in the June 2003 LAX Master Plan Addendum and the July 2003 Supplement to the Draft Environmental Impact Report (Supplement).

We have now reviewed the responses contained in the Final EIR to the 78 comments raised in our October 28, 2003 report (SAL00015-157 through SAL00015-234), and provided rebuttals below. As indicated below, LAWA and FAA have not adequately responded to a number of our earlier comments, and many of the associated problems with the traffic analysis have not been adequately addressed. Several of the LAWA responses attempt to defend their unsupported assumptions and faulty methodology rather than provide the necessary technical support, explanation, and documentation for their opinions. In other responses, impacts have not been mitigated by the proposed measures, or monitoring of the proposed mitigation measures has not been incorporated.

It must be pointed out that it is extremely difficult, if not impossible, to conclusively verify and ascertain which changes have been made in the Final EIR in response to our October 28, 2003 comments. The responses to our comments contain references to Topical Responses, responses to comments made by others, and to the Draft EIS/EIR, Master Plan, Master Plan Addendum, Supplement to the Draft EIS/EIR, various technical reports, Errata, and the Final EIR. The logistical difficulties associated with wading through numerous CD's which contain thousands of pages of text and hundreds of intersection capacity calculations are enormous. The resulting compilation of materials in the Final EIR and all the prior documents cannot be remotely considered as "user friendly."

Current Understanding of the Alternative D Project

The Master Plan proposal currently before the Los Angeles City Council consists of Master Plan Alternative D as modified by the terms of the LAX Specific Plan.

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Under the proposed Specific Plan, certain components of the Master Plan will require additional study and evaluation prior to their construction. However, with the controversial nature of some of these so-called "yellow light" components, it is very likely that some of these 'yellow light' components will become "red light" components and that they will never be constructed as envisioned in the LAX Master Plan Addendum and as have been evaluated in the Final EIR. Particularly controversial "yellow light" projects include the demolition of Terminals 1, 2, and 3 as well as the removal of public parking structures in the Central Terminal Area, together with construction of a linear aircraft terminal and the Ground Transportation Center (GTC).

Thus, it is reasonably foreseeable and even highly likely that the number of aircraft gates at LAX would remain at 163, or greater, with Terminals 1, 2, and 3 as they are today, rather than be reduced to 153 as was analyzed in the FEIR. Retaining 163 or more aircraft gates, not reducing them to 153 as assumed in the Final EIR for Alternative D, would result in more passengers, more vehicle trips and additional traffic impacts to freeways and streets above those identified. Without the proposed GTC, the origin and destination of many of the airport trips would also shift back to the Central Terminal Area and away from the site of the proposed Ground Transportation Center. Using just the passenger and related trips for Alternative D from Table F4.3.2-4 of the Final EIR, nearly 12,000 a.m. peak hour trips, over 21,000 Airport peak hour trips, and over 13,000 p.m. peak hour trips would be rerouted. No traffic study or analysis has been conducted of the significantly changed off-airport traffic impacts that would occur under this condition, a scenario that is now very likely to occur with the partial implementation of the LAX Master Plan.

In summary, LAWA has not conducted an adequate traffic and circulation analysis of Alternative D, either as initially proposed or as now modified by the LAX Specific Plan. Without further study to address the inadequate analysis and substantial evidence of significant traffic impacts, as discussed below, it is not legally permissible to conclude, as the Final EIR does, that most of the proposed project's traffic impacts have a less than significant effect on the environment with mitigation. A corrected traffic analysis for Alternative D must be prepared, and the Final EIR for the Los Angeles International Airport Master Plan must be revised and recirculated, to address these critical issues.

LAX Master Plan Final EIR - Traffic Related Issues - Rebuttal

The following concerns, omissions, and deficiencies relate to the continuing traffic impacts associated with Alternative D upon the City of El Segundo. These rebuttals were developed during our review of the responses to our October 28 2003 comments (SAL00015-156 through SAL00015-234) contained on Pages 3-5854 through 3-5891 of the Final EIR for the LAX Master Plan.

1. Peak Hour Trip Caps for LAX Northside Development (SAL00015-163)

   - Comment - Supporting calculations must be provided to ensure the reductions of 50 percent in the a.m. peak hour and 57 percent in the p.m. peak hour claimed on Page 2-117 will be achieved.
   - Response – Recognizing that the continuing growth in airport demand is increasing airport related traffic, Los Angeles World Airports has agreed to reduce development of LAX Northside... Therefore, the reduced trip generation can be achieved simply by staying within the square footage parameters (total of 2.6 million square feet) defined for the project.
   - Rebuttal – The Final EIR does not provide any calculations to support the conclusion that 2.6 million square feet of LAX Northside Development, reduced from 4.5 million square feet, will provide the reductions to 50 percent in the a.m. peak hour and 57 percent in the p.m. peak hour, the revised trip caps. Different ranges of land uses that could be developed on this site would generate significantly different levels of peak hour trips. A monitoring plan to ensure peak hour trips do not exceed the revised trip caps, together with penalty provisions for non compliance, must also be included for the 2.6 million square foot LAX Northside Development

2. Interim Analyses Are Required for Alternative D (SAL00015-165)

   - Comment - Analyses must be conducted for each phase of Alternative D so the timely mitigation of associated traffic impacts will occur. Each phase of Alternative D contains major components that will significantly alter traffic patterns and impacts. . The traffic impacts after completion of each phase must be identified, together with the timely implementation of necessary mitigation measures.
   - Response – The mitigations associated with the major project components were based on location and the anticipated traffic patterns to that facility
   - Rebuttal - No traffic study or analysis has been conducted of the significantly changed off airport traffic impacts that would occur under a segmented, partial implementation of the LAX Master Plan.

3 I-405 and I-105 Freeway Impacts (SAL00015-171)

   - Comment - A number of freeway ramps as well as mainline sections of the adjacent I-405 and I-105 Freeways will be significantly impacted by Alternative D. Adding even a single trip to freeway segments operating at Level of Service E or F requires detailed study...

   - Response – If Alternative D and its mitigation measures are adopted by the Los Angeles City Council, further environmental review will be conducted including the preparation of Project Study Reports for the proposed interchanges. The Project Study Reports will analyze in more detail the effects of the proposed interchanges on the movement of traffic on the I-405 and I-105 mainlines and ramps in the vicinity of LAX.
   - Rebuttal – Page 2-217 of the Final EIR states "Alternative D would affect freeway segments." However, the Final EIR attempts to improperly defer the analysis of traffic impacts of Alternative D upon the I-405 and I-105 mainlines as well as on interchanges along both freeways. Without conducting such analyses at this time and including it in the Final EIR, the full extent of the required mitigation of the traffic impacts associated with the LAX Master Plan Addendum remains unknown.

4. Alternative D Construction Schedule (SAL00015-181)

   - Comment – The Supplement indicates substantial shifts in airport traffic patterns will occur as the major components of Alternative D are constructed... Construction of the off site roadway improvements, which are assumed in the analysis in the Supplement, must be accelerated...
   - Response – The construction schedule in Table S3-15 of the Supplement to the Draft EIS/EIR will be revised to begin the Offsite Roadway Improvements earlier...
   - Rebuttal – The Final EIR does not provide the revised construction schedule for the offsite roadway improvements to support this response.

5. Construction Trips/Impacts on Sepulveda Boulevard (SAL00015-184)

   - Comment - Table S4.3.2-10 fails to properly quantify the amount of construction traffic that will impact Sepulveda Boulevard...
   - Response – Figure S7 shows that no construction truck trips will travel on Sepulveda Boulevard south of Imperial Highway. Response ST-3.9 indicates dirt and aggregate and all other materials and equipment will use Sepulveda Boulevard north of Imperial Highway.
   - Rebuttal – Sepulveda Boulevard south of Imperial Highway routinely carries truck traffic and the use of this roadway by trucks is not restricted or prohibited in any way. If mandatory provisions to totally preclude the use of Sepulveda Boulevard south of Imperial Highway by construction traffic are developed and enforced, then the analysis completed to date is acceptable. To the contrary, however, some construction worker and truck

traffic will use Sepulveda Boulevard south of Imperial Highway, especially during the critical airport peak hour. The volumes of construction related traffic during this peak hour on this portion of Sepulveda Boulevard must be forecast, analyzed, and appropriately mitigated.

6. Construction Trips/Impacts on I-405 (SAL00015-185)

- Comment - The Supplement's failure to disclose the significant adverse effect of construction traffic on I-405 south of Rosecrans Avenue is a significant flaw.
- Response – It is not possible to perform a traffic impact analysis for the 3-4 p.m. peak hour identified in construction analysis that would be consistent with the detailed analysis performed for the a.m., p.m., and airport peak hours. This is because the available information for this hour is not of sufficient detail. The Ground Access Model cannot be used to model the hour between 3 p.m. and 4 p.m.
- Rebuttal – It does not take a special run of the Ground Access Model to determine that LAX construction traffic will significantly impact I-405. Simply reviewing the data presented in Table S4.3.2-10 in the Supplement discloses the addition of construction traffic to I-405 between 3 and 4 p.m results in traffic volumes exceeding the freeway capacity. This will cause the mainline freeway to degrade from LOS E to LOS F, resulting in a significant traffic impact. This significant traffic impact remains undisclosed in the Final EIR and measures must be developed to mitigate it.

7. Traffic Diversions from Freeway Mainlines (SAL00015-191)

- Comment – ...without significant improvement to both the I-405 and I-105 mainlines, airport traffic will still divert off both freeways onto surface streets upstream of LAX, even with the new interchange and the connectors.
- Response – In general, the traffic model indicates that as airport related traffic increases on the I-405 Freeway, non airport traffic shifts to the parallel surface streets...
- Rebuttal – No data is presented to support the traffic model which keeps LAX traffic on I-405 and reassigns non airport traffic to the surface streets.

8. Traffic Impacts to Freeway Mainlines (SAL00015-192)

- Comment – Various tables show traffic forecasts exceeding freeway capacity. These volume projections indicate the demand to use the

freeway but this is a theoretical number because these volumes exceed the actual capacity of the freeway segments. When the number of vehicles exceeds the mainline freeway capacity, vehicles will divert to surface streets, causing additional adverse impacts on those streets, or they will be severely delayed, significantly extending peak hours.

- Response – Some sections of the freeways analyzed for the LAX Master Plan have traffic volumes in excess of capacity as the existing condition. The LAX Ground Access Model takes into account the lengthy delay that occurs when a facility has traffic volumes above capacity, and shifts traffic away to other facilities, if shorter travel times can be achieved.
- Rebuttal – The response attempts to justify what has been done in the analysis, but it fails to respond to this concern and to mitigate the resulting impacts. The data presented in the tables show the demand to use the freeway facility, not the volume that will actually be carried by the freeway.

  Freeway capacity is just that, the maximum that the freeway can handle in a given period of time. A freeway flowing at capacity is like a river flowing full of water, right up to the top of its banks. Just as the river cannot handle more water without overflowing its banks, more trips cannot be accommodated by freeway segments already carrying their maximum number of vehicles. Trips in excess of those accommodated by the capacity of the freeway will divert to surface streets just as water will overflow the river banks. By continuing to assign trips to a jammed freeway exceeding its capacity, the model has ignored diversion of the trips in excess of the freeway capacity to the surface streets. Flooding of surface streets by vehicles that the freeway cannot handle will occur.

9. Mitigation of Traffic Impacts to Freeway Mainlines (SAL00015-196)

- Comment - The Supplement must examine the Alternative D traffic impacts on the I-405 and I-105 mainline freeway segments in the vicinity of LAX, where the impacts will be obvious and severe, in far more detail.
- Response - ...Project Study Reports will be prepared which will analyze in more detail the effects of the proposed interchanges on the movement of traffic on the I-105 and I-405 mainlines and ramps in the vicinity of LAX.
- Rebuttal – Page 2-217 of the Final EIR states "Alternative D would affect freeway segments." Detailed analysis is required as part of the Final EIR to identify traffic impacts and to develop necessary mitigation measures

10. Arbitrary Peak Hour Volume Adjustments at:
    Aviation Boulevard and Imperial Highway (SAL00015-205)
    Imperial Highway and Douglas Street (SAL00015-209)
    Sepulveda Boulevard and El Segundo Boulevard (SAL00015-215)
    Sepulveda Boulevard and Imperial Highway (SAL00015-221)
    Sepulveda Boulevard and Mariposa Avenue (SAL00015-223)

- Comment - The Supplement must provide technical support for each of the arbitrary "Project" and "Ambient" peak hour volume adjustments as well as the rationale for making adjustments in various movements during the a.m., Airport, and p.m. peak hours.
- Response – These refinements included manual adjustments to specific intersection turning movements to improve the model forecasts... it is a common practice to manually adjust the intersection turning volumes predicted by the model to ensure reasonableness of the results.
- Rebuttal – This generalized response does not explain the specific volume adjustments questioned in the original comments. The adjustments made are inconsistent from one peak hour to the next. Further, some of the manual adjustments appear to result in a better bottom line performance for the intersection as vehicles projected by the traffic model have been manually deducted from the intersection's critical movements and added to movements that are not critical. Until specific technical data and supporting documentation are provided, the adjustments remain arbitrary.

11. MTA Mitigation Measures Are Not Properly Analyzed at:
    Sepulveda Boulevard and Imperial Highway (SAL00015-222)
    Sepulveda Boulevard and Mariposa Avenue (SAL00015-225)

- Comment - ...there is absolutely no assurance or guarantee that providing funding to MTA for improved Rapid Bus or other transit services would actually mitigate Alternative D traffic impacts on Sepulveda Boulevard at these intersections.
- Response – The revised analysis concludes that the fair share contribution to MTA's proposed Metro Rapid Program or other enhancements to benefit transit will need to fund enhancements to reduce vehicle trips...
- Rebuttal – The original comment remains unaddressed. There are no assurances or guarantees that providing funding to MTA will actually reduce peak hour vehicle trips on Sepulveda Boulevard.

12. Mitigation Measures Are Incomplete (SAL00015-231)

- Comment – The listing ...adds a "fair share" contribution toward a future widening of the southbound I-405 Freeway on ramp at El Segundo Boulevard but does not identify the scope of this proposed project. The listing ...fails to provide "fair share" cost estimates for any of the proposed intersection or segment improvements.
- Response – The scope of the referenced ramp widening will be established at the time Caltrans or another agency initiates the project. ..The actual "fair share" costs of the recommended intersection and segment improvements will be determined through consultation with the implementing jurisdictions at a later date.
- Rebuttal – Order of magnitude cost estimates must be developed for the ramp, intersection, and segment improvements required as mitigation, together with the appropriate "fair share" costs associated with the LAX Master Plan.

13. Mitigation Measures Not Coordinated With Phasing (SAL00015-232)

- Comment - Mitigation measures at Imperial Highway and Main Street must be constructed prior to the scheduled completion of the proposed west employee parking structure in 2006, not in 2015 long after increased LAX employee traffic occurs along Imperial Highway
- Response – The Conceptual Summary Schedule has been revised in the Final EIR to begin the Offsite Roadway Improvements earlier in the schedule
- Rebuttal – Table F4.3.2-29, Year 2015 Alternative D Mitigation Plan, still shows the improvements at Imperial and Main occurring in 2015 long after the scheduled completion of the west employee parking structure in 2006.

14. Cost Estimates/Fair Share Contributions Not Incorporated (SAL00015-233)

- Comment - Cost estimates for the necessary mitigation measures must be developed and the proportionate "fair share" contributions calculated for Alternative D.
- Response – Some of the proposed traffic mitigations do involve fair share contributions by LAWA toward projects sponsored by another agency... However, it is premature to develop the specific costs of these fair share contributions

Ms. Christy H. Taylor
LAX Master Plan Alternative D Final EIR – Rebuttal to Traffic Comments
November 24, 2004

- Rebuttal – This comment has not been addressed by failing to provide cost estimates of mitigation measures and the fair share contributions.

As pointed out in this rebuttal, many of our October 28, 2003 comments have not been adequately addressed in the Final EIR. Several of the responses attempt to defend LAWA's unsupported assumptions and faulty methodology rather than provide the necessary technical support, justification, and documentation for their opinions. In other responses, concerns have not been mitigated by the proposed measures or monitoring of the proposed mitigation measures has not been incorporated.

Retaining 163 or more aircraft gates, not reducing them to 153 as assumed in the Final EIR for Alternative D, would result in more passengers, more vehicle trips and additional traffic impacts to freeways and streets above those identified. No traffic study or analysis has been conducted of the significantly changed off airport traffic impacts that would occur with a segmented, partial implementation of the LAX Master Plan under the "green light/yellow light" scenario.

The conclusion of the Final EIR, that most of the project impacts from Alternative D would be reduced to insignificance in the areas of transportation and circulation by implementation of the mitigation measures as proposed, is not supportable, in light of the myriad of technical problems in the analysis. These problems have now been compounded by the deferral or elimination from the Master Plan of important plan components including the GTC and terminal demolition.

Respectfully submitted,

Tom Brohard and Associates

Tom Brohard, PE
Principal

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

NOV 29 1995

David B. Kessler (Code AWP-611.2)
Federal Aviation Administration
P.O. Box 92007
Los Angeles, CA 90009

Dear Mr. Kessler:

This letter supplements our comments of November 9, 1995 regarding the Final Environmental Impact Statement and Clean Air Act (CAA) conformity determination for the Burbank-Glendale-Pasadena Airport Land Acquisition and Terminal Replacement Project, Los Angeles County, California.

After further discussions with Ralph Thompson and Daphne Fuller of your headquarters' office, the U.S. Environmental Protection Agency (EPA) now concurs with you that, in making an applicability determination and calculating whether your action is de minimis under 40 C.F.R. § 93.153 of EPA's conformity regulation, you may compare projected total direct and indirect emissions caused by your action with a future emissions baseline which includes growth that would occur even if your action were not constructed (i.e., growth not caused by your action). As we have previously discussed, this determination must be based on the most recent estimates of emissions derived from the most recent population, employment, travel and congestion estimates as determined by the Southern California Association of Governments (SCAG), in accordance with 42 U.S.C. § 176(c)(1) and 40 C.F.R. § 93.159.

When calculating future emissions under § 93.153(b), your analyses should include all emissions caused by the project, including construction emissions, pursuant to § 93.159(d). We note that your applicability calculations use the year 2010 as full build out of the project. You have determined in that year the emissions for all nonattainment pollutants will be the greatest. If 2010 represents the year in which the emissions are the greatest, EPA concurs that your use of this year for applicability purposes would be sufficient to determine that your project is de minimis and meet the requirements of 93.159(d), since the preceeding years would also be de minimis.

If you have any further questions regarding these issues, please feel free to contact myself at (415) 744-1207 or Robert Pallarino at (415) 744-1297.

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Sincerely,

Wallace Roo
Chief, Plans Development Section
Air and Toxics Division

cc:

Thomas Greer, Executive Director, Airport Authority, Burbank
Ralph Thompson, FAA
Daphne Fuller, FAA
Terry Parker, CARB
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THIS DOCUMENT HAS BEEN PEER-REVIEWED AND EDITED, BUT NOT PROOFREAD

DOCUMENTED BRIEFING

Near-Term Options for Improving Security at Los Angeles International Airport

Donald Stevens, Terry Schell, Thomas Hamilton, Richard Mesic, Michael Scott Brown, Edward Wei-Min Chan, Mel Eisman, Eric V. Larson, Marvin Schaffer, Bruce Newsome, John Gibson, Elwyn Harris

Prepared for Los Angeles World Airports

RAND INFRASTRUCTURE, SAFETY, AND ENVIRONMENT

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The research described in this report was conducted by RAND Infrastructure, Safety, and Environment (ISE), a unit of the RAND Corporation, for Los Angeles World Airports.

Published 2006 by the RAND Corporation
1776 Main Street, PO. Box 2138, Santa Monica, CA 90407-2138
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PREFACE

This document assesses near-term security improvements that can be made to counter the threat of terrorism at Los Angeles International Airport (LAX).

In July 2004, Los Angeles World Airports commissioned the RAND Corporation to conduct a two-phase study on security issues at LAX. The first phase is an eight-week effort to address the best near-term options for improving security at LAX. Here we provide the documentation for Phase 1. The second phase will examine long-term security options.

This document will be of interest to decisionmakers and staff at Los Angeles World Airports; the Transportation Security Agency; the Los Angeles International Airport Police Department; the Los Angeles Police Department; the Los Angeles mayor's office; the Los Angeles City Council; similar staff at other airports; and those in the general public interested in LAX, terrorism, and airport security.

This research was conducted within RAND Infrastructure, Safety, and Environment (ISE), a unit of the RAND Corporation. The mission of RAND ISE is to improve the development, operation, use, and protection of society's essential built and natural assets, and to enhance the related social assets of safety and security of individuals in transit and in their workplaces and communities. The ISE research portfolio encompasses research and analysis on a broad range of policy areas including homeland security, criminal justice, public safety, occupational safety, the environment, energy, natural resources, climate, agriculture, economic development, transportation, information and telecommunications technologies, space exploration, and other aspects of science and technology policy.

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CONTENTS

SUMMARY

Commissioned by Los Angeles World Airports (LAWA), this study examines near-term options for reducing the terrorist threat to LAX. Although the study has considered many possible terrorist threats and responses, the study results presented here focus on actions that can be taken at LAX to reduce the terrorist threat. We have not attempted a review of the overall effectiveness of Transportation Security Administration (TSA) procedures nor have we considered general national antiterrorist strategy. Terrorism is a complex international problem; here we are examining it only from LAWA's point of view.

Terrorism has long been a serious problem for the air transportation system of the United States and the world. We note that of 5,347 deaths that have resulted from terrorist attacks on civil aviation since 1980, only 198 occurred in attacks on airports themselves, as opposed to aircraft.

LAX is one of the safest places in Los Angeles. It was one of the first airports to implement baggage screening procedures, an on-site bomb squad, high police presence, a distributed terminal layout, and large numbers of bomb-sniffing dogs. Despite this high level of security, there are good reasons to believe that LAX is viewed by at least some terrorists as a particularly attractive target. Since 1974, LAX has been the site of two bombings, two attempted bombings, and one gun attack.

In meeting the terrorist threat, we find that the problem is how to influence the behavior of an unpredictable enemy. The logical structure of the problem is similar to that of preventing nuclear war, which RAND has studied extensively over many years. The solution is to shape the situation so that in any scenario the outcomes from the terrorist's point of view will be unsatisfactory. The primary goal of this strategy is deterrence. Terrorists will see the airport as an unsatisfactory target that is not worth their effort.

Operationally, the key to implementing a successful strategy of deterrence is to understand and reduce LAX's vulnerabilities. We analyze a wide range of possible terrorist actions and assess LAX's level of vulnerability. We then examine possible alternative courses of action LAX can take to reduce these vulnerabilities.

We do not construct a formal cost-effectiveness measure to evaluate different courses of action because it is not possible to formally evaluate

the chance of any type of attack. In addition, actions taken at LAX will alter the chances of different types of attacks. We analyze scenarios and possible actions in a relative way. Our goal is to identify the most dangerous vulnerabilities and the security improvements that can make them less dangerous. We particularly seek to identify dangerous vulnerabilities that can be mitigated at a relatively low cost.

In this document, we focus on fatalities as an indicator of airport vulnerabilities. We have also investigated economic measures of vulnerability (e.g., reconstruction costs, long-term disruption, and lost earnings) and find that they correspond with the number of fatalities. That is, the attacks that have the largest economic impact are those that result in the largest loss of life. Because of this, the primary conclusions of the study do not depend on which type of vulnerability measure is used.

ATTACK SCENARIOS

Our formal analytic approach begins by constructing a series of attack scenarios—descriptions of ways in which terrorists could attack LAX. This list was compiled based on history, discussions with security professionals at LAX and elsewhere, and our own judgment. Therefore, we focus on the attack scenarios that we found most threatening, a subset of those that we actually studied. We then constructed a list of security improvement options and assessed their impact on each attack scenario. This was an iterative process—the implementation of one security improvement option may change the overall situation in ways that modify the effectiveness of other options. Our iterative approach in assessing options enabled us to understand possible synergies.

We identified 11 major classes of attack. These are not the only possible attacks, but they are the ones that we assess to be most likely and most dangerous. Starting with the scenarios most threatening to LAX with its current security procedures and making very rough estimates of expected civilian deaths, we list the threats as follows:

1. **Large truck bomb.** A large bomb could be concealed in a truck. If the bomb was detonated at the lower level, we expect a large number of deaths, using observed passenger concentrations. This includes deaths from the curbside and baggage claim areas and at the departure level. The front portion of the terminal would be lost (both the arrival and departure levels), along with two sections of elevated roadway.

2. **Curbside car bomb.** A medium sized bomb detonated in the right lane in front of the line for a skycap might cause a large number of deaths. The number of deaths is very sensitive to the density and number of people standing in line.
3. **Luggage bomb.** A small bomb detonated in a large screening line could also produce a large number of deaths. The number of deaths is very sensitive to the density and number of people standing in line.
4. **Uninspected cargo bomb.** A bomb is placed inside uninspected cargo and detonates in a passenger aircraft during flight, killing hundreds of passengers.
5. **Insider-planted cargo bomb.** With the assistance of an employee with access to the airport, a bomb is placed inside a large passenger aircraft, causing it to be destroyed in flight, and killing hundreds of passengers.
6. **Air operations attack.** A well-armed group of terrorists could enter the air operations area by scaling the fence and attacking the fuel area, runways, and aircraft.
7. **Public grounds attack.** A well coordinated, armed, and equipped terrorist group blocks the exit to LAX and attempts to kill as many civilians as possible. Current airport police equipment would be of limited effectiveness against well-equipped attackers.
8. **Air traffic control tower/utility plant bomb.** We assume a car or truck bombing occurs with enough explosives to destroy the air traffic control tower or utility plant.
9. **Man Portable Air Defense System (MANPADS) attack.** We assume that a properly aimed and launched MANPADS attack (small, portable surface-to-air missiles) will result in destruction of an airliner less than 10 percent of the time.
10. **Sniper attack.** A sniper set up on airport-adjacent property with a .50-caliber sniper rifle shoots at loaded planes, firing approximately 50 shots over five minutes.
11. **Mortar attack.** This might be an attack similar to the Irish Republican Army attack on London's Heathrow Airport in which terrorists fired mortar shells along the length of the runway. The attack might disrupt operations for several days, but it would kill few people on average. However, it is possible, albeit unlikely, that a mortar round could hit a loaded plane.

SECURITY IMPROVEMENT OPTIONS

We evaluated a series of possible security improvement options that make the threat scenarios less dangerous. Different security improvement options will have different consequences depending on the threat scenario. We focus on security options that offer the greatest effectiveness against the most threatening attacks. We then estimate costs, both initial and recurring, for each security improvement option.

One fact that consistently emerges from our analysis is the following: **It is not the size of the bomb that matters most; it is where it is detonated.** All of the most dangerous terrorist attacks involve terrorists placing a bomb in close proximity to a vulnerable crowd of people. There are two general ways to reduce this vulnerability: Move the possible bomb detonation away from the people or move the people away from the possible bomb detonation. Both approaches are valid, and we provide specific recommendations for both.

Security improvement options fall into four broad categories. The first group contains low-cost options that greatly reduce LAX's vulnerability. These should be acted upon immediately. The second includes high-cost options that greatly reduce LAX's vulnerability and should be studied to identify affordable, time-phased solutions. The third includes low-cost solutions that modestly reduce LAX's vulnerability and can be addressed in a more deliberate fashion as opportunities arise during planned modernization. The fourth group includes expensive solutions to modest problems that we do not recommend.

Low-Cost Options That Greatly Reduce Vulnerability: Clearly Recommended

Limit density of people in unsecured areas—where baggage has not been inspected or areas near uninspected vehicles. Eliminating lines at baggage check-in is very effective because these lines are an attractive target. For example, a terrorist could bring a substantial bomb concealed in luggage with little risk of arousing suspicion. Similarly, lines outside terminals (e.g., for curbside check-in) are dangerous because they make an attractive target for a vehicle bomb.

It may be surprising to some that the costs of eliminating check-in lines are quite modest according to our assessments. Overall airport efficiency, including the operations of LAWA, the airlines, and TSA, is not enhanced by having people stand in line. The amount of actual work required to check bags, etc. remains the same whether people have waited or not. Substantial reduction of lines can be implemented immediately with small

changes to airline and TSA staffing policies. This is our strongest recommendation.

Add permanent vehicle security checkpoints with bomb detection capability. Large vehicle bombs can be detected by quick examination of vehicles entering the airport. Improved technology is becoming available, but even simple vehicle scales can identify suspicious vehicles, which can then be diverted before entering the airport proper. This procedure will greatly reduce the threat from large vehicle bombs and provide some effectiveness against smaller bombs. It will not be effective against small bombs concealed in luggage, which would require a detailed, expensive search operation

High-Cost Options That Greatly Reduce Vulnerability: Possible Recommendations

Implement additional inspections of cargo on passenger flights. Additional equipment and staff could be used to increase the probability that explosives in air cargo carried on passenger flights would be detected. Such a screening program would be expensive, on the order of $100 million per year at LAX. Determining the optimum level of cargo screening is a TSA responsibility, and such a program should logically be implemented at a national level.

Enhance screening of airport personnel. Background checks on personnel allowed unrestricted access to the airport operations area could be more thorough than they are at present. For example, all personnel employed in catering, etc. could be required to undergo the same background screening as is currently required for TSA screeners. This would be expensive. The cost of the investigations themselves would be large because of the large number of people who would need to be investigated. Moreover, security clearance procedures have the effect of disqualifying people who are not actual terrorists but have had some problem in their lives, usually involving money, which makes them more vulnerable to pressure or recruitment by terrorists.

Low-Cost Options That Modestly Reduce Vulnerability: Possible Recommendations

Enhance training of airport rapid reaction team. There is a possibility that well-trained terrorists with automatic weapons and body armor could attack either the passenger terminals or the operations area. There is a distinct possibility that the existing airport police force might not be able to respond effectively to such an attack. Development of an airport police

SWAT (special weapons and tactics) capability could reduce this vulnerability. This is relatively inexpensive. However, we believe that such an armed incursion is, from the terrorists' point of view, a poor strategy. It will probably kill fewer people than a well-placed bomb, and it will be difficult for the terrorists to get away.

Improve perimeter fence. A double fence with motion detection capability would improve LAX's ability to respond to intruders attacking the air operations area. Particularly coupled with the enhanced rapid response team described above, this could make attacking over the fence even less attractive to terrorists than it already is.

Options Not Recommended

We have examined a wide range of possible security enhancements that we do not recommend because their likely effectiveness is relatively low compared to their cost. That does not mean that they are bad ideas. It means that they are relatively bad compared with the options we recommend. For example, diverting all vehicles to remote lots and busing passengers to terminals would reduce vulnerability to vehicle bombs, but it would cost a great deal more than reducing the size and density of vulnerable lines and screening for large bombs.

This study has focused on near term options. We assess that LAX, which is already one of the more secure airports in the United States, can be made significantly more secure by the following high-priority actions.

Low cost:

- **Greatly reduce the number and density of people standing in line in unsecured areas.**
- **Establish vehicle checkpoints to search for large vehicle bombs.**

Higher cost:

- **Enhance screening of airport personnel.**
- **Enhance inspection of cargo.**

Finally, the security of LAX is the joint responsibility of many agencies. LAWA should continue to work closely with national and international airport security organizations to raise the level of security across the entire air transportation system.

INTRODUCTION

Los Angeles International Airport (LAX) is vital to Southern California. It is the airport of choice for over 50 million passengers every year. According to Los Angeles World Airports (LAWA), it provides the Southern California economy with over $70 billion in revenue each year. It is vital to Southern California that LAX is a safe and secure airport.

Since 1980, there have been over 8,000 terrorist attacks against aviation targets worldwide, killing over 5,000 people. Since 1974, LAX has been the target of two bombings, two attempted bombings, and one gun attack. In August 1974, the Alphabet Bomber, Muharem Kurbegovic, detonated a bomb in a locker that killed three and injured 36. Another bomb was detonated in the China Air baggage processing facility in January 1980. In May 1982, three members of the Armenian Secret Army for the Liberation of Armenia were arrested attempting to place a bomb in the Air Canada cargo office. In December 1999, the Millennium bomber, Ahmed Ressam, was caught crossing into the United States with bomb-making equipment. Ressam's plan was to detonate four, timed luggage bombs at curbsides and inside terminals at LAX. His al Qaeda trainers in Afghanistan suggested that he attack an airport. He chose LAX because he had flown through Los Angeles and was familiar with the airport. In July 2002, Hesham Hadayet brought a .45-caliber handgun into the Tom Bradley terminal and opened fire while waiting in line at the El Al ticket counter. Two people were killed and four were injured before Hadayet was killed by El Al security personnel.

Although it is very difficult to predict exactly what a terrorist will attack at LAX, we developed a list of attacks that are feasible for a terrorist group to carry out against key airport components. The list, shown in the table, contains the most likely threat scenarios, the breadth of possible threat scenarios, and the scenarios that are the most difficult for LAX to prevent and deter

Scenarios

Title	Description
Large truck bomb	A truck bomb is detonated on the lower level next to a column supporting the upper roadway
Curbside car bomb	A car bomb is detonated on the upper roadway in front of a crowded terminal
Luggage bomb	A luggage bomb is detonated curbside or at the check-in line inside a busy terminal
Uninspected cargo bomb	A bomb is placed inside uninspected cargo and detonates in a passenger aircraft during flight
Insider-planted cargo bomb	An insider places a cargo bomb on a passenger flight and detonates the bomb during flight
Air operations attack	A well armed and equipped terrorist group scales the perimeter fence and attacks the fuel area, runways, and aircraft
Public grounds attack	A well coordinated, armed, and equipped terrorist group blocks the exit to LAX and attempts to kill as many civilians as possible
Tower/utility plant bomb	Terrorists hope to destroy either the tower or the utility plant with a car bomb
Man Portable Air Defense System (MANPADS) attack	Two surface-to-air missiles are launched from a boat in the bay, from the beach, or from the sand dunes, at an aircraft taking off from LAX
Sniper attack	From a roof of a high-rise building on the airport perimeter, a sniper using a .50-caliber rifle fires at parked and taxiing aircraft
Mortar attack	Two large mortars fire shells along the length of the runway

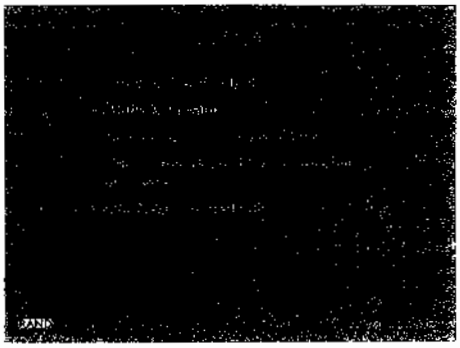
LAX has a master plan that outlines a variety of ways to meet the long-term aviation needs of Southern California. Within the plan, one of the alternatives has been called the safety and security alternative. Even the most optimistic proponents of this alternative recognize that the safety and security aspects of the plan would not be in place until well into the next decade. There are options available for improving LAX security long before the security aspects of this alternative may be in place. This study focuses on these near-term (two to five years) options.

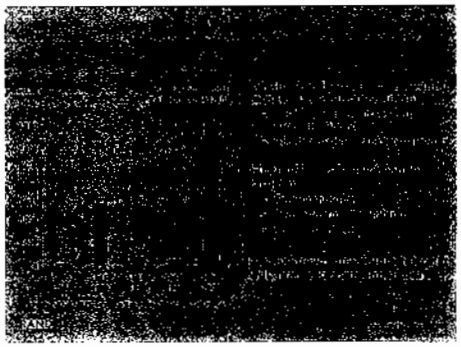
Our study was designed to provide useful input to decisionmakers about the operation of LAX. Security from terrorist attack is only one of a long list of requirements for safe and effective airport operations. Therefore, major decisions about LAX need to be made based on a broad range of

information. We believe that our analysis will be a useful piece of this necessarily complex decisionmaking process.

RAND has a long history of studies on terrorism, stretching back to the early 1970s.

In July 2004, Los Angeles World Airports (LAWA) to commission the RAND Corporation to conduct a two-phase study on security issues at LAX. The first phase, which this briefing documents, examines near-term options that could be implemented within the next two years. The second phase will examine long-term issues for improving LAX security.





Even though LAX is one of the most secure airports in the world, we should be concerned about LAX's security needs.

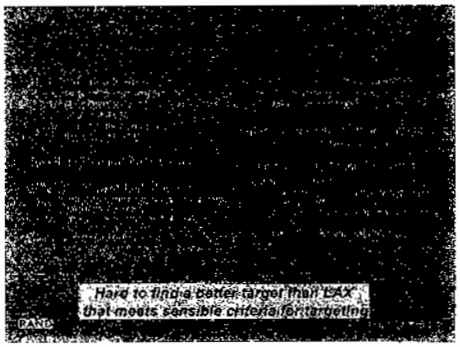
First of all, although attacks on aviation targets account for less than 5 percent of the attacks,[1] the historical data suggest that attacks on airports and aircraft have been very costly in human lives. This chart presents data on fatalities associated with terrorist attacks on aircraft and airports in five-year increments through June 2004. These attacks have caused more than 5,500 deaths worldwide since 1980, or, on average, more than 200 deaths a year.[2] (About 3,000 of these deaths were the result of the 9/11 attacks.)

We should also be concerned about LAX security because of LAX's own history of attacks. Since 1974, LAX has been the site of two bombings (the

[1] As of August 2004, the RAND and the Oklahoma City National Memorial Institute for the Prevention of Terrorism (MIPT) terrorism database included 7,629 international incidents from 1968 through June 2004 and 9,687 domestic incidents from 1998 through June 2004, for a total of 16,716 attacks, 524 of which (3.1 percent) were attacks on aviation related targets (aircraft, airports, or airline offices); http://db.mipt.org/Home.jsp

[2] The chart includes deaths in both incidents of international terrorism, which the RAND-MIPT terrorism database has tracked since 1968, and incidents of domestic terrorism, which have been tracked only since 1998, but which are far more frequent. Thus, readers should keep in mind that domestic incidents are included only after 1997.

International terminal in August 1974 and the China Air baggage processing area in January 1980), two attempted bombings (the Air Canada terminal in May 1982 and the Millennium bombing plot in December 1999), and one gun attack (the July 2002 armed attack at the El Al ticket counter).



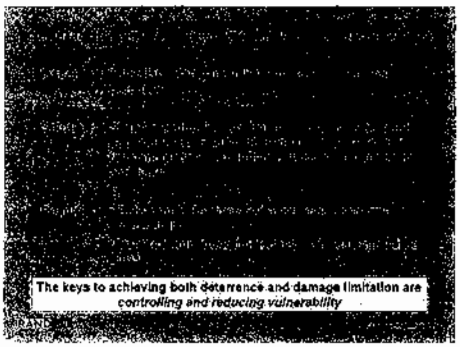
We were asked to address the question of whether LAX is a higher-risk terrorist target in Los Angeles than others in the city; our research on the matter suggests that there are many reasons to believe that it may well be higher risk, including the following:

1. The history of attacks on LAX suggests that there is something special about the airport that has led to attacks by different groups over a relatively long span of time.
2. Law enforcement and security officials we spoke with stated their belief that LAX continues to be the subject of surveillance.
3. It is worth noting that LAX fits many of the key criteria that terrorists themselves have indicated should be used in choosing targets.
4. There is evidence that terrorists train specifically to attack airports.
5. The case of the World Trade Center, which was attacked in 1993 and 2001, suggests that jihad terrorists have a pattern of revisiting particularly attractive targets.
6. Citing threat assessments, briefings, and other sources, many California law enforcement and security officials have concluded

that LAX is at or near the top of the list of potential targets that they are most concerned about.

As one security official we spoke with said, it's hard to find a better target than LAX that meets the sort of targeting criteria that we think terrorists use.

Finally, given the adaptive nature of terrorism, we simply do not know how future terrorists might attack airports and aircraft. It is simply prudent to consider the various ways in which LAX might be attacked to ensure that it is prepared for a wide range of plausible attack scenarios.



There are two significant features of the terrorist threat which shape a proper response:

1. We have no reliable ability to control or predict what terrorists might do.
2. We strongly prefer they do nothing. There are no scenarios leading to "good" terrorist attacks.

This is a situation familiar to law enforcement and in preventing nuclear war. The solution is to shape the situation so that in any scenario the outcomes from the terrorists' point of view will be unsatisfactory. This will achieve the primary goal of deterrence. Terrorists will look at the airport and decide that attacking is not worthwhile.

This solution may lead to the objection that this really does not solve the problem. Terrorists who are aware that LAX is a poor target for attack might decide to attack elsewhere—Dodger Stadium, for example.

This is true. However, by diverting terrorists from their most favored target we have presumably made the entire terrorist enterprise less attractive. Perhaps they will attack elsewhere, or perhaps they will give up terrorism. Moreover, diverting terrorists away from LAX is the most that LAWA can do. Diverting terrorists from LAX does not solve the

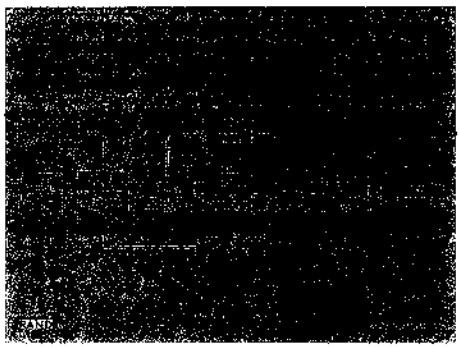
overall problem of terrorism, but it is a step in the right direction and an example to others tasked with security enforcement.

Operationally, the key to implementing a successful strategy of deterrence is to understand and reduce LAX's vulnerabilities. We create a situation in which terrorists have no good options.

LAWA's goal is to improve security at LAX as cost-effectively as possible. Unfortunately, given the uncertainties associated with the limited directly relevant historical data on threats and the adaptable nature of terrorists, cost-benefit assessment processes (similar to those used to manage risks against common criminal acts, accidents, and natural phenomena such as storms and earthquakes) are not applicable. Risk is the product of *consequences* and *likelihood*. *Consequences* for various assumed terrorist attacks are measurable or can be estimated (with the greatest controversy associated with putting a monetary "value" on human lives), but the *likelihood* cannot be meaningfully quantified. Because of this, we have associated risks with vulnerabilities, assuming that terrorists have the time and motivation to find and exploit weaknesses in LAX's security—particularly those vulnerabilities that can be exploited by those terrorists at modest costs (in dollars and human capital) and, most important, those vulnerabilities that expose them to the lowest risk of failure.

From the perspectives of vulnerabilities and consequences, LAX facilities and operations vary widely. We identified the most vulnerable locations with quantitative engineering and operational analyses of attack effects, and then made qualitative judgments of the relative risks and costs associated with mounting these attacks. Security enhancement opportunities and a sense of investment priorities emerge naturally from

this multistage quantitative and qualitative filtering process. The goal is to eliminate the most glaring weaknesses in order to put security measures into better *balance* for a given overall investment level. Another difficult question, of course, is what should this overall investment level be, but that determination was beyond the scope of this effort.

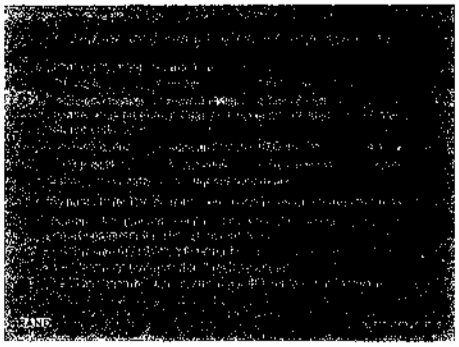


Shown above is the analytic approach we used in this study.

We began by looking at terrorists' historic priorities and options for attacking airports. We combined our findings with what we determined were LAX's key elements for operations (e.g., terminals, airliners, control towers, etc.) to develop a list of security vulnerabilities at LAX. From the list of vulnerabilities, we developed a suite of attack options for each vulnerability. This suite of attack options was based on the vulnerability of LAX and historic priorities for airports by terrorist organizations. We obtained feedback on this list of attack options from security professionals at LAWA, the Transportation Security Administration (TSA), the Los Angeles Police Department (LAPD), and LAX to make sure the list was reasonable. We assessed the damage (measured in fatalities, damage to the airport, and service interruption) for each of these attacks against LAX as it is today. From the list of attack options, we developed a list of security improvement options (SIOs) for each attack option. For each SIO we developed a cost estimate and a benefit (in terms of fatalities, damage, and service interruption averted should that attack be attempted) for implementing the option at LAX. We assessed the benefits of the SIO for all the attack options, not just the SIO for which it seemed the most effective. Next we conducted a cost-benefit analysis and selected the preferred SIO. This gave us our first preferred SIO.

To find our next preferred SIO, we assumed that LAX implemented our first SIO, and we went back and identified security vulnerabilities and terrorist options and repeated the process. It is important to reassess the terrorist's options after each SIO is implemented to capture the effect of terrorists adapting their attack options when LAX implements security improvement options.

From this iterative process, we developed our recommended security improvement options.



Before we can examine security improvement options at LAX, we need a suite of possible terrorist attack options. Shown above is the method we used for developing the list of attack options.

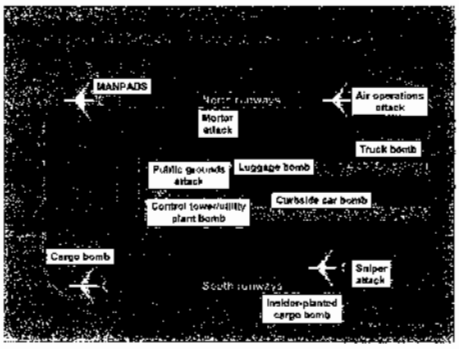
We began by identifying the key components of the airport that present a likely target for a terrorist attack. These components were selected based on the likelihood that, if they were attacked, the results would be a large number of fatalities, damage to the airport infrastructure, and interruption of airport operations.

Next we identified the effective ways the terrorists could attack each of the key components. The list of combinations of attack options and targets was narrowed by factoring in the feasibility of terrorists being able to carry out the attack.

Finally, we reduced the list further by considering the historic tendencies and expertise of the terrorist organizations, based on information we gained from intelligence organizations.

Applying this methodology we developed the list of 11 attack scenarios shown on the following page. This list includes the most likely threat scenarios, the broadth of possible threat scenarios, and the most challenging scenarios for us to defend against.

It is important to note again that this process was iterative; we applied this methodology after each LAX security improvement option was "implemented" in our model to account for terrorists adapting their strategies in response to any security enhancements LAX makes.



Shown above are the 11 attack options that emerged from the methodology described on the previous slide. The attack options are described below, starting with a MANPADS attack in the upper left of the slide and working our way around clockwise:

To evaluate the threat from a **MANPADS attack**, we examined the scenario where two surface-to-air missiles are launched from a boat in the bay adjacent to LAX, from the beach, or from the sand dunes, at a Boeing 777 taking off from LAX.

For the **mortar attack**, two homemade mortars are fitted into the back of a van. Terrorists fire mortar shells along the length of the runway.

For the **air operations attack**, a well-trained and well-equipped terrorist group scales the perimeter fence and attacks the fuel area, runways, and passenger aircraft. This is similar to an attack by the Tamil Tigers that occurred in Sri Lanka in 2001.

For the **large truck bomb**, a bomb is detonated inside a truck on the lower level next to a column supporting the upper roadway. The terrorists hope to collapse the upper roadway closing the airport for an extended period of time.

For the **curbside car bomb**, a car bomb is detonated on the upper level in front of a crowded terminal.

For the **luggage bomb**, a luggage bomb is detonated in either the curbside check-in line or the line inside a crowded terminal.

For the **sniper attack**, a sniper using a .50-caliber rifle fires at parked and taxiing aircraft from the roof of a high-rise building on the airport perimeter.

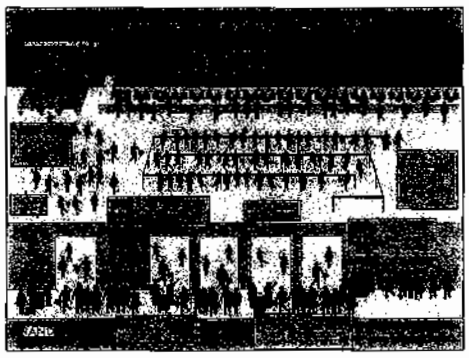
There were **two cargo bomb scenarios.** In the first, a bomb is placed in uninspected cargo. In the second, an insider places a cargo bomb in a passenger aircraft. In both cases the bomb is detonated during flight.

For the **air traffic control tower/utility plant bomb**, the terrorists hope to destroy either the tower or the utility plant with a car bomb.

For the **public grounds attack**, a terrorist jumps security controls, forcing evacuation of a terminal. This is coordinated with well-armed terrorists coming from vehicles blocking the entrance and exit to the airport and from the Tom Bradley terminal. The terrorists' goal is to kill as many civilians as possible.

Shown above are the relative fatalities for each of the attack options against LAX before our recommended security enhancements. We note that the attacks fall into two categories, those that kill a large number of people which we call "major" threats and those that kill fewer people, which we call "lesser" threats. We refer to major and lesser threats again later.

We also examined other measures besides fatalities, such as "damage to the airport" and "interruptions to airport operations." For simplicity, we use fatalities averted as our measure of merit.



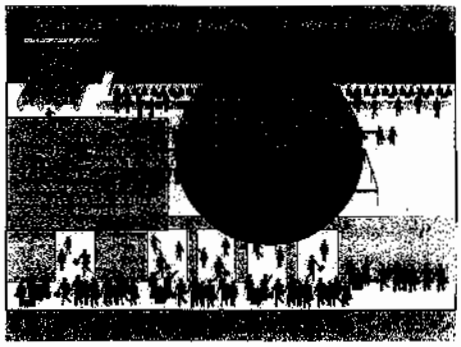
This slide and the following slide show an example of how we conducted the analysis that went into the previous chart on LAX vulnerability. We began by describing a crowded terminal and then showed its vulnerability to luggage and curbside bombs.

This chart summarizes our observations of the situation at a crowded terminal around the check-in area on several weekday mornings in the summer of 2004. We note that the check-in area and the sidewalk outside are often quite crowded, with 300–400 people crowded into a small area. The striking thing about this crowd is that at any given time, most of these people are not doing anything except waiting in line. There are about 35 airport personnel who are checking and screening passengers' bags, and about 25 passengers are being processed at any given time, but the vast majority of those in the terminal and on the sidewalk are simply waiting in line for the opportunity to check in their baggage.

Passengers can check baggage at either the inside ticket counter or with the skycaps on the sidewalk. In either case, the wait is typically about 20 minutes. In our observations, neither the ticket counters nor the skycap stations were fully staffed.

We also note that many of the passengers waiting in the terminal have with them large pieces of luggage, none of which has yet been screened.

This is just one example; other terminals may have slightly different problems. In addition, these peak densities may occur in several terminals simultaneously.



We consider two possible scenarios for attacks on a crowded terminal. In one, a bomb concealed in a suitcase explodes in the line of people waiting inside the terminal to check in luggage. In this case, a large number of people are killed and seriously injured. A luggage bomb exploding on the sidewalk would produce roughly the same number of casualties. The glass wall separating the interior from the sidewalk provides little protection, and, in any case, there is a dense crowd on the sidewalk as well as inside. These estimates are based on observed passenger densities in each region (approximately 12 square feet per person in screening lines, 16 square feet per person in check-in or skycap lines, and 80 square feet per person elsewhere in the terminals)

Recall that this concept, using bombs to attack people standing in line, is precisely what Ahmed Ressam (the millennium bomber) testified that he intended to implement. Ressam had no intention of committing suicide He assessed that he could execute this type of attack and have a good chance of surviving.

We note that this type of attack could either be executed by a suicide bomber or by detonating the bomb without causing the death of the attacker. Simply walking away from a piece of luggage may not be immediately noticed in the generally confused conditions inside the terminal. Even if those in the crowd panicked and ran for the exits, they

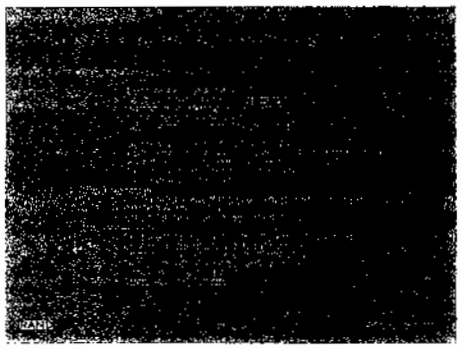
would not be able to exit the interior quickly enough to avoid a bomb. Of course, an unsuspecting person could be asked to "watch" a terrorist's luggage while the terrorist claimed to be visiting the restroom, for example.

We found that our list of possible security improvement options for LAX easily fell into three categories.

In the first category are options that improve airport processes. These options tend to have small capital improvement costs and relatively low risk of failure. Some require an increase in personnel, which has a recurring cost.

In the second category are options requiring new technology. These options tend to have moderate capital and recurring costs but force us to assume some technical risk of the system(s) operating as planned.

The third category is new construction. These options have high capital expenses (relative to our technology or processes options), but most have low recurring costs because they do not increase the number of employees required. They also tend to involve lower technological risks than the technology solutions.



Potential defenses were identified by examining each attack scenario and seeking ways to reduce vulnerability by limiting exposure to attack, hardening the target to withstand attack, or intercepting the attacker. The options explored included the following

CHANGING PROCESSES

Improving airport processes, the first category of possible security improvement options, can be further divided loosely into two categories: changes to operations—i.e., changing the way the airport manages vehicles, passengers, employees, delivery people, etc. (and therefore changing the experience these people have at the airport)—and changes to the security procedures used by the airport police.

Operations

Hasten check-in: By adding additional ticket agents and skycaps during peak periods (we estimate ~20 total positions), as well as one more TSA screening lane to each terminal (staffed for one net shift), queues in the terminals can be largely eliminated. Reducing the lines in the terminals will reduce the density of people within the terminals. Bombing attacks are less effective against dispersed passengers.

Physically search: Searching bags carried into each terminal will produce a vulnerable line at the doorway (simply changing the location of a bombing) unless the search is very highly staffed. Under this assumption, cursory searches (30 seconds) can require ~15 stations per terminal during peak hours; thorough searches (three minutes) can require almost 80. The resulting staffing requirements for long searches are not cost-effective.

Inspect cargo: Roughly 75 percent of the cargo carried on passenger planes can be inspected using luggage screening machines; we explored what the results would be in terms of costs and benefits if *only* screenable cargo were to be allowed on passenger planes, and the other 25 percent was searched manually.

Inspect vehicles: By establishing permanent security checkpoints at five airport access points, vehicles entering the airport can be searched for bombs. Staffing requirements are again driven by the need to avoid queues. Brief (10 seconds) examinations require ~20 total screening lanes and allow the largest bombs to be filtered. More thorough searches (one minute) require) require 65 screening lanes.

Divert vehicles: Rather than searching vehicles, the airport may opt to have traffic officers direct large vehicles to a remote lot in an attempt to prevent vehicles capable of carrying the largest bombs from approaching vulnerable areas. Passengers would board secure buses that would take them into the terminal area.

Police

Increase rapid reaction training: A portion of the LAWA department undertakes intense marksmanship and tactical training. We assume this consumes 15 percent of their duty time (requiring additional officers to be hired). These tactical officers will be more heavily armed and armored. As a baseline, we assume enough officers to maintain one on duty per terminal, as well as a squad able to quickly respond to events in the air operations area (AOA).

Conduct background checks: Personnel with access to the AOA are subjected to the same type of checks as applicants for secret security clearance (credit history, residence checks, and interviews), every five years.

Establish security relationship: The security of adjacent buildings is a concern to LAX because they can be used as firing positions. LAX should arrange to be notified immediately of security breaches (via special telephones reserved for that purpose—i.e., "red phones"), and community

security standards that would be followed by LAX and its neighbors should be established by municipal authorities.

Bomb-sniffing dogs: Officers with dogs trained to detect bombs move through terminal entrances and lobbies, randomly examining people (dogs, on average, can inspect one person per minute). Our initial costing was for ~ one dog and handler per terminal.

Increased patrol: Units of plainclothes security personnel in autos, boats, etc. are deployed to patrol the areas where MANPADS might be launched, with particular emphasis on vantage points where terrorists might be in range to strike planes mid-takeoff and landing. Unfortunately, this is an enormous area, and so patrols have very little chance of intercepting an attacker.

New Technology

Bomb detection: When bomb-detection equipment that is fast and reliable becomes available, it can be added to vehicle or personal inspections (replacing dogs), allowing highly effective probability of detection with rapid inspections (i.e., low manpower requirements). This will allow searches to intercept most any weapon brought to the airport.

MANPADS countermeasures: Defenses *based at LAX* can contribute only to the protection of planes taking off and landing, but these are particularly vulnerable conditions. Unfortunately, the location of the airport in a civilian area makes most countermeasure options undesirable, and of the few remaining, none are very effective. The only promising airport-based countermeasure is a high-energy laser, but these are still only in the prototype phase.

Artillery sensors: Acoustic systems can immediately locate the source of mortar and sniper fire to within a 5x5 meter location, allowing a chance to disrupt an attack if a patrol is close (and at the very least, raising the likelihood that the attacker will be caught). These are simple to use (on laptop computers) and very affordable.

New Construction

Harden curbside: Currently, glass walls are a major shrapnel hazard that add to the lethality of car bombs; changing materials and adding blast deflectors at the curb will reduce the severity of such attacks.

Enhance perimeter fence: A "leaky" coax-cable motion-detection system, isolated within a second fence inside the reinforced fence already being

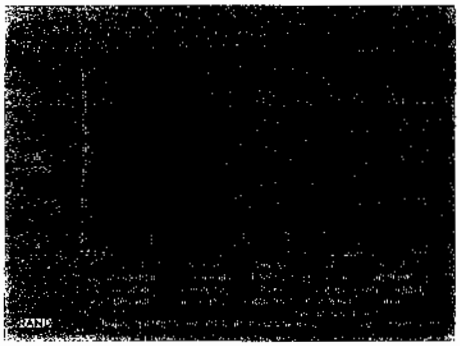
constructed, provides a very reliable intrusion detection system. Police can respond immediately to intrusion and confront assailants before they venture close to aircraft.

Isolate pilings: Reinforcing support for upper roadways is considered very difficult by airport officials; few places remain to sink columns. An equally effective alternative is restructuring the lanes on the lower deck and using barriers to prevent vehicles from approaching closely. Unfortunately, to be even slightly effective this option consumes three lanes of traffic.

Eliminate upper lanes of traffic: Closing the right lane on the upper roadway reduces the effect of car bombs on terminal lobbies.

Restrict central access: Closing the entrance to the inner roadways to all but authorized LAWA personnel (using a gated entrance) makes it impossible to bring a car bomb adjacent to the tower or utility plant.

Harden air traffic control tower and utility plant: Geometric restrictions make it impossible to harden these buildings effectively without consuming road area around them, which makes hardening redundant.



Shown above is the number of potential fatalities averted for a luggage bomb in a crowded terminal if one of the security improvement options is implemented.

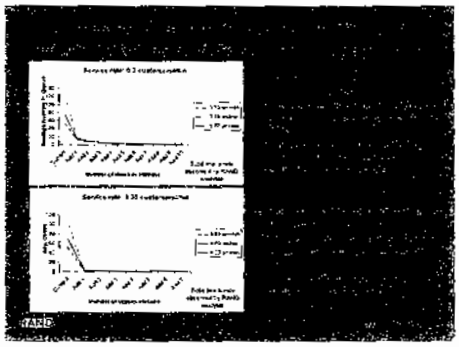
Two options appear very effective, and three appear not very effective.

For the left-hand bar "Search all luggage entering terminals," we assumed everyone entering a terminal is subjected to a 30-second search of their luggage. Although this appears effective, it is very expensive.

The second bar pertains to a case where the airlines reduce the density of people in the terminal lobbies and at curbside check-in by hiring additional check-in personnel. As we will show later, this is our preferred option for dealing with luggage bombs and curbside car bombs.

Adding handheld bomb detection devices or bomb sniffing dogs with handlers wandering around the terminal checking for explosives is not very effective. There are too many people to check, and it takes too long to check a person's luggage. It would require ~100 dogs (with handlers) to effectively check all the luggage in a terminal.

Adding permanent checkpoints for automobiles does not help a lot with luggage bombs, but checkpoints are valuable for other scenarios (truck and car bombs). So, as we see later, they will be on our recommended list.



This chart shows how sensitive the lengths of the check in and skycap lines are to the number of people checking-in luggage. The top figure shows the line length inside the terminal and the bottom figure is for curbside check-in. This chart shows that by increasing the number of personnel checking-in passengers by 5 percent we can reduce the density of people in the lobbies and on the curb by 75 percent, and the potential fatalities to luggage bombs by 80 percent.

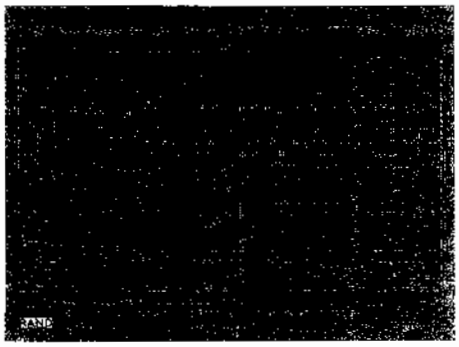
During peak travel hours, check-in lines at the curbside skycaps and at the lobby ticket counters may become long. In addition to being an inconvenience to passengers, these lines are a safety and security concern. Large numbers of passengers gathered in a small space present a tempting target for terrorists seeking a high number of casualties. RAND researchers observed crowded terminals during busy periods and found lines at the skycaps and at ticket counters to be 70–75 people. If luggage bombs were used to attack those lines, a substantial number of people would be killed.

The overall goal should be to move passengers away from the curb and lobby as quickly as possible, and send them through screening and into the secure area, where they would be less vulnerable to attack. Reducing the check-in lines at the curbside skycaps and ticket counters would enable LAX to reduce the passenger densities in those areas, reducing the

number of casualties in the event of an attack, and thus presenting less temptation for an attack to occur in the first place. Passengers would spend less time waiting in line, reducing their inconvenience as well as the amount of time they are vulnerable to attack.

Reducing the line lengths does not require a large increase in staffing levels. If stations are staffed so that the overall service rate barely keeps up with passengers arriving for service, lines will build up to large numbers. Adding just a few more stations can have dramatic effects on line lengths. Standard mathematical queuing models (Markovian) were applied to the passenger arrival rates, waiting times, and line lengths observed by researchers. The models indicate that increasing the staffing level by one ticket counter station (from 19 to 20) would reduce average line length from 75 to 15. Similarly, increasing the staffing level by one skycap station (from three to four) would reduce the average line length from 70 to 3. These additions reduce the number of passengers vulnerable to attack at those locations by 80–90 percent.

The results are also sensitive to the rate at which passengers arrive. In our visits to the crowded terminals, the rate at which passengers arrived was 225 people per hour (3.75/minute) at the check-in counter and 240 passengers per hour (2.4/minute) at the curbside skycaps. These numbers correspond to the solid lines on the chart on the previous page. These rates were very predictable over the periods we examined. We also examined slightly lower and higher arrival rates as shown by the dashed lines.



Shown above are the cost estimates for the security improvement options we considered. All costs are in millions of FY2004 dollars. The first column shows the one-time capital expenditure cost. The second column shows the annual recurring costs. Most of the annual recurring costs are salary and benefits for additional employees. The right-hand column shows the total annual costs. The total annual cost is the annual cost of capital expenditures per year over a 10-year period after applying a 4.5 percent compounded annual interest rate over the 10-year timeframe (or a factor of 1.55) and the recurring operating cost. We used a 10-year time horizon because LAWA intends to make substantial changes to the airport in 10 years. When the table shows a range for the costs, we used the midpoint between the high and low cost estimates for our calculations.

These cost estimates are designed to be relative figures of merit to allow comparisons across various alternatives. The actual cost of implementing the proposed measures may vary from these estimates. Discussed below are the major assumptions and cost drivers that went into these calculations.

Add permanent checkpoint vehicle search with bomb detection capability (add shelter/restroom facilities, bomb sniffers, and LAWA inspectors). *The capital costs* include (1) the purchase of barriers to set up inspection lanes for 20 stations across five different locations (at $0.8

million), (2) the construction cost of shelter/restroom facilities (12 ft. x 12 ft. each at all five locations) (at $0.8 million), (3) 77 sets of bomb detection-related equipment at $25,000 each ($1.9 million), and (4) roadway construction cost to add one lane of traffic on the lower level on-ramp entry to the airport after leaving the Sepulveda northbound tunnel (at $3.0 million). The *annual recurring cost* is equal to the average number of inspectors—between 40 (20 per shift assuming as an average over 16 hrs/day) and 153 at a salary including benefits of ~$100,000 per year ($4.0 million to $15.3 million) plus $5,000 per year per inspector for training ($0.2 million to $.77 million), and an additional $0.5M for maintenance of the shelter and restroom facilities and roadway repairs or an average total recurring cost of $10.6 million.

Direct all vehicles to remote lots (add LAWA inspectors, buses, and parking attendants). The *capital costs* include (1) two-fifths of the same construction cost as above for one 24 x 24 square feet consolidated shelter/restrooms facility adjacent to a new remote parking lot plus two-fifths the quantity or 26 of the bomb-detection equipment cost (at $0.9 million), (2) the average construction cost for either (a) a parking lot expansion using only existing LAX land consisting of earth leveling and paving for 8,000 to 10,000 spaces (same as the equivalent number of spaces as the current center garages inside the roadway loop) (estimated at $50 million minimum) or (b) a large garage with up to five levels for the same equivalent number of spaces as the current center garages inside the roadway loop (estimated at $450 million maximum or $250 million), and (3) purchase of close to the same number of (natural gas–fueled) buses (50) that are already in the fleet that are assumed to be currently operating for LAX parking lots B and C (which include 11,000 spaces) (at an average purchase cost of $150,000 per bus) ($7.5 million). *Annual recurring cost* is the sum of (1) the average number of parking lot attendees/vehicle inspectors of ~ 33 at a salary including benefits of ~$100,000 per year ($3.3 million) plus $5,000 per year per inspector for training ($0.17 million or $3.5 million), (2) the salary (plus benefits) of the additional drivers based on 45 additional buses operating at peak, which requires 90 drivers available over an average day of 16 hours at $60,000 per year salary (including benefits) ($5.4 million), and (3) bus maintenance at $0.75 average cost per mile x 30,000 miles per year per bus for the 45 buses (at $1.0 million).

Curbside blast barrier deflection plus shatter-resistant glass (add LAWA maintenance). The *capital cost* is estimated between $6 million (25 percent weighting) to $21 million (75 percent weighting) or $17.3 million for (1) the purchase and installation of 6-feet high blast barriers (of concrete-reinforced steel and sand) near curbside on the lower and upper-level

roadways across all terminals with openings for existing pedestrian crosswalks (estimated at 24,165 linear feet at a range of between $175 and $666 per square foot or $4.2 million to $16.1 million) and (2) the purchase and installation of shatter-resistant film coatings on all eight terminal front glass windows (at between $1.8 million to $4.9 million). The annual *recurring cost* assumes two additional LAWA maintenance personnel per year at $100,000 (salary plus benefits) each to maintain barriers and shatter-resistant film coatings (at $0.2 million).

Eliminate lane closest to terminals on upper roadways (add air carrier skycaps). The *capital expense* consists of putting up traffic barriers on upper roadway estimated at $0.5 million. The *annual recurring cost* consists of adding one curbside station per terminal of two skycaps each or 32 skycaps over the eight terminals based on 16 hours per day at a salary of $60,000 (with benefits) per skycap or $1.9 million.

Add pilings on lower-level roadways (add LAWA maintenance). The *capital cost expenditure* is estimated at a range between $21.6 million (with a 25 percent weighting) to $32.4 million (with a 75 percent weighting) to add one structural concrete-reinforced piling an equal distance between each existing piling below the LAX upper-level roadways including the on-ramps from Century Boulevard and Sky Way where the upper roadways begin (prior to Terminal 1 and ending at the off-ramps to Sepulveda Boulevard after Terminal 8). The construction cost is based on an estimated cost of $270,000 per piling for an estimated quantity of between 80 and 120 pilings. *Recurring operating expense* assumes two additional LAWA maintenance personnel per year at $100,000 each or $0.2 million.

Search all packages entering terminals (add TSA inspectors). *Assumed no capital cost.* For *recurring annual cost*, if the search takes three minutes/passenger, an estimate of 77 search stations per terminal at peak are needed. If the search takes 30 seconds per passenger, an estimated 14 search stations at peak per terminal are needed. On average, we assumed that 14 inspectors are needed over one eight-hour shift or 28 inspectors over an average of 16 hours per day for each terminal. A TSA inspector salary of $80,000 (including benefits and training) is applied for 28 x 8 terminals or 224 inspectors at a cost of $17.9 million.

Add handheld bomb sniffers (TSA purchase plus training). The recurring cost of adding TSA inspectors in the above paragraph is based on an average number needed over a 24-hour period, but the *capital cost* for procuring the bomb detection devices for these inspectors is estimated at $25,000 each to handle the peak of 77 inspectors for three terminals (#1, Bradley, and #7) and 14 inspectors at peak at the remaining five terminals

or $7.5 million. The *recurring annual cost* is estimated as the training cost for the total number of 224 TSA inspectors estimated at $10,000 per year for each or $2.2 million.

Add bomb-sniffing dogs (LAX Police Department). The *annual recurring cost* is estimated based on the upkeep and food for 30 K-9 dogs at an expense of $11,000 per year (at $.33 million) plus the salary of 30 LAWA Police Department handlers (with benefits and training at $110,000 per year, with 11 deployed per 12-hour shift (at $3.3 million).

Speed check-in, TSA lines (TSA plus air carriers). The *capital cost* is estimated based on (1) purchasing and installing one explosive trace detection (ETD) machine (at $120,000 each plus 16 percent of $120,000 for installation cost) in three of the eight terminals (#1, #7, and Bradley) at $0.42 million and (2) the estimated cost of remodeling each terminal to make additional floor space estimated at $150,000 per terminal or $0.45 million. The *annual recurring cost* is based on (1) adding 12 TSA inspectors per shift (four per ETD station) or 24 inspectors over a 16-hour average work day at a salary with benefits of $80,000 per year at $1.9 million and (2) adding one skycap station with two skycaps and four ticket agents over the same three terminals per 8-hour shift, with an average working day of 16 hours at a salary with benefits at $60,000 per year, estimated at $2.2 million.

Inspect all cargo going into passenger planes (TSA screening equipment plus additional inspectors). We assumed on average, cargo screening cost on passenger aircraft is equivalent to ~ 50 percent of the capital cost estimate of procuring and installing baggage screening equipment and ~ 33 percent of the recurring cost of adding TSA inspectors' labor salary of $80,000 including benefits. TSA has a new fiscal year 2004 screening level (head count) of 2,695 employees at LAX, which represents an annual operating expense at LAX of $216 million. LAX currently has 270 ETD systems and 60 explosive detection systems (EDS). The current unit procurement cost for EDS machines is ~ $0.9 million each (based on a July 2004 procurement of 37 machines from L-3 Communication) and ETD system cost at ~$0.5 million. Therefore, the *capital cost* for (1) purchasing half the quantity of the same mix of ETD and EDS machines at LAX for cargo screening would be ~$94.5 million, (2) another 16 percent of the purchase price for installation or $15.1 million, and (3) an estimate of the cost of remodeling and/or minor construction needed for the cargo screening at an existing facility of $1.6 million for a total capital expense of $111 million. The annual operating expense is based on (1) adding one-third more TSA inspectors or 889 at a salary of $80,000 per year (including benefits) estimated at $71.1 million and (2) an annual maintenance cost of these screening machines estimated at 4 percent of the purchase cost of

FTD equipment and 8 percent of the purchase cost of EDS equipment or $4.9 million per year.

Add motion-detection system near all aircraft. The *capital cost* is estimated by assuming ~ 110 aircraft at each of LAX's gates/jet way areas and that each motion detector system is estimated at ~$1,000 per gate purchased initially at $0.11 million along with one central workstation for monitoring alerts estimated at $0.9 million. The *annual recurring cost* consists of (1) two additional LAWA employees needed (one per shift or two over a 16-hour day) that are trained to monitor alerts at the central control station at $0.2 million and (2) the estimated cost of replacing these motion detectors at the same fiscal year 2004 cost, on average, once every three years at $0.05 million.

Background checks on airport personnel. As of August 23, 2002, 39,150 employees at LAX held SIDA (Security ID Display Area) badges. We assumed the *capital cost* for the development of a centralized personnel information data base at $2 million and an *annual recurring cost* of $5,000 for each background investigation initially for ~ 40,000 employees and then again repeated once every seven years for a total of $34 million yearly.

Add motion sensors to second perimeter fence. The *capital cost* was estimated by (1) assuming the cost of the second perimeter fence is $17.50 per linear foot over the 15-mile perimeter or $1.4 million, (2) an estimated cost of $175 per linear foot over 50 percent of the 15 mile perimeter or $6.9 million for initial purchase and underground installation of a coaxial cable motion detector system and removal of obstructions in between the two fences, (3) an estimated cost of $700 per linear foot over 50 percent of the 15-mile perimeter or $27.7 million; and (4) a central workstation with software installed for monitoring alerts at $200,000. The *annually recurring cost* was estimated by (1) adding two additional LAWA employees trained to monitor alerts at a central control station at a salary of $100 thousand per year including benefits or $0.2 million; and (2) repairing and/or replacing the second perimeter fence with coaxial cable motion detector sensor system using a service contract estimated at $0.3 million.

Antiterrorist rapid reaction force (15 trained LAX Police Department personnel). The *capital cost* consisted of procuring special weapons and setting up the initial training courses estimated at a total cost of $200,000. The *annual recurring cost* is based on a force of 15 existing officers receiving incentive pay each for two 12-hour shifts and recurring continuous training of three days per month estimated at a total cost of $1.55 million for a total of $2 million yearly.

Patrol MANPADS-vulnerable areas (LAPD). The *capital cost* is estimated as an average procurement cost of between 24 and 36 patrol cars at $50,000 each monitoring 8 km of roadway with two LAPD officers per vehicle over two 12-hour shifts. The *annual recurring cost* is (1) the salary plus benefits of the additional police force of an average between 48 and 72 officers (average of 60) at $6 million, (2) training at $0.9 million, and (3) patrol car maintenance cost estimated at $0.3 million, and (4) the re-procurement of new patrol cars, on average, approximately every three years at a cost of $0.6 million.

Add ground laser for MANPADS detection (Department of Homeland Security expense). The *capital cost* is estimated as the acquisition cost for procuring one Northrop Grumman Hunter high-powered laser system at a cost of between $30 million and $100 million. The *annual recurring cost* is estimated assuming up to five operators/maintainers assumed each shift or a total of 10 over two 12-hour shifts at an average salary of $110,000 including benefits and training. The equivalent of Hunter (MTHEL) is now going through demo testing with the U.S. Army.

Sensors to locate mortars. The *capital cost* estimate is based on one-fifth to one-tenth the cost of the U.S. Army's Firefinder Radar TLQ-37's cost, where the "full" system with vehicles, spares, and generators is estimated to cost up to $20 million.

Restrict roadway near air traffic control tower and utility plant. The *capital cost* includes closing the center roadway, setting up permanent traffic barriers, and restricting access with security fence(s) to allow only LAWA and air traffic control employees to enter near the air traffic control tower and utility plant. The *annual recurring operating expense* includes, on average, two additional LAWA security officers over a 16-hour day at a salary with benefits and training at $110,000 per year.

Shown above is the cost (expressed as annualized cost of the LAX modification) and benefit (expressed as the fatalities averted if the attack were attempted) for each of the five security improvement options we considered for luggage bombs.

Notice that searching all the baggage entering terminals costs about $18 million per year. Nearly 225 screeners would be required to process all the passengers without allowing a line of three people or longer to develop.

Reducing the density of people in the terminals appears to be the most cost-effective because it is both very effective and inexpensive.

Searching all automobiles is not particularly cost-effective for finding luggage bombs, but it is for other threat scenarios so its advantages appear evident in those scenarios.

Handheld bomb detection devices and bomb sniffing dogs do not appear to be very cost-effective. The primary cost component is the salary of the handlers.

For this scenario, reducing the density of people in terminals is the most cost-effective solution.

Shown above are the costs and benefits for different security improvement options against curbside car bombs.

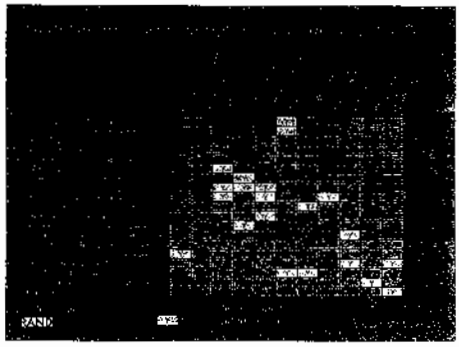
All of the options look cost-effective relative to diverting all vehicles to remote parking lots. The capital cost of $260 million and the recurring cost of $12 million per year make diverting all vehicles unaffordable, especially since there are cheaper (and nearly as effective) alternatives in each scenario.

The other three SIOs appear roughly equal in this scenario. The difference between them is in the other scenarios where they help.

Reducing the density of people in the terminal lobbies helps with this scenario and any scenario involving public grounds bombs. It is also the only SIO that helps with luggage bombs.

Adding permanent checkpoints helps with this scenario and any scenario involving large bombs (large car bombs or truck bombs).

Adding curbside blast deflectors and shatter-resistant glass appears about as cost-effective as permanent checkpoints and reducing the density of people in terminals for this scenario. This is the only scenario where this option improves survivability.



This matrix summarizes our assessments of the 19 SIOs in terms of their potential cost-benefits against each of the 11 threat scenarios we considered. The darkest (G for green) boxes represent the most attractive solutions (from cost-effectiveness perspectives) to individual threats. The lightest boxes (Y for yellow) are less attractive than the darker boxes, but are nevertheless worth considering. The unmarked boxes are not interesting (i.e., they are either too costly for the benefit or of no [or possibly even negative] utility).

SIOs (e.g., speeding check-ins) that are marked G for a number of threats are obviously of relatively greater utility than those that do not (e.g., additional pilings), while others (e.g., curbside blast deflectors/shatter-resistant glass) may not be totally adequate (G) for any particular threat, but may be somewhat useful (Y) for many.

For a specific threat (e.g., an insider-planted bomb), there may be only one or two SIOs that have some benefit (e.g., background checks—G, and motion detection systems—Y). For other threats (e.g., sniper attacks), we were unable to identify any truly satisfactory solutions (e.g., secure nearby buildings—Y).

We are aware that there has been a lot of concern focused on the size of bombs that may threaten LAX. Our view, however, is that the size is relevant, but the location is everything. A small bomb, placed to exploit particular vulnerabilities, can be more effective than a much larger bomb with less access to sensitive areas.

When issues of threat opportunity, demonstrated capabilities, and consequences are considered, we believe that the five areas of vulnerability outlined in the chart above should be of the most immediate concern to LAX.

Finally, solutions to these vulnerabilities fall into four categories as shown in the last part of this chart. Some are "best buys" and can and should be acted on immediately. Others are more difficult and/or expensive but still address major problems. These should be studied further to identify affordable, time-phased solutions (or even partial solutions). Other more minor problems may be addressed in a more deliberate fashion as opportunities arise from planned modernization changes to LAX operations and facilities. Obviously, expensive solutions to minor problems should be deferred pending attention to the more immediate problems.

Two security improvement options fall into the category of inexpensive solutions to major problems. The first is to limit the density of people in terminals. This can be accomplished by adding about 20 additional personnel. This will greatly reduce LAX's vulnerability to curbside and luggage bombs.

Adding permanent automobile checkpoints with bomb detection equipment is the second inexpensive solution to a major problem. It would reduce LAX's vulnerability to large car and truck bombs. LAWA should go forward with the currently unfunded program to add permanent automobile checkpoints.

Enhancing the inspection of cargo on passenger flights is more expensive than the previous two options, but it will significantly reduce LAX's vulnerability to cargo bombs. Enhancing the screening of airport personnel is also more expensive than the first two options but it will reduce LAX's vulnerability to cargo bombs or any threat that is enhanced with insider support.

Finally there are two options that are inexpensive and probably worthwhile, but they do not reduce LAX's vulnerability to major threats. The first is to improve the perimeter fence. This will reduce LAX's vulnerability to over-the-fence attacks. It will also greatly reduce the number of "crazies" wandering onto the runways. Finally, enhancing the

training of the airport rapid reaction team will allow LAX to quickly respond to heavily armed terrorist attacks.

We recommend that the most glaring, easily fixed issues be addressed first, namely the risks associated with unnecessarily overcrowded terminals.

Next, we believe it is important to bring air operations security up to the same generally high standards as the terminal operations. Solution directions are generally clear, but their costs and effectiveness are less clear. We recommend that the process of implementing the actions outlined here should begin immediately, with further study and phased investments flowing from these studies.

Unfortunately, there are a number of vulnerabilities to LAX operations that LAWA cannot address unilaterally. These will require cooperative initiatives with other local, state, and federal agencies as organized and coordinated by LAWA.

Since no security measures can be perfect, LAWA must also plan and equip for rapid damage control and service reconstitution following an attack. These plans must anticipate the political and social aftermath of an attack, and they must be designed to help rebuild public confidence.

Terrorist threats will change and react to our changes at LAX; therefore, security at the airport must be periodically examined and tested by independent entities with no direct stake in airport operations.

Finally, since LAX is only one element of the international air transport system, its security affects and is affected by security at other airports. LAWA must conduct outreach and information sharing efforts to help raise the security bar across the industry.

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Issue Paper

RAND Public Safety and Justice

Designing Airports for Security

An Analysis of Proposed Changes at LAX

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INTRODUCTION

The Los Angeles International Airport (LAX) Master Plan explores a variety of ways to meet the changing aviation needs of Southern California in coming decades. The needs include increasing the safety of passengers and airport workers. A recent proposed alternative, Alternative D—Safety and Security, includes many features for the security of airport workers and passengers.[1] Among the features of this plan are

- maintaining current gate capacity to accommodate growth to 78 million annual passengers by 2015 (from roughly 67 million in 2000), with some reconfiguration to better accommodate very large aircraft
- reconfiguring the Central Terminal Area, including removal of the U-road currently used for passenger loading and unloading, and the removal of all parking structures
- limiting Central Terminal Area vehicle traffic to emergency vehicles, mass transportation vehicles (including "Fly-Away" buses to long-term parking lots), and vehicles making deliveries to tenants and concessionaires
- constructing a large Ground Transportation Center in the Manchester Square Area, approximately two miles from the Central Terminal Area; all short-term park-ing and passenger dropoff and pickup would occur at this facility
- constructing a mass transit system or "people mover" linking the Ground Transportation Center, the Metro Green Line, the Central Terminal Area, and a consolidated car rental facility within the Central Terminal Area.

During a series of exchanges between RAND and U.S. Congresswoman Jane Harman (D-Calif.) and her staff on topics related to national security, counterterrorism, and homeland security, involving numerous visits and joint appearances both in California and Washington, D.C., Rep. Harman asked RAND to examine the relative security merits of Alternative D. Specifically, this analysis examines how the security features of Alternative D compare with current airport configuration (also referred to as the "no action/no project alternative") in improving the security of airport workers and passengers against terrorist attacks. It follows two strands of work: (1) published and confidential RAND analyses on securing a wide range of facilities in the United States, from Los Angeles skyscrapers to the U.S. Capitol grounds, and (2) a growing body of research on improving airport and airline screening, including baggage screening, passenger profiling, use of Transportation Security Administration (TSA) employees for security screening, and enhanced aircraft safety measures (e.g., reinforced cockpit doors). This work is unique in offering one of the first explicit analyses of airport security as a function of airport design since the September 2001 terrorist attacks against the United States.

[1] See "Safety and Security Alternative Sub-Theme," available at http://www.lawa.org/news/pdf/clarmp_factsheet_7202.pdf (as of May 8, 2003).

AN ANALYTICAL FRAMEWORK FOR AIRPORT SECURITY

Alternative D raises two general issues for consideration in improving LAX security. The first is the net effect on security of any physical change to the airport. This can be assessed by comparing the new physical features in Alternative D with existing or possible modifications of features in the current configuration and illustrates what benefits may be realized from reconfiguring the airport to include the greatest number of security features possible. The second issue is the effect of limiting airport capacity to 78 million annual passengers, which is close to the maximum capacity of the current configuration (set at 79 million). This illustrates what benefits may be realized merely by limiting air passenger traffic at LAX and ultimately redistributing it throughout Southern California. Alternatives A–C allow substantially more passengers than both Alternative D and the no action/no project alternative. Alternatives A–D call for some reconfiguration to include safety features for reducing taxiway congestion and increasing runway separation.

We begin by examining possible means of terrorist attack. The RAND-MIPT Terrorism Incident Database (known before 1998 as the RAND Chronology of Terrorism) is a database tracking terrorist activity worldwide and offers a comprehensive list of terrorist attacks against airports or aircraft since 1980. These historical data indicate both the means that have been used to attack airports as well as means of attack on other facilities that might be used against airports.

Any airport redesign for improved security can be evaluated for its effect on three security outcomes variables: (1) deterrence or detection of an attack before it occurs, (2) the number of casualties an attack would cause, and (3) the extent to which airport operations would be interrupted by an attack. For each means of likely attack, we examine how airport configuration might help in deterring or detecting such an attack as well as how it might limit the casualties and effects on operations.

We make several assumptions that are important for evaluating our conclusions. First, we assume that ongoing security expenditures are equal for each alternative, or that any security personnel and equipment that would be added under Alternative D could be added to the existing configuration. Second, we assume that additional security resulting from hardening structures in the reconfigured facility could also be achieved by hardening structures in the existing structure. We evaluate only the configuration of the airport, not the actual structures, because the engineering details of the structures specified in the plan are not yet available. Third, we assume that attackers will exploit the security weaknesses of each design, and that attacks would be conducted to maximize their damage. This means terrorists will adapt to changes in security, so that improving one weakness in security will provide only minimal benefit if a more substantial weakness remains.

HISTORY OF THREATS TO AIRPORT SECURITY

The RAND-MIPT Terrorism Incident Database lists 225 attacks on civilian aircraft or airports worldwide since 1980.[2] Of these, two-thirds, or 150, were attacks on civilian aircraft and one third, or 75, were attacks on or at airports. It is possible that the proportion of attacks on airports is slightly overstated given that a bomb detonated or detected at an airport was counted as an airport attack even if intended for an aircraft.

Attacks on aircraft have been much deadlier than those on airports. The 150 attacks on aircraft have resulted in 4,260 fatalities, compared with just 76 fatalities resulting from attacks on airports. Even if one excludes the casualties of the September 2001 attacks on and using civilian aircraft, there have still been about 1,400 fatalities resulting from attacks on civilian aircraft since 1980, or about 20 times those that have resulted from attacks on airports.

To be sure, attacks on airports have produced significant damage. Of the 75 attacks on airports

- 49 used portable explosives (mostly in luggage but also including 3 mail bombs), resulting in 58 fatalities
- 9 used vehicle bombs, resulting in 4 fatalities
- 8 used missiles, rocket propelled grenades, or mortars, resulting in 1 fatality
- 7 used firearms, resulting in 13 fatalities.

In sum, portable explosives are the most frequent and deadly mode of terrorist attack nationwide, while attacks by firearms, though only the fourth most frequent means of attack, are the second most deadly. There have also been an unknown number of criminal, non-terrorist attacks that used firearms or other small weapons.

Attacks against airports in the United States, including LAX, have been similar to those elsewhere in the world. The RAND-MIPT Terrorism Incident Database includes data on three attacks at LAX, including a bomb attack at an Air China luggage processing facility in 1980, a 1999 plot to detonate a bomb at a security screening point which

[2] Numbers of attacks against airports and aircraft should be viewed as approximate for two reasons. First, the database is incomplete because funding was interrupted for a time, and researchers are now making the database complete for the late 1990s and early 2000s. Second, these numbers include deterred or detected attacks for which detailed preparations had been made. They include, for example, an attempted bomb attack against LAX that was foiled in late 1999 as described below.

was foiled when the perpetrator was arrested at the Canadian border upon attempting to enter the United States to execute the attack, and a firearms attack at an El Al ticket counter in July 2002 that resulted in three fatalities, the only fatalities to result from a terrorist attack at LAX.

There are two known means of terrorist attack that could plausibly be used against airports but have not been used to date. One is a very large truck bomb, such as that used against the Murrah Federal Building in Oklahoma City and the Khobar Towers in Saudi Arabia. Another is a nonconventional weapon such as anthrax, sarin, or a radiological "dirty" bomb. (An additional possibility we do not explicitly consider is simultaneous attacks using conventional means, such as those executed by al Qaeda, on multiple targets, including airports.) Such attacks may have far more severe consequences than past means of attack, so we also consider them in our analyses of the impact on security of LAX reconfiguration.

Before reviewing the effects of airport configuration on limiting possible means of terrorist attack, we remind the reader that while past data are helpful for designing means to prevent or limit the effects of future attacks, there are limits to their uses. Terrorists may change their methods, adapt to changes in security or perceived value or significance of the target, or adapt techniques that have been used successfully against other targets to attack airports.

THE IMPACT OF RECONFIGURING AIRPORT FACILITIES

In all, we consider how possible airport reconfiguration could help prior detection or deterrence and ultimate limitation of casualties and operational disruption for seven types of attacks (overall assessments are provided in Table 1), including those

(1) on aircraft
(2) with a portable bomb
(3) by gunmen
(4) with a small vehicle bomb
(5) with a large vehicle bomb
(6) with a rocket-propelled grenade or mortar, or
(7) with chemical, biological, or nuclear weapons

Airport reconfiguration is unlikely to have any substantial effect on the more common and lethal attacks, those against aircraft. Complete screening of baggage and passengers to prevent such an attack is already occurring. Airport reconfiguration can provide no additional protection against such attacks; it cannot affect terrorists' ability to fire weapons from the ground against aircraft; and it cannot boost the effectiveness of security measures, such as air marshals and cockpit barriers, that have been implemented on aircraft.

Table 1
Attack Outcomes as a Function of Threat Type and Airport Configuration

	Outcome		
	Deterrence	Casualties	Operations
Attack on aircraft	O	O	O
Portable bomb	?	O	
Gunman	?	O	–
Vehicle bomb (small)	?	+	-
Vehicle bomb (large)	?	?	+
RPG/Mortar	O	O	
CBN	O	O	O

NOTES: +, likely security advantage for new configuration; –, likely security disadvantage for new configuration; O, no discernible effect; ?, unknown effect. RPG, rocket-propelled grenade; CBN, chemical, biological, or nuclear attack.

Airport reconfiguration may have some effect on the most common and lethal attacks against airport facilities (rather than aircraft)—those by small (e.g., luggage) bombs and by firearms—but the full extent of this effect is unknown. Not enough is known to evaluate the effect of Alternative D on deterring or detecting such attacks. The distance between parking facilities and the new Central Terminal Area may allow some extra time to use profiling or other methods to identify potential bombers or gunmen, but would have no effect on detecting those seeking to attack the new Ground Transportation Center. There is also little evidence on the effectiveness of profiling techniques or on the ability of terrorists to "game" or otherwise elude a profiling system. Assuming any engineering or building features of Alternative D can be used in the current configuration, airport reconfiguration by itself is not likely to affect the number of casualties that result from small bombs or firearm attacks. Casualties from such attacks are determined by the density of persons waiting in unsecured areas of the airport, such as ticketing, baggage claim, security checkpoint, and transportation waiting areas. These densities are not likely to change as a result of the reconfiguration so similar casualties should be expected from such attacks in both configurations. The effect of such attacks on airport operations may be slightly more severe under reconfiguration. Reconfiguration would centralize several airport functions, such as transportation and terminal entrances that are currently distributed throughout several terminals. An attack at one centralized location may have a great effect on all airport operations during cleanup, investigation, and repair, while an attack on one terminal would affect only operations at that terminal.

Reconfiguration can improve security against small vehicle bombs, but it is difficult to determine the size of this benefit. In particular, how well reconfiguration would affect the deterrence or detection of small vehicle bomb attacks is unknown. If the proposed Ground Transportation Center were eventually seen as "the airport," it would become the likely spot for such an attack. Cars would still be able to drive near lines of persons waiting to board the "people mover," but the greater distances that reconfiguration could incorporate between the "people mover" and passenger dropoff and pickup areas would help limit casualties from small vehicle bombs. Reconfiguration may help maintain airport operations in the event of attack by a small vehicle bomb; the new Central Terminal Area, for example, would likely continue to function, being far removed from the Ground Transportation Center.

We can draw no conclusions about the impact of reconfiguration on large vehicle bomb attacks, because the plan does not specify how large vehicles would be handled. LAX currently has about 200 restaurants, bookstores, and other businesses that require deliveries nearly every day. Reconfiguration would boost the number of these tenants. Although the Central Terminal Area will be closed to passenger dropoff and pickup, it will need to be accessible to trucks. It is possible to search these trucks before they enter the Central Terminal Area, but this would require considerable manpower. Diverting all trucks to a separate entrance may facilitate such searches and security, but such diversion does not require reconfiguration. More generally, it is not clear how airport reconfiguration should be used address the potential problem of large vehicle attacks. Airports typically make poor targets for large vehicle bombs. For example, fatalities caused by bomb attacks at tall buildings, such as those caused by bombing of the nine-story Murrah Building and the eight-story Khobar Towers, generally occur as a result of structural collapse of the upper floors onto the lower floors.[3] By contrast, airports typically have only two stories, meaning their structural collapse would have far fewer catastrophic consequences. Airports do have multistory parking structures that terrorists may seek to attack with large truck bombs, but such targets are not desirable targets for several reasons, including their minimal symbolic value, their more solid construction than residential or business buildings of comparable size, their sparse population, and their open walls that reduce energy absorbed from a blast.

There is little to distinguish Alternative D from the current configuration for boosting security against attack by rocket-propelled grenades or mortars. Reconfiguration may do little to deter, aid the detection, or limit the casualties of such attacks. It is possible that reconfiguration, by centralizing airport facilities, would aggravate the effects on airport operations of such attacks, particularly an attack that disabled the "people mover" system.

There is also little to distinguish Alternative D from the current configuration for boosting security against attack by chemical, biological, or nuclear weapons. It is worth noting that such weapons have not been used against airports. There are several reasons for this. These weapons are relatively difficult to obtain and use effectively. If a terrorist group did obtain these weapons, it could use them against nearly any target in the United States as easily as against LAX. We do not mean to imply that such attacks would never occur at LAX, only that such attacks would be less likely, and less catastrophic, than at other locations in the region and nation.

There are two additional security considerations that affect all modes of attack we analyze and that should be considered in evaluating the security effects of reconfiguration. First, the proposed reconfiguration will increase the area to be patrolled by security personnel. This may have a negative effect on deterrence and detection if security forces are not increased for the reconfigured facility. Personnel will need to be diverted to new facilities, such as the Ground Transportation Center, at which large crowds will gather, leaving fewer to patrol the Central Terminal Area than now patrol the decentralized terminals. Second, reconfiguration may make it difficult to evacuate the terminal area in the event of an attack, particularly given reliance on the "people mover" system for moving persons to and from the terminal. Such reliance might entice terrorists to issue a bomb threat and then attack large and dense crowds waiting to board the system. Evacuation plans and equipment can help mitigate this danger, but would rely on persons leaving the terminal in a way other than which they entered. Alternatively, terrorists may seek to disable the "people mover" at any point along its two mile route and attack trapped passengers with weapons ranging from "Molotov cocktails" to biological weapons.

THE IMPACT OF RESTRICTING GROWTH

One common characteristic of both the current configuration and Alternative D that may have a great effect on airport security is the limit on capacity (both would limit capacity to less than 80 million passengers annually). Relative to Alternatives A–C, such a limit would mean that more growth in air travel would need to be absorbed by other airports in the region. Over time, this would result in a far more evenly distributed system of air travel in which LAX would handle a smaller proportion of a growing number of Southern California air passengers.

Even without changes to airport facilities or procedures, such a limit may help deter terrorist attacks on LAX by helping reduce the value terrorists may perceive in such an attack. A capacity limit, by shifting a proportion of

[3] National Research Council, *Protecting Buildings from Bomb Damage*, Washington, D.C.: National Academy Press, 1995.

regional air traffic from LAX to other airports, may also help mitigate the effect of a terrorist attack on regional airport operations, because a future attack on LAX would affect a smaller proportion of regional airport operations than a present attack would. Such benefits should be viewed as highly speculative, for it is impossible to calculate their magnitude or the length of time needed to realize them. Furthermore, there may be substantial economic costs to the region resulting from restricting LAX capacity; such costs may outweigh the economic benefits of a regional air transport system better able to recover from possible terrorist attacks.

More precise calculations can be made regarding the effects of limiting capacity on potential casualties from a terrorist attack. Reconfiguration, as noted, may help improve LAX security against small vehicle bombs, but it likely would not improve security against small or portable bombs concealed in luggage, which, historically, have been about twice as lethal at airports than larger bombs. While perhaps surprising, this finding follows as a direct consequence from the physics of explosives. The force of a bomb, as well as its ability to cause casualties, is greatly reduced over distance from the bomb; more precisely, the force of a bomb decays with the cube of the distance from the bomb. Thus even small changes in distance from a bomb can result in dramatic reductions of its power (with some minor exceptions for bombs detonated in extremely rigid structures such as tunnels).[4] This also means that the density of a population being attacked can matter far more than the sheer size of the bomb. Because the density of persons can be greater in buildings or mass transit vehicles, small bombs there can be more lethal than larger bombs in more open spaces (Table 2).

For example, the amount of explosives needed per casualty in a city bus arriving at the airport or a large aircraft filled to 50 percent capacity is about one half, or less, that needed to kill an equal number of persons in a terminal line, while the amount of explosives needed to kill a given number of persons in an airport terminal line is about one fifth, or less, than that needed to kill an equal number of persons in an open area, such as a sidewalk, outside the terminal. Put another way, a terrorist seeking to kill the greatest number of persons can kill more with a small bomb (e.g., luggage bomb) in a relatively dense area such as inside a terminal than with a large bomb (e.g., vehicle bomb) in a relatively open area such as a sidewalk outside a terminal (Figure 1).

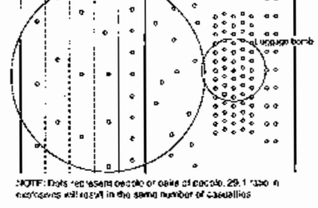
[4] C. E. Elliot, "The Defence of Buildings Against Terrorism and Disorder: A Design Philosophy for the Construction of Ordinary Buildings and Installations to Resist Terrorism and Public Disorder," University of Southampton, unpublished M.Phil. thesis, 1986.

Table 2
Explosives Required as a Function of Population Density in Several Airport Locations

Region of Airport	Area per Person[a] (Sq ft)	Distance Between People[b] (ft)	Explosives Needed per Casualty[c,d]
Inside plane (767, even, 50% capacity)	7	2.7	0.7
Inside city bus (80% capacity)	12	3.5	0.3
Inside airport bus w/baggage	30	5.5	1.0
Line of passenger in terminal			
High-density	16	4	0.5
Mid-density	25	5	1.0
Low-density	36	6	1.7
Open area in terminal or sidewalk			
High-density	81	9	5.8
Mid-density	144	12	14
Low-density	196	14	22
On roadway (lane next to airport bus)[e]	144	17	14
On roadway (curbside)[e]	15	27	
On roadway (third lane from curb)[e]	625	25	125
Parking lot (1 person for every 5 cars)[e]	1,225	35	343
Parking lot (1 person for every 10 cars)[e]	2,500	50	1,000
Parking lot (1 person for every 17 cars)[e]	4,225	65	2,197

NOTES: [a]Population densities calculated within a circular area large enough to enclose 20 people. [b]Square root of density. This would be the distance between individuals if they were evenly dispersed. [c]Bomb sizes are expressed in relative units. 1 represents the power required when population density is 1 person per 25 square feet. The absolute amount of explosives will depend on the type and construction of the bomb. [d]Does not include secondary casualties from structural failures. [e]Calculations assume vehicles and buildings offer no protection from explosion; this will slightly overestimate the casualties from bombs in these locations.

Our calculations may overstate the casualties that would result from large vehicle bombs because of several simplifying assumptions. We assume, for example, that there is no protection whatsoever for persons within range of a given bomb, but a large number of persons within a given range of a vehicle bomb would probably be in their own vehicles, which should offer considerable protection from a blast and resulting debris. Similarly, a large number



NOTE: Dots represent people or pairs of people. 29:1 ratio in explosives will result in the same number of casualties

Figure 1—Different Bomb Sizes Can Yield Similar Casualty Rates, Depending on Population Densities (Higher-Density Scenario)

of persons would be inside the terminal building, which should also offer protection from the blast. While flying glass or falling debris inside a terminal building resulting from a vehicle bomb can cause fatalities, such problems may be mitigated by thorough modification to windows or reinforcement of building structures.

In comparing potential fatalities from small and large bombs detonated at airports, we consider casualties from the bomb itself, rather than secondary effects of structural failure, because the detailed structural engineering required for predicting structural failure is beyond the scope of this project. Nevertheless, we note that the structural peculiarities of an airport may mean a small luggage bomb inside a terminal can cause greater structural damage than a large vehicle bomb outside it. The roadway overpass outside a terminal is designed to handle far greater loads, and has a much greater mass, than the interior floors of the terminal building. As noted earlier, structural collapse resulting from a bomb in an airport terminal of just two stories is less likely to have the catastrophic consequences that can result from large bombs used against taller buildings.

Small bombs detonated inside a terminal, in addition to being a more likely threat and more deadly for a given weight of explosives, are easier to build without detection and to deploy in an airport without suspicion and leave less forensic evidence about perpetrators. Any individual or organization that has the capability to launch an effective vehicle bomb attack outside a terminal has the materiel, skills, and motivation needed to launch several smaller and more lethal bombs inside a terminal. This is not to say that terrorists will never attack LAX with a car bomb, but instead that efforts to mitigate the damage from bomb attacks might be better focused on preventing or limiting the damage of small bombs detonated in crowded areas. Reconfiguration can offer some greater protection from some vehicle bombs, but by itself can do little to affect threats posed by small bombs. Such threats are best addressed by reducing crowded areas in the existing or reconfigured airport.

INCREASING SECURITY IN EITHER CONFIGURATION

The fact that small, portable explosives have been the most likely and most lethal means of attacks at airports suggests a number of changes can help improve security greatly either in the current configuration or in the Alternative D reconfiguration. We outline three broad areas to consider.

Expedite the Movement of Passengers into the Secure Terminal Areas

The greatest risks for casualties for most types of attacks are in the high-density areas passengers encounter before reaching the security checkpoint, particularly lines for ticketing and for passing the security checkpoint. Airport procedures and numbers of personnel, rather than configuration, determine the number of persons that must wait in these unsecured areas. Even small increases in ticketing and screening personnel may help reduce these crowded areas.

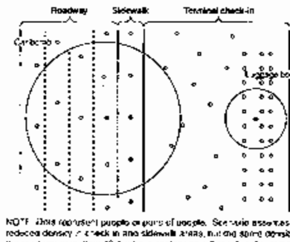
Consider, for example, that if current personnel can screen 10 passengers per minute, and 12 passengers per minute are arriving at the terminal, then a line of 60 persons will form within 30 minutes, with new arrivals facing a wait time of at least 6 minutes. Just a 20 percent increase in screening capacity would completely eliminate the line and wait time. Increased capacity at ticket counters would have similar effects. Passenger flow is extremely predictable, and airlines already make some adjustments to handle peak flight times. In fact, completely eliminating ticket counter lines may require no additional personnel, particularly as electronic kiosks are used to handle more passenger traffic.

Similarly, reducing the wait for baggage check-in from 15 minutes to 1 minute would cut the number of persons who could be killed in a bomb attack in that area by more than 50 percent (compare dot density of Figure 2 with that in Figure 1). It would also reduce the number of persons who could be killed by a curbside bomb both by reducing the number of persons waiting there for baggage or security checks and by allowing persons inside the terminal to move further from the exterior wall.

Unfortunately, the TSA is setting funding and personnel at each airport to levels that could result in security checkpoint wait times of up to 10 minutes.[5] This will have more detrimental effects at larger airports, such as LAX, because a 10 minute wait for a terminal that must handle 15 passengers per minute will result in a crowd of 150 persons at each security checkpoint, while such a wait at a terminal that must handle 5 passengers per minute would result in a crowd of only 50 persons.

The economic costs of such delays should be considered in efforts to improve security. These occur because the value of air travel is in the savings of time it offers relative to other modes of transportation. Anything that adds time to a trip by air reduces its value and hence its demand relative to other modes. A recent RAND analysis concluded that the costs of increased equipment and personnel needed to eliminate security delays would be more than offset by the resulting increased value passengers

[5] The TSA recently announced it was reducing its number of screeners by about 6,000, including more than 150 at LAX. See http://www.tsa.gov/interweb/assetlibrary/ScreenerReductionFactSheet.doc (as of May 8, 2003).



NOTE: Dots represent people or pairs of people. Scenario assumes reduced density in check-in and sidewalk areas, but the same density in the roadway area; thus 10:1 ratio in explosives will result in the same number of casualties.

Figure 2—Different Bomb Sizes Can Yield Similar Casualty Rates, Depending on Population Densities (Lower-Density Scenario)

would perceive, and pay, for air travel.[6] In other words, most passengers would pay the nominal increase in cost required to eliminate waiting in lines in unsecured areas of the terminal.

Eliminating lines in unsecured areas for passengers departing LAX would shift the most vulnerable location in the airport to the baggage claim area. Crowd density in this area is lower than that for ticketing counters or security checkpoints, but it is still significant. Unfortunately, eliminating these crowds is not simply a matter of increasing personnel or capacity. Nevertheless, some changes are possible to increase the security of this area. Restricting baggage claim access to those persons disembarking planes would increase the security of this area, but would possibly be seen as an inconvenience to persons meeting passengers. Alternatively, security personnel could prohibit non-passengers entering the baggage claim area from bringing any bags or backpacks into it.

Harden High-Value Structures

Potential casualties from a bomb attack could be greatly reduced through structural modifications. A high priority should be preventing damage from flying glass through use of shatterproof glazing, decreasing the size of window panels, or using stronger window frames. Other structural changes that may also be cost effective include reinforcing walls in high-risk areas or adding support columns.[7] Such changes may help reduce the damage and casualties from earthquakes in the region; these secondary benefits should be considered in any cost-benefit analysis.

Use Physical Barriers

Physical barriers can help increase the separation between vehicles and buildings or crowds. These barriers would reduce the population density of an area a vehicle bomb could affect, and they could reduce the secondary damage from structural failures. Truck use on the upper (departures) deck could be limited by placing height restrictions on vehicles there and through other means to prevent the passage of heavy vehicles.[8] Because buses currently use the lower (arrivals) deck for passenger dropoff and pickup, this would not restrict current traffic flow. Barriers such as planters or bollards could also increase the distance between cars and the terminal building and between cars and pedestrians. It may be less expensive, however, to move passengers inside the terminal further from exterior walls.

CONCLUSIONS

While there have been past terrorist attacks on LAX and future attacks cannot be ruled out, airports have been very safe places in recent decades, and the threat of terrorism at an airport should be viewed in the context of other safety and security threats facing air travelers. An airplane collision at LAX, for example, could result in more casualties than any terrorist attack not using a nuclear weapon. An earthquake could also result in more damage and a significantly longer shutdown of the airport. Any terrorist attack can result in tragedy, but the threat of terrorism should not dominate discussions of airport planning at the expense of solutions to more common problems. Any reconfiguration of LAX should be judged primarily on how effectively the airport will function and on the effects reconfiguration will have on the transportation and economy of Southern California. There is enormous economic value to be realized in getting passengers from their homes to their destinations quickly and safely. The economic costs incurred by an inefficient airport operation could therefore outweigh the economic benefits of some of the more expensive security aspects in reconfiguration.

Terrorism is dynamic and terrorists adapt their methods to suit changes in weaponry and defense tactics. Terrorism prevention and security therefore also needs to be dynamic. Buildings are essentially static. This makes it extremely difficult, and expensive, to design airport facilities that will be as secure against attack 20 years from now as

[6] Russell Shaver, *How Much Is Enough? Facing the Dilemma of Baggage Screening Equipment by Considering the Economic Cost of Passenger Delays*, Santa Monica, Calif.: RAND, PM-1412-BC, forthcoming.

[7] National Research Council, *Protecting Buildings from Bomb Damage*, Washington, D.C.: National Academy Press, 1995.

[8] Bruce Hoffman and Peter Chalk, with Timothy E. Liston and David W. Brannan, *Security in the Nation's Capital and the Closure of Pennsylvania Avenue: An Assessment*, Santa Monica, Calif.: RAND, MR-1293-1-RC/OC, 2002.

they may be today. While in the past ten years there have been a number of notorious terrorist attacks using vehicle bombs, which airport reconfiguration might help mitigate, future terrorists may use rocket-propelled grenades for their attacks.[9] This could diminish some of the short-term improvements in safety and security that Alternative D could effect.

Our analysis helps indicate the priorities for considering security in airport planning. Top priority should be given to securing aircraft, the most likely—and lethal—target of terrorist attacks on air transportation. This should include screening of all baggage and passengers, adequate security procedures and equipment on aircraft, and restricted access to aircraft on the ground.

The next priority should be given to securing airport facilities against portable bombs, the most commonly used weapons in terrorist attacks against airports. Such weapons are easy to build and the perpetrators of such attacks are hard to catch. Detonation of these bombs in crowded areas of the airport makes them more lethal, per pound of explosive, than any other means of attack.

Restricting passenger capacity as proposed in Alternative D, or as would result from the no action/no project option, could reduce the overall vulnerability of LAX in particular and Southern California aviation more generally. Restricting LAX capacity would make it a less prominent target for terrorist attack, while distributing air traffic more evenly throughout the region would help its air traffic system continue functioning in the event of an attack on one of its parts. Such restrictions may have detrimental economic effects beyond the scope of this work.

Other features of Alternative D appear less likely to improve security. The proposed reconfiguration could help limit damage caused by a vehicle bomb, but would not help limit damage caused by small bombs, and it could increase the time the airport is shut down by such attacks. Reconfiguration could also result in two security problems that will need to be addressed in future versions of the plan. First, the present plan would substantially increase the area that would need to be secured against possible terrorist attack. This will be difficult to do with the present number of security personnel. Second, the present plan would consolidate transportation to the Central Terminal Area on a "people mover" that could become a tempting target for terrorists and that may impede evacuation of the terminal in the event of an attack, a fire, or a natural disaster.

Regardless of configuration, several improvements in airport processes could be made to improve security against terrorist attacks at LAX. The most important of these is expediting the movement of passengers into secure terminal areas. This is the best defense against small bombs and firearms—the most common, and deadly, types of terrorist attacks. Building structural improvements, including the replacement of conventional glass with shatterproof materials and changes to the terminal facade and structural supports, can also mitigate the effects of terrorist attacks. Physical barriers, including the prohibition of tall or heavy vehicles on the upper (departures) deck, to increase separation between vehicles and persons can also limit potential casualties from larger bombs.

If it is assumed that some reconfiguration of LAX (in the form of Alternative A–D) is likely, Alternative D would likely have a slightly positive effect on improving LAX security. This positive effect would be due to only one portion of the plan—restricting passenger capacity—and not those parts that are more expensive, such as reconfiguring the terminal, parking, and ground transportation at the airport. The current configuration would allow airport managers to realize the most likely security benefits of Alternative D and to add others as well. Airport planners need to consider the security benefits of restricting passenger capacity with the economic effects of doing so, as well as economic or safety reasons, such as runway separation or taxiway improvements, favoring Alternative D that were beyond the scope of this analysis.

[9] There are recent reports of rocket-propelled grenades selling for as little as $100 on the European black market. See Nicholas Rufford, "Prime Suspect: Who Masterminded the Rocket Attack on MI6 Headquarters?" *Sunday Times* (London), September 24, 2000.

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IP-251 (2003)

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THE NATION; COLUMN ONE; A Plane as Big as the Globe; The A380, the largest airliner ever built, will be unveiled by Airbus on Tuesday. It's the sum of a worldwide ballet of parts manufacturers.; [HOME EDITION]

Peter Pae. **Los Angeles Times.** Los Angeles, Calif.: Jan 17, 2005. pg. A.1

Full Text (1944 words)

To build the world's biggest passenger plane, Airbus first constructed the world's largest wing and fuselage factories. It set up a paint shop big enough to house a football stadium, bought the world's biggest automated riveting machine and commissioned a 505- foot-long transport ship.

On Tuesday at Airbus headquarters here, the public will get its first look at what many consider an engineering marvel: the A380, the heaviest and roomiest commercial passenger aircraft ever built. In a lavish ceremony, a 10-story-high curtain will part to reveal the first completed "super-jumbo" plane before some 5,000 guests, including British Prime Minister Tony Blair and French President Jacques Chirac.

The A380 will carry as many as 800 passengers -- more than double the capacity of a Boeing *747* -- on two decks. The craft will weigh more than 1.2 million pounds fully loaded. It stretches about 260 feet wingtip to wingtip, and the tail stands seven stories high. The A380's passenger cabin is so elevated that 18 doors are equipped with emergency slides made with special friction material to slow down escaping passengers. Final work on the aircraft is done in a hangar 1,610 feet long, and workers must take elevators to reach their spots in the assembly line along a five-story-high scaffolding.

"Everything about this plane is mind boggling," said Richard Aboulafia, an aviation analyst for research firm Teal Group.

For 35 years, Boeing Co.'s 747 set the standard for jumbo commercial aircraft. European governments got into the airplane business in 1970 by teaming up to finance Airbus, which is now controlled by a Dutch aerospace company. Airbus thinks its plane will create the blueprint for the next generation of airborne giants.

"It's the plane of the future, a cruise ship in the sky," said John Leahy, Airbus' top salesman, who is credited with helping the company surpass Boeing as the world's biggest aircraft maker. The A380 "will change the way we fly, just like what the 747 did."

Eleven airlines, including Singapore, Korean Air, Lufthansa and Air France, plus cargo carriers FedEx and UPS, have ordered 149 planes at $250 million apiece. After a year of test flights, the first passenger-carrying A380 is expected to fly in spring 2006, with Los Angeles International Airport a likely destination.

In keeping with the grand scope of the A380, to get the plane built involves a global mobilization of supplies that is unequaled for an industrial project. Some 18,000 suppliers in 30 countries, including the U.S., have a hand in its construction. Thousands of A380 parts crisscross the globe daily en route to factories in Europe. Plants in Britain assemble the wings, workers in Germany build the fuselage, and these major sections are then shipped to Toulouse for final assembly.

The man responsible for this $12-billion project, including the delivery of a jigsaw puzzle of parts, is Frenchman Charles Champion, 49, executive vice president for the A380. Champion, a Stanford University graduate, has no doubt that despite its size, the A380 will fly "beautifully." The plane relies more on composites, such as carbon fiber, than does the 747, to save weight while adding significantly more space.

What worries Champion and keeps him up at night are the logistics of "getting the supplies here on time." A single A380, for instance, requires 1 million aluminum fasteners.

Any kink in the intricate global delivery chain could delay the A380, and that could be financially devastating for

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Airbus and its suppliers

One problem is that the A380 is pushing the envelope on the maximum size of a commercial airplane. International airport standards call for no plane to exceed 80 meters in length and width. The A380 has a wingspan of 79.8 meters. The new plane is so much larger than any other craft that most airports face the daunting prospect of making design changes to accommodate it.

Six airlines plan to put LAX on their first flight routes for the A380. Carriers are worried that LAX may not have enough gates for the plane, although airport officials said they were committed to having at least two A380 gates next year. At the moment, if two A380s tried to park side by side at existing LAX gates, their wings would touch. San Francisco International Airport has redesigned an existing terminal to accommodate the A380s, hoping to lure flights away from LAX.

If major airports are slow to support the new plane, airlines may hesitate to buy more A380s. Airbus says it needs to sell 250 planes to break even; some analysts believe the company must sell 325 to cover its investment.

Already, though, the economic effect of the plane is widespread. More than 100,000 people in the U.S. alone are involved in getting the A380 airborne.

At Monogram Systems in Carson, engineers are refining the plumbing for the biggest waste and water system ever built for an aircraft. In Irvine, Thales Inc. has built the world's largest in- flight entertainment test laboratory, where 600 seat-back video monitors are left on for days to see how such a massive system would perform if that many A380 passengers decided to watch movies at the same time.

But of all the components for the A380, the wings are considered the most crucial, and they illustrate the great lengths to which Airbus has gone to spread out work on the project.

In western Australia, near Perth, miners dig up a reddish, clay- like material containing bauxite, the principal ore of aluminum, which makes up the basic structure of the A380. Bauxite is ground down and mixed with caustic soda and lime, then heated to a granulated state. It's shipped to a smelting plant in Texas, where it is poured into large pots and shocked with electricity to turn it into hard aluminum ingots the size of mattresses.

The ingots are shipped to Alcoa Inc.'s Davenport, Iowa, plant, the world's largest aluminum mill. Stretching 1.2 miles along the Mississippi River, the facility produces aluminum sheets and plates used in bicycles, cars, trucks, planes and rockets. It's the only mill that can fabricate aluminum pieces large enough for the A380.

The ingots are put through a machine with rollers that apply 16 million pounds of pressure. In 10 minutes the ingots are reduced in thickness from 20 inches to barely half an inch. Another machine pulls and stretches them to create 6-ton aluminum plates 115 feet long.

Sandy Madison, a 25-year plant veteran, is the floor manager in Davenport. The wing section is so long that Madison shut down an adjacent production line to clear room for a crane to lift and turn the aluminum piece and put it on a truck for shipping.

"Just the sheer size is the issue for us," said Madison, who has also worked on wings for the Boeing 747, which are about 30% smaller. "It's the largest piece we do here, so it needs some special attention."

These aluminum wing pieces are so long that Airbus had to design a single-bed truck trailer that can extend out, like a telescope, to carry the metal plates across the Midwest to Baltimore, from where they are shipped to Broughton in North Wales.

Broughton is home to the world's largest wing assembly plant, with enough room to fit 12 soccer fields.

Lennie Cinelli, head of A380 wing skin manufacturing, climbed up on one of the pieces. "This is my baby," he said, pointing at what appeared to be a shiny aluminum floor. A 29-year Airbus veteran, Cinelli has been

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involved in virtually every new aircraft built by the company. But the A380 will be special, he said. "I would love to see this big baby fly."

Aluminum plates arrive at the Broughton factory in the basic shape of a wing. The pieces are too big to stand up, so they are laid on the plant floor. Then a milling machine on rails moves back and forth over them to shave off most of the aluminum, turning a 6- ton plate into a shiny 1-ton sheet.

The wing skins are treated in a chemical bath. Then a three- story-high automated robotic riveting machine, the first of its kind, attaches the skins to a row of ribs made of composites and metals. The machine uses more than 750,000 fasteners to attach the skins; any difficult-to-reach spots are riveted by hand.

Afterward, workers install the wing innards, including electrical wiring, hydraulic and fuel systems and an air pump the size of a compact car. The wing is so thick that the Houston Rockets' 7-foot- 6 basketball center Yao Ming could stand comfortably inside its broadest point.

To move each 120-foot- long wing piece to Toulouse, along with fuselage pieces from Germany, Airbus had to create a shipping system.

A 96-wheel trailer carries the wing piece a mile down the road, where it is loaded onto a custom-built river craft. The craft carries one wing piece and travels 16 miles downriver to the port at Mostyn. "We have to catch a good tide here" to clear the low bridges, said Ken Roberts, an Airbus manager in charge of transporting the wing. "It can be challenging sometimes."

At the port, the parts are moved onto a Chinese-built cargo ship to be transported to France. The cargo ship, a derivative of a car carrier built for Airbus, is marked with large letters saying "A380 On board."

After the parts are unloaded at a port north of Bordeaux, they go on a barge that makes its way 60 miles up the Garonne River. The barge must pass under the historic stone Pont de Pierre, a bridge near Bordeaux. The barge has a window of only about three hours a day when the tide will allow it to clear the bridge without damaging it or the wings.

"We just have to live with that," said Champion, the Airbus project chief. This elaborate transportation system is still more efficient and less costly than other methods Airbus considered, he said.

At one point, the company had contemplated building massive, zeppelin-like airships to fly the biggest pieces to Toulouse. But that would have risked bad weather, the possibility of dropping the cargo and other uncertainties.

At the small river port village of Langon, the wings and fuselage are separately loaded onto tractor-trailers, which make the final leg of the journey through 150 miles of French countryside, mostly two-lane roads lined with vineyards and geese farms, to landlocked Toulouse.

The convoy -- three tractor-trailers carrying two wing sections and a fuselage -- makes the trek overnight, when the French police close down intersecting roads.

Airbus paid to expand or strengthen portions of the roadways and built bypasses around villages where old roads were too small. It also built four massive resting areas for the convoy, equipped with stadium lights that illuminate nearby farms and villages that date back to the Middle Ages.

After three days, the truck convoy reaches the outskirts of Toulouse, where a large sign marks the "end of a grand trip" before entering the massive assembly line.

At the moment, Airbus has heard little criticism from the villages, where residents have been lining the roads with their lawn chairs to marvel at the twice-a-month nighttime convoy traveling barely 10 miles an hour.

If the airplane is a success, residents may get less sleep. When Airbus ramps up to full production, the parade of giant airplane parts coming through the towns would become a weekly affair.

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County of Los Angeles
Regional Planning Commission
Airport Land Use Commission

Commissioners
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Harold V. Helsley
Pat Modugno

August 26, 2004

Mr. Jim Ritchie
Deputy Executive Director
Los Angeles World Airports
1 World Way, P.O. Box 92216
Los Angeles, CA 90009-2216

RE: RESOLUTION OF THE AIRPORT LAND USE COMMISSION AVIATION CASE NO. 04-162-(2,4)

Dear Mr. Ritchie:

As you are aware, at its August 18 and 25, 2004 public hearings, the Los Angeles County Airport Land Use Commission (ALUC) reviewed the LAX Master Plan and related documents (collectively, "LAX Master Plan Program"), for consistency with the Los Angeles County Airport Land Use Plan, known as the (CLUP). After considering extensive testimony and evidence from Los Angeles World Airports (LAWA), elected officials, community organizations and members of the public, together with evidence submitted by LAWA and others, ALUC voted unanimously that the LAX Master Plan Program was inconsistent with the CLUP.

If you have any questions please call me or Mark Child of my staff at (213) 974-6425 Monday through Thursday between 7:00 a.m. 6:00 p.m. We are closed on Fridays.

Very Truly Yours,

DEPARTMENT OF REGIONAL PLANNING
James E. Hartl, AICP
Director of Planning

Ronald D. Hoffman, Administrator
Advance Planning Division

RDH:JTM:MC
Attachment: Resolution
c: Herb Glasgow, LAWA

James E. Hartl, AICP
Director of Planning
Dept. of Regional Planning

Rose O. Ruiz
Secretary to the Commission

320 West Temple Street, Los Angeles, California 90012 Telephone (213) 974-6409 or TDD (213) 617-2292

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RESOLUTION
LOS ANGELES COUNTY AIRPORT LAND USE COMMISSION

WHEREAS, the Los Angeles County Airport Land Use Commission ("County ALUC") has conducted two public hearings in the matter of Aviation Case No. 04-162-(2,4) to consider the Los Angeles International Airport ("LAX") Master Plan Program in regards to its consistency with the adopted Los Angeles County Airport Land Use Plan, known hereafter as the Comprehensive Land Use Plan ("CLUP"), on August 18, 2004 and on August 25, 2004; and

WHEREAS, the Commission finds as follows:

1. The State Aeronautics Act Section 21670, et seq. of the California Public Utilities Code ("PUC") requires every county in which there is an airport served by a scheduled airline to establish an airport land use commission;

2. Pursuant to Section 21670.2 of the PUC, the Los Angeles County Regional Planning Commission has the responsibility for acting as the Airport Land Use Commission for Los Angeles County and thereby coordinating the airport planning of public agencies within the County;

3. Pursuant to Section 21670(a)(1) of the PUC the purpose of the State Aeronautics Act that establishes airport land use commissions is to provide for the orderly development of each public use airport and the area surrounding these airports and to prevent the creation of new noise and safety problems;

4. Pursuant to Section 21674 of the PUC, the powers and duties of an airport land use commission include: assisting local agencies in ensuring compatible land uses in the vicinity of new and existing airports; coordinating planning at the state, regional and local levels so as to provide for the orderly development of air transportation; preparing and adopting airport land use compatibility plans; and reviewing plans of local agencies to determine whether such plans are consistent with the applicable airport land use compatibility plan;

5. In 1991 the County ALUC adopted the Los Angeles County Airport Land Use Plan, which is known as the Comprehensive Land Use Plan ("CLUP") that sets forth policies, purposes, maps with planning boundaries, and criteria for promoting compatibility between airports and the land uses that surround them;

6. The CLUP provides for the orderly development of Los Angeles County's public use airports and the area surrounding them. The CLUP contains policies and criteria, including a 65dB Community Noise Equivalent Level ("CNEL") contour, that minimize the public's exposure to excessive noise and safety hazards;

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7. LAX is one of fifteen public use airports in the County whose land use compatibility plans are contained in the CLUP and subject to the policies and programs contained therein;

8. LAX is the primary commercial air transportation hub of the Los Angeles region and is the dominant U.S. international gateway to the Pacific Rim. It is the third busiest airport in the United States in terms of aircraft operations and the world's fifth busiest in terms of passengers. LAX plays an essential role in meeting the current and projected transportation needs of passengers and shippers, and in producing economic vitality, within the surrounding five-county region;

9. Pursuant to Sections 21674(d), 21676(b), 21672(c), 21661.5, 21664.5(a), and 21664.5(b) of the PUC, the County ALUC has the responsibility to review airport master plans, specific plans, general plan amendments, zoning ordinances, related development proposals and airport expansion plans for consistency with the adopted CLUP, before final action is taken by the local agency;

10. In 1995, LAWA began preparation of the LAX Master Plan Program which has undergone several substantial revisions and which includes numerous implementation actions;

11. Los Angeles World Airports ("LAWA"), a branch of the City of Los Angeles ("City"), is the owner and operator of LAX and has submitted an application, known as Aviation Case No. 04-162-(2,4), to the County ALUC for its consideration to determine whether the proposed project, hereafter known as the LAX Master Plan Program, is consistent with the CLUP;

12. The LAX Master Plan Program is described in documents submitted to the County ALUC by LAWA and includes the following principal documents: Los Angeles International Airport Final Master Plan (April 2004), the LAX Plan (June 11, 2004), the Los Angeles International Airport Specific Plan (June 11, 2004) which is also known as the "Consensus Plan", the Westchester Playa del Rey Community Plan, proposed amendments to the City of Los Angeles General Plan, proposed amendments to the Los Angeles Municipal Code ("LAMC"), the existing and future Airport Layout Plans ("ALP"), tract maps, the Final Environmental Impact Statement/ Environmental Impact Report ("EIS/EIR"), and tables, figures, maps, and plans that provide land use information for the areas newly exposed to greater noise and safety impacts that are derived from a comparison of the LAX Master Plan Program to the CLUP;

13. The Final LAX Master Plan contains the essential elements of the security and safety plan known as Alternative D which is the City staff-preferred alternative. The LAX Master Plan Program was approved by the City Planning Commission and the Board of Airport Commissioners on June 14, 2004;

14. The fundamental consideration for the County ALUC is to determine whether any components of a proposed master plan would result in greater noise and safety

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impacts on surrounding land uses than are assumed in the CLUP. The airport master plan does not have to be identical with the compatibility plan as long as the impacts are not increased or moved to previously less-impacted areas;

15. The County ALUC's review of the LAX Master Plan Program for consistency with the CLUP is primarily concerned with safeguarding the general welfare of the inhabitants within the vicinity of the airport and the public in general through the identification of any increased impacts on noise sensitive uses, residences, and land uses that concentrate people and structures in areas newly or increasingly exposed to noise and safety impacts;

16. The ALUC review also includes an evaluation of whether the policies, programs, plans, or actions associated with the LAX Master Plan Program are in conflict with the CLUP;

17. The County ALUC's review is required to focus on the different and greater noise and safety impacts that the LAX Master Plan Program would have on the inhabitants within the vicinity of the airport and the public in general, as compared to the impacts assumed in the CLUP;

18. The CLUP adopted a planning boundary which includes the airport area ownership, the Runway Protection Zones (RPZ) and the 65 dB CNEL noise exposure area, as well as noise and safety policies and criteria. Each of these areas has different compatibility issues relative to the LAX Master Plan Program;

19. The key changes to the airport proposed in the LAX Master Plan that relate to surrounding land use compatibility issues include:

A. Changes to Runway Alignment -The proposed Master Plan Program would maintain four runways configured in two pairs, the north complex and the south complex. Each pair includes an outer runway used for landings (located on the airport property closest to the community) and an inner runway (located closest to the passenger terminals). The north runways are named Runways 6L/24R (outer) and 6R/24L (inner). The south runways are 7R/25L (outer) and 7L/25R (inner). Proposed runway modifications affecting noise and safety are:

- Runway 24L would be reconstructed 340 feet to the south and extended approximately 135 feet to the west and 1,260 feet to the east of its present location. This is the inner north complex runway that is primarily used for take offs;

- Runway 25L would be reconstructed 50 feet to the south of its present location. This is the outer south complex runway, which is primarily used for landings;

The LAX Master Plan indicates that the realignment of the outer south complex Runway 25L would occur during Phase I (fourth quarter 2004 through first

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quarter 2006) which would shift the noise impacts to the newly exposed area at that time. The Specific Plan does not require a Specific Plan Restudy (otherwise known as a "yellow light") for this runway realignment. The LAX Master Plan indicates that the realignment of the inner north complex Runway 24L would occur during Phase III (third quarter 2012 through fourth quarter 2013) and the Specific Plan requires a Specific Plan Restudy for this runway realignment;

B. New Locations for Runway Protection Zones (RPZ) - The new runway configuration creates new RPZ boundaries and exposes new areas to the safety issues associated with this zone. The RPZ is a trapezoidal area at the ground level, beyond the runway for the purpose of protecting the safety of approaches and keeping the area clear of congregations of people. The RPZ begins at the end of each primary surface and is centered upon the extended runway centerline;

C. Airport Property Boundary Changes - The addition of new airport property will change the airport ownership boundary. LAX intends to develop a remote parking and ground transportation center, a consolidated rental car facility and other facilities that would not be within the airport ownership boundary shown in the CLUP;

D. Existing and Proposed Airport Policy and Implementing Measures related to Noise and Safety – Boundary changes for RPZs and new noise affected areas require that an examination of the land use policy and implementation measures for the affected areas be conducted to determine consistency with the CLUP;

20. A direct conflict exists between the CLUP and the LAX Master Plan Program because the Master Plan results in negative noise and safety impacts on a significantly different population than was assumed by the CLUP. It is appropriate to review uses that are newly exposed to noise and safety impacts because the implementation of the LAX Master Plan would result in impacts to uses that did not exist or were not previously impacted when the CLUP was adopted;

21. The CLUP noise policy establishes a measuring and reporting system (Policy N-1), and sets sound insulation standards when applicable (Policy N-2). It also establishes the Land Use Compatibility Table (Policy N-3) and encourages a statement of noise disclosure for properties where noise is greater than 60dB CNEL (Policy N-4);

22. As the LAX Master Plan Program creates shifts in runway alignments, there will be corresponding shifts in noise contours. A comparison between the areas exposed to the 65dB CNEL in 1991 (adopted CLUP) and 2015 (LAX Master Plan Program) shows the following noise contour changes in the jurisdictions of the City of Inglewood, the City of Los Angeles, and the County of Los Angeles (Lennox and West Athens-Westmont) resulting in increased impacts:

A. The 65 dB CNEL Noise Contour would be reduced in total area and would affect fewer properties, but there would be newly impacted areas, totaling approximately 170 acres that would be exposed to higher noise levels that were not previously exposed to the 65dB CNEL;

B. Existing Newly Exposed Noise Sensitive Land Uses - A comparison of the LAX Master Plan Program 2105 65 dB CNEL noise contour and the 1991 CLUP 65 dB CNEL noise contour indicates that three public schools, two elementary and one high school, with a combined enrollment 3,835 and three private schools/preschools would be subject to greater noise levels than the CLUP identified. These three public schools – Beulah Payne Elementary School, Clyde Woodworth Elementary School and Morningside High School and the three private schools/preschools - Century Community Charter School, California Technical Union High School and Ruby's Christian Academy preschool will be located in the newly exposed area. In addition to the schools, there are 12 other noise sensitive uses –ten churches, one hospital and one park – within this area. The inclusion of educational facilities in areas experiencing noise levels of 65 dB CNEL are clearly contrary to the CLUP's Land Use Compatibility Table which indicates such areas as "Avoid Land Use Unless Related to Airport Services";

C. Existing Newly Exposed Land Uses - A comparison of the LAX Master Plan Program 2015 65 dB CNEL noise contour and the 1991 CLUP 65 dB CNEL noise contour indicates that the 65 db CNEL is expanded in several areas to include a total of 1,823 residential units with an estimated population of 5,382 exposed to higher noise levels than assumed under the CLUP as follows: 565 single family units with an estimated population of 1,825 in the newly exposed area, and 1,258 multi-family units with an estimated population of 3,557. This is a significant number of additional people and homes that would be affected by the change in the noise contour.

D. Planned Land Uses – A comparison of the LAX Master Plan Program 2015 65 dB CNEL noise contour and the 1991 CLUP 65 dB CNEL noise contour indicates that the expansion of the 65 dB CNEL also includes 170 acres of newly exposed areas which are planned for residential and commercial land uses. The newly exposed area includes the following planned land uses (from Los Angeles City, Los Angeles County and

Inglewood General Plans): 140 acres in Residential categories which is almost 82% of the total newly impacted area and approximately 30 acres in Commercial categories or almost 18% of the total area. The remaining land constituted only 0.05 acres of Industrial and 0.01 acres of Institutional. This expansion is considered significant because the future uses of this area are residential and commercial. If, instead, these areas were planned for industrial or agricultural uses, the expansion of the higher level noise would not be considered significant;

23. A Land Use Compatibility Table is included in the CLUP. The purpose of the table is to define levels of noise exposure compatibility for a broad range of land use categories, which include: Residential, Educational Facilities, Commercial, Industrial, Agriculture and Recreation. The Table indicates that educational facilities in the 65dB CNEL are to be avoided. Residential, commercial and recreational uses require review with caution and the provision that noise insulation needs be assessed. Industrial and agricultural uses are considered compatible;

24. A significant change is considered to have occurred when a use becomes affected by noise to a level where the CLUP Land Use Compatibility Table recommends to "*Avoid Land Use Unless Related to Airport Services*" and where the local agency's land use category previously was outside the 1991 noise affected area or when it fell within the "*Satisfactory* or *Caution, Review Noise Insulation Needs*" CLUP category;

25. The CLUP contains safety policy and criteria within two sections of the CLUP - the Policy and Programs statement and the description of Plan Boundaries section. Four of the seven stated noise policies in the Policy and Programs statement relate to the RPZs. The other three policies are related to activities that could occur anywhere within the planning boundary/influence area that affect the safe operation of aircraft into the airport. Additional airport management practices that relate to safety that are required for compatibility are discussed in the Plan Boundaries section of the CLUP. This section defines the RPZ, its purpose and the type activities and development that is prohibited;

26. The safety policies contained in the LAX Plan were compared to the CLUP safety policies and indicate that:

A. Both the CLUP Policy S-1 and LAX Plan Policy P7 require RPZs to be established. The CLUP requires that RPZ be clear of structures and that no use that congregates people be allowed. The CLUP also states that airport control over this zone is essential. However, LAX Plan Policy P-7 does not include either of these requirements;

B. The CLUP Policy S-2 prohibits the above ground storage of more than 100 gallons of flammable liquids. The LAX Plan, the Specific Plan and the Los Angeles Municipal Code (LAMC) do not contain restrictions of this type;

C. The CLUP Policy S-3 prohibits lighting that would interfere with an aircraft approaching or departing from the airport. The applicable policy in the LAX Plan is Policy P-8 which prohibits uses within a designated RPZ that will create safety hazards. The implementing provision is found in the LAMC Section 12.50, which prohibits lighting that creates a safety hazard on all structures. Structures are defined in the LAMC as "any object constructed by man, including, but not without limitation, buildings towers, smoke stacks and overhead lines";

D. The CLUP Policy S-5 and LAX Plan Policy P9 both prohibit uses that attract a large concentration of birds, emit smoke, or which otherwise affect safe air navigation;

E. The CLUP Policy S-6 and LAX Plan Policy P10 both prohibit uses that generate electrical interference;

F. The CLUP Policies S-4 and S-7 require compliance with the height restriction standards and procedures set forth in FAR Part 77;

G. The LAX Plan Policy P8 addresses safety issues in the RPZ only in a non-specific manner;

27. LAX has established RPZs for all runways as required by CLUP Policy S-1 and as required by the LAX Plan. In addition, the Plan Boundaries section of the CLUP requires that RPZs be kept free of structures and the congregation of people, however the LAX Master Plan Program does not place adequate restrictions to keep this area free of structures or the congregation of people. The LAX Plan is inconsistent with Policy S-1 that requires RPZs to be established because it does not restrict use land uses and structures within RPZs to the degree described in the CLUP;

28. CLUP Policy S-2 prohibits the above ground storage of over 100 gallons of flammable or toxic materials. The prohibition is not specifically addressed in the LAX Plan or other implementing programs. The LAX Plan is inconsistent with Policy S-2 that prohibits the above ground storage of over 100 gallons of flammable or toxic materials. The prohibition is not addressed in the LAX Plan, the Specific Plan or the LAMC;

29. Policy P8 of the LAX Plan prohibits uses within a designated runway protection zone that will create safety hazards; however, the uses intended for regulation are not specified and, therefore, the policy is non-specific in its intent. There is no corresponding implementing mechanism for this policy in the LAMC or Specific Plan. Section 12.50 of the LAMC, which provides Airport Approach Zoning Regulations does not address restrictions on uses. The LAX Plan, Specific Plan and LAMC also do not limit the number of people in the RPZ as required by the Plan Boundaries section of the CLUP;

30. The CLUP indicates that the RPZ is the most critical safety area under the approach path and should be kept free of all obstructions. No structures should be permitted, nor congregations of people allowed within this zone. Control of the RPZ by the airport owner is essential. The FAA recommends that the airport operator have sufficient control over property rights within an RPZ to assure the safety of aircraft approaches and to keep the area clear of congregations of people. The FAA, through Advisory Circular 150/5300-13, recommends land use restrictions within RPZs and indicates that land uses prohibited in the RPZ are residences, places of public assembly (churches, schools, hospitals, office buildings, shopping centers, and other uses with similar concentrations of persons), and that fuel storage facilities should not be located in the RPZ;

31. As the LAX Master Plan Program creates shifts in runway alignments, there will be corresponding shifts in the RPZs which create new safety concerns. The specific information and concerns regarding structures newly exposed within runway protection zones are:

    A. A portion of a three-story 100-unit residential condominium, the Pacific Sands at 770 Imperial Avenue, El Segundo, will be included in the RPZ for Runway 7R (this is the same as Runway 25L, but from the west). The LAX Master Plan Program shifts the RPZ during Phase I to include the northwest corner of the building at the outer most corner of the RPZ. The LAX Plan and provisions of Specific Plan LAX Zone-L do not apply to this residential structure because it is within the City of El Segundo. The airport agency does not own this property and the LAX Master Plan indicates that no residential properties would be acquired under Alternative D. Therefore, the LAX Master Plan Program provides no assurances that the property will be acquired by the airport agency. Therefore, LAWA will not have sufficient control over land at this site within the RPZ to directly control the concentration of people;

    B. The existing three-story Centinela Hospital Airport Medical Clinic at 9601 Sepulveda Boulevard will be included in the RPZ with the reconstruction of Runway 24L. The existing clinic is a use that is available to the general public that could potentially concentrate or cause the congregation of people within this hazard area. The clinic is located on property owned by the airport and therefore subject to the LAX Plan and Los Angeles International Airport Specific Plan. The project shifts the RPZ to include the entire structure in the proposed RPZ. The Specific Plan and LAMC do not contain restrictions that are necessary to limit the congregation of people within the zone. The future airport layout plan indicates that the Medical Clinic will be either removed, relocated, or renovated, but does not specify which action will occur. The LAX Master Plan Program provides no assurances that the structure will be removed or relocated from the RPZ.

    C. A cluster of commercial and industrial buildings at the south edge of the RPZ of Runway 24L will be included in the new RPZ. Runway 24L is being extended eastward and positioned further south. Most of the buildings within this cluster

are owned by the Los Angeles City Community College District and are used as a movie prop training and storage facility. Another building is under private ownership and is used as a valet car park facility. The LAX Master Plan indicates that a land purchase of these locations is proposed during Phase I (fourth quarter 2006 through third quarter 2008) and the structures will be relocated prior to the shift in the location of the RPZ resulting from the relocation of Runway 24L during Phase III;

32. Existing structures that would be within the proposed RPZs are below the height limit set for the approach surface in FAA Part 77. The restrictions on use and the potential for congregations of people within the zone are however absent from LAX Plan policies and implementing programs in the Specific Plan and LAMC;

33. The portions of the RPZs which are beyond the east end of the runways are located within LAX Zone-L (Airport Landside). Permitted uses and restrictions are explained in the Los Angeles International Airport Specific Plan and under "Permitted Uses" it explains that all uses allowed in the C2 and M2 Zones are permitted in LAX Zone-L, including uses that would attract congregations of people,such as restaurants. Prohibited uses within LAX Zone–L include any building containing a dwelling residence;

34. The policies in the LAX Plan and implementation through the Specific Plan only apply to property that is owned by LAWA. Property not owned by LAWA but within the LAX Plan area will continue to remain subject to the present zoning use limitations and standards. This concern is relevant to existing as well a future uses;

35. Pursuant to Section 21676(d) of the PUC, the County ALUC must render a determination of project consistency with the CLUP for any referred project within 60 days of receiving the request as required by Sections 21676(b) and 21676(c) of the PUC;

36. The County ALUC has received and duly considered public testimony both in support of the LAX Master Plan Program and in opposition to the project, including testimony from LAWA and their representatives, officials from the City of Los Angeles, officials and representatives from the County of Los Angeles, officials and representatives from cities within the vicinity of the airport and from the South Bay area, and other interested and concerned groups and individuals.

37. The County ALUC has duly considered and been guided by the information contained in the 2002 California Airport Land Use Planning Handbook for its review of the LAX Master Plan Program.

NOW, THEREFORE, BE IT RESOLVED THAT the County ALUC:

1. Determines that the proposed LAX Master Plan Program is inconsistent with the Los Angeles County CLUP.

2. Instructs staff to notify LAWA of the Commission's determination.

I hereby certify that the foregoing resolution was adopted by the Los Angeles County Airport Land Use Commission on August 25, 2004.

By _____
Rosie O. Ruiz, Secretary
Los Angeles County
Airport Land Use Commission

APPROVED AS TO FORM:

OFFICE OF THE COUNTY COUNSEL

By _____

LAWRENCE L. HAFETZ
Principal Deputy County Counsel
Public Works Division

LOS ANGELES COUNTY AIRPORT LAND USE COMMISSION

STAFF REPORT FOR AVIATION CASE NO. 04-162-(2,4)

LOS ANGELES INTERNATIONAL AIRPORT – LAX MASTER PLAN PROGRAM

August 10, 2004

LOS ANGELES COUNTY AIRPORT LAND USE COMMISSION

STAFF REPORT FOR AVIATION CASE NO. 04-162-(2,4)

LOS ANGELES INTERNATIONAL AIRPORT
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In Los Angeles County, the County Regional Planning Commission has the responsibility for acting as the Airport Land Use Commission (ALUC) and for coordinating the airport planning of public agencies within the county. In 1991, the ALUC prepared and adopted the Los Angeles County Airport Land Use Plan, also known as the Comprehensive Land Use Plan (CLUP) that sets forth policies for promoting compatibility between airports and the land uses that surround them. Certain plans and land use actions, including airport master plans, airport expansion plans, specific plans, zoning ordinance changes, and general plan amendments must be review by the ALUC pursuant to provisions of the State Aeronautics Act (California Public Utilities Code Section 21670, et seq.) for consistency with the CLUP prior to a final action being taken by the local agency.

EXECUTIVE SUMMARY

Los Angeles World Airports (LAWA) has submitted an application to the ALUC to determine consistency with the CLUP pursuant to provisions of the State Aeronautics Act for the ALUC's review of the proposed Los Angeles International Airport (LAX) Master Plan Program, including the proposed extensions and realignments of existing runways, and related documents that are necessary to implement the Master Plan. The ALUC review primarily considers whether the proposed Master Plan Program is consistent with the CLUP and, therefore, focuses on the differences between the Master Plan Program and the adopted CLUP. The ALUC will review the Master Plan Program's components and determine if they would result in greater noise and safety impacts on surrounding land uses than are assumed in the CLUP and if the Master Plan Program is in conflict with any of the CLUP policies.

Staff recommends that the ALUC determine that the proposed LAX Master Plan Program is inconsistent with the CLUP for the following reasons because the noise and safety exposure impacts are significantly different in the LAX Master Plan Program as compared to the CLUP and that there are material increased impacts beyond what was assumed in the CLUP:

- Three schools, two elementary and one high school, with a combined enrollment of 3,835 would be subject to greater noise levels than the CLUP identified.
- The expansion of the 65 db CNEL includes a total of 1,823 residential units with an estimated population of 5,382 exposed to higher noise levels than assumed under the CLUP.
- The 170 acres of newly impacted area of 65 dB CNEL are planned for residential and commercial land uses which the CLUP indicates as "Caution, Review Noise Insulation Needs".
- Important safety policies and criteria in the CLUP are not addressed in the LAX Master Plan Program where new structures will be included in the Runway Protection Zone (RPZ) that allow the concentration of people.
- The Los Angeles International Airport Specific Plan and current provisions in the Los Angeles Municipal Code (LAMC) do not prevent future land use incompatibilities.

I. BACKGROUND

a) Project Location

Los Angeles International Airport is located on 3,651 acres of land within the jurisdictional boundary of the City of Los Angeles. The airport is located 12 miles southwest of downtown Los Angeles and is bordered by the communities of Playa del Rey and Westchester (portions of the City of Los Angeles), the City of El Segundo, the City of Inglewood, the unincorporated community of Lennox, and the Pacific Ocean. The airport and its planning environment are depicted in **Figure P4.2-1 from the LAX Master Plan Final EIS/EIR (see Attachment A of this report)**.

b) Description of the Surrounding Area

The existing land uses to the north of the airport are predominantly low-density residential with concentrated areas of commercial and industrial uses. Existing land uses to the south of the airport also include predominately low-density residential, but there is a large area south between Sepulveda Boulevard and Aviation Boulevard that consists of light industrial and commercial uses. To the east is a mix of commercial, industrial, low- to high-density residential and institutional uses.

c) The Approval Process for the LAX Master Plan Program

There are a number of agencies that are involved in the review of the long-range plans for the airport, some with an approval role and others in an advisory capacity. The LAX Master Plan and related implementing documents were considered and approved by the City Planning Commission (CPC) and Board of Airport Commissioners (BOAC) after two public hearings (May 24 and June 11, 2004). The City of Los Angeles referred the LAX Master Plan Program to the ALUC for a consistency determination. Following the ALUC determination, the LAX Master Plan will be considered by the Los Angeles City Council. The Los Angeles City Council is expected to take final action on the proposed LAX Master Plan Program in early Fall 2004. Federal and State review and potential approval would follow if the project is approved by the City Council.

II. ROLE/SCOPE OF ALUC REVIEW

The Los Angeles County Airport Land Use Plan (CLUP) was adopted by the ALUC in December 1991. The CLUP complements the planning responsibilities of cities, counties and other affected agencies. The CLUP also sets uniform policies and standards to prevent development of incompatible uses but it is the responsibility of the cities and the County, through planning and zoning powers, to specify which compatible uses are appropriate within their jurisdiction. The CLUP provides for the orderly development of Los Angeles County's public use airports and the area surrounding them. It is also intended to provide for the adoption of land use measures that will minimize the public's exposure to excessive noise and safety hazards. In formulating the CLUP, the ALUC has established provisions for safety, noise insulation, and the regulation of building height within areas adjacent to each of the public airports in the County.

As required by provisions of the State Aeronautics Act, Sections 21674(c), 21674(d), and Sections 21661.5, 21664.5(a) and 21664.5(b) of the California Public Utilities Code, the Los Angeles County ALUC has the responsibility to review the proposed LAX Master Plan Program for consistency with the CLUP. The ALUC consistency review is neither an approval nor denial of the project; it is a determination of the Master Plan Program's consistency with the adopted CLUP. Approval or denial of the Master Plan Program is the responsibility of the Los Angeles City Council.

The 2002 State of California, Department of Transportation, Division of Aeronautics, Airport Land Use Planning Handbook supports and amplifies provisions of the State Aeronautics Act and provides guidance to ALUCs regarding the focus of the ALUC's review of plans for airport development—especially airport master plans and airport expansion plans, including runway extensions and relocations—before the plans are adopted by the airport proprietor. The primary focus of the ALUC's review is on proposed airport features which can have off-airport land use compatibility implications. Unlike project referrals, where the ALUC must consider a project's compatibility with the airport, the review of the proposed LAX Master Plan Program is focused on the affects the Plan would have on the inhabitants within the vicinity of the airport and the public in general. Any proposed non-aviation development on airport property should be reviewed against the same criteria that would apply if the site were off airport (Handbook, Summary-11)

The Handbook provides compatibility planning guidance to ALUCs, their staffs and consultants, the counties and cities having jurisdiction over airport area land uses, and airport proprietors. Despite the statutory references to it, the Handbook does not constitute formal state policy or regulation. The Handbook is not regulatory in nature and does not take precedence over locally adopted compatibility plans, such as the County CLUP (Handbook, Summary-3).

Within that context, the Handbook advises that when the ALUC reviews an airport master plan (and a CLUP has already been prepared and adopted) the fundamental question to be examined is whether any components of the airport plan would result in greater noise and safety impacts on surrounding land uses than are assumed in the adopted compatibility plan. The Handbook goes on to explain "this concept implies that the airport plan does not have to be identical with the compatibility plan as long as the impacts are not increased or moved to previously less-impacted areas" (Handbook, Page 4-19).

According to the Handbook, when reviewing the plans for a new airport or airport expansion, it is important that ALUCs evaluate the adequacy of the facility design (in terms of federal and state standards) only to the extent that the design affects surrounding land use. Also, commissions must base their review on the proposed design. ALUCs do not have the authority to require alterations to the airport plan or to make different assumptions regarding the future airport role and airfield configuration than are indicated in the airport's plan (Handbook, Page 4-20).

The ALUC's review of the LAX Master Plan Program for consistency with the adopted CLUP is primarily concerned with safeguarding the general welfare of the inhabitants within the vicinity of the airport and the public in general. In this type of review, the ALUC is concerned with any increased impacts on noise sensitive uses, residences, and land uses that concentrate people and structures in areas newly or increasingly exposed to noise and safety impacts. This review also includes evaluating whether the policies, programs, plans, or actions associated with the project are consistent with the CLUP.

III. LAX MASTER PLAN PROGRAM
The following plans, programs and actions have been submitted to the ALUC as the LAX Master Plan Program for a determination of consistency with the CLUP:

a) LAX Master Plan
b) LAX Plan
c) Westchester Playa del Rey Community Plan
d) Los Angeles International Airport Specific Plan
e) Tract Maps
f) Los Angeles Municipal Code
g) City of Los Angeles General Plan

a) LAX Master Plan
The LAX Master Plan, also known as Alternative D 2015, is a long-range operation and airport facilities plan that accounts for airport development to 2015. In 1996, the owner and operator of the airport, Los Angeles World Airports (LAWA), began efforts to develop a long-range master plan for the airport. Over the past several years LAWA has been refining the LAX Master Plan and devising a means to implement the plan. The Plan proposes to modernize the airport by relocating two of the four runways for greater separation and to provide a center taxiway, to also extend three of the four runways, to provide a new parking and preliminary security screening center away from the present terminal area, to provide a new mid-field terminal and to replace some of the existing terminals. The implementation process that has been developed requires the amendment of several City of Los Angeles plans, which are listed and described below. The location of the Plan's primary components is identified in **Figure ES-1 from the LAX Master Plan (see Attachment B)**.

b) LAX Plan
This LAX Plan is proposed as an element of the City of Los Angeles General Plan. The Plan would replace the Westchester Playa del Rey Community Plan for the LAX area. An amendment to the Westchester Playa del Rey Community Plan would therefore be necessary to reflect the change in the plan boundary. The LAX Plan contains four main land use categories: Airport Airside, Airport Landside, LAX Northside and Open Space.

There are also two supplemental categories: Special Study Area: Belford – Medium Residential, and Special Study Area: Belford – Regional Center Commercial.

Airport Airside – This area includes the airfield. Uses include the runways, taxiways, aircraft gates, maintenance areas, airfield operations areas, air cargo areas, passenger handling facilities, fire protection facilities and other ancillary airport facilities.

Airport Landside – The Airport Landside area functions as the interface between the airport and the regional ground transportation network. The area includes the passenger terminals in the Central Terminal Area (CTA)[1], the proposed Inter-modal Transportation Center[2], Ground Transportation Center (GTC)[3], the Consolidated Rental Car facility (RAC)[4]. An Automated People Mover (APM) would transport people from the Landside areas into the passenger terminals in the CTA.

Open Space – The open space designation would be used for the Los Angeles Airport/El Segundo Dunes Specific Plan area. Development in this area would be limited to existing and relocated navigational aids, a public golf course, a park and other ancillary facilities as defined in the Los Angeles Airport/El Segundo Dunes Specific Plan.

LAX Northside – The LAX Northside includes a variety of uses proposed to create a transition from the Westchester community to the airport. This area may be used as a relocation area for businesses displaced by the implementation of the LAX Master Plan. The primary uses allowed in this area would be commercial, office, light industrial, research and development, hotel and conference facilities, retail and restaurant use, school and community facilities, and open space.

Special Study Area: Belford – Medium Residential and Regional Center Commercial - Prior to any new development in this area, LAWA would conduct an additional study.

The locations of the Plan's land use designations are depicted in **Figure 1 from the LAX Master Plan (see Attachment C)**.

[1] Central Terminal Area (CTA) located in the center of the airport. This area is proposed to have restricted access for non-secure private, public and commercial vehicles. Secure linkages to and from access portals and Flyaway Terminals will be allowed. Airport administration and control tower facilities are also located in this area.
[2] Inter-modal Transportation Center (ITC) is proposed to provide premium public parking and accommodate charter, regional and other buses as well as private shuttles and will provide access to and from the MTA Green Line station.
[3] Ground Transportation Center (GTC) is proposed to include a passenger-processing facility with adjacent parking and/or a commercial passenger vehicle staging and holding area.
[4] Consolidated Car Rental Facility (RAC) is proposed to provide for all rental car operations, facilities pick-up, drop off, storage and maintenance

c) Westchester Playa del Rey Community Plan
The Century Blvd/98th Street Corridor specific area of the Plan would be amended to eliminate language that promotes development of the area along 98th Street. This area would become partially within the Runway Protection Zone (RPZ) and accommodate the people mover and car rental facility.

The Los Angeles Airport/El Segundo Dunes Specific Plan would be located within the LAX Plan so references have been deleted.

d) Los Angeles International Airport Specific Plan
The Specific Plan, which is often referred to as the "Consensus Plan", would provide the regulatory controls for the systematic and incremental execution of the LAX Plan, including the appropriate zoning regulations for the development of the LAX Plan. The Specific Plan would establish standards such as densities, uses, parking, signage, and open space and landscape requirements. It also provides a phasing program for future review of different aspects/components of the Plan.

e) Tract Maps
The purpose of the tract maps is to vacate streets within areas that will become airport property.

f) Los Angeles Municipal Code
Section 12.04 of the Los Angeles Municipal Code (LAMC) would be amended to establish the LAX Zone. A new section, Section 12.19.1 would be created to describe the purpose, use and area of the LAX Zone. The LAX Zone is administered through regulations set forth in the Los Angeles International Airport Specific Plan.

g) City of Los Angeles General Plan
Proposed changes to the City's General Plan are limited to replacing references to the Playa del Rey/Westchester Plan with the LAX Plan where appropriate.

IV. LAX MASTER PLAN PROGRAM COMPONENTS RELATED TO CLUP CONSISTENCY
The adopted CLUP defines the airport influence areas as the airport ownership boundary, the Runway Protection Zones (RPZ) and the 65 decibel Community Noise Equivalent Level (dB CNEL) noise exposure area. Each of these areas has different compatibility issues relative to the LAX Master Plan Program. Although the LAX Master Plan Program is very complex, the parts that relate to surrounding land use compatibility can be associated with a few key proposed improvements and operational changes. Changes to the airport proposed by the LAX Master Plan Program that have surrounding land use compatibility issues include:

Changes to Runway Alignment -The airport would move two runways and as a consequence change the noise exposure area within several communities[5]. Affected communities include the City of Inglewood, unincorporated Lennox and Athens and the City of Los Angeles. **Figure 2.1-1 from the Master Plan (see Attachment D)**, identifies the proposed location of the airport's four runways. The proposed Master Plan Program would maintain four runways configured in two pairs, the north complex and the south complex. Each pair includes an outer runway used for, landings located on the airport property (closet to the community) and an inner runway (located closest to the passenger terminals). The north runways are named Runways 6L/24R (outer) and 6R/24L (inner). The south runways are 7R/25L (outer) and 7L/25R (inner).

- Runway 24L would be reconstructed 340 feet to the south and extended approximately 135 feet to the west and 1,260 feet to the east of its present location. This is the inner north complex runway that is primarily used for take offs.
- Runway 25L would be reconstructed 50 feet to the south of its present location. This is the outer south complex runway, which is primarily used for landings.

New Locations for Runway Protection Zones (RPZ) - The new runway configuration creates new RPZ boundaries and exposes new areas to the safety issues associated with this zone. The RPZ is a trapezoidal area at the ground level, beyond the runway for the purpose of protecting the safety of approaches and keeping the area clear of congregations of people. The RPZ begins at the end of each primary surface and is centered upon the extended runway centerline (CLUP, Glossary, page 17).

Airport Property Boundary Changes - The addition of new airport property will change the airport ownership boundary. LAX intends to develop a remote parking and ground transportation center, a consolidated rental car facility and other facilities that would not be within the present airport ownership boundary.

Existing and Proposed Airport Policy and Implementing Measures related to Noise and Safety – Boundary changes for RPZs and new noise affected areas require that an examination of the land use policy and implementation measures for the affected areas be conducted to determine consistency with the CLUP.

Inconsistencies occur with the CLUP when the LAX Master Plan Program results in negative noise and safety impacts on a significantly different population than was assumed by the CLUP. It is appropriate to review uses that are newly exposed to noise and safety impacts because the implementation of the Master Plan would result in incompatibilities to the uses that did not exist previously. A detailed evaluation of noise and safety is set forth below.

[5] In addition, Runway 24R would be extended approximately 1,495 feet to the west. This runway is the outer north complex runway that is primarily used for landings.

V. CONSISTENCY EVALUATION - NOISE

a) Noise Policy

CLUP noise policy establishes a measuring and reporting system (Policy N-1), and sets sound insulation standards when applicable (Policy N-2). It also establishes the Land Use Compatibility Table (Policy N-3) and encourages a statement of noise disclosure for properties where noise is greater than 60db CNEL (Policy N-4).

The concern in this review is the area that was previously (1991) not exposed to noise levels of 65dB CNEL and above but would be in 2015 with implementation of the LAX Master Plan. This analysis compares the effects of aircraft noise on the community between the established influence area in the CLUP from 1991 and the projected affected area in 2015 defined by the Master Plan Program. The Planning Boundary map for the 1991 CLUP identifies the 65dB CNEL noise contour, but did not identify the 70dB or 75dB CNEL contour. In addition to the 65dB CNEL, the CLUP also identifies compatible uses for the 70dB and 75dB CNELs. In order to evaluate changes relating to those levels, 1992 70dB and 75dB CNEL contours from LAWA were used for comparison because they were the closest in date to the 1991 CLUP.

b) Noise Exposure Changes

Three jurisdictions, the City of Inglewood, the City of Los Angeles and the County of Los Angeles (Lennox and West Athens-Westmont communities) are presently and will continue to be affected by changes in noise exposure levels through implementation of the LAX Master Plan.

A comparison between the areas exposed to the 65dB CNEL in 1991 (adopted CLUP) and 2015 (LAX Master Plan Program) shows the following noise contour changes resulting in increased impacts:

The 65 dB CNEL Noise Contour would be reduced in total area and would affect fewer properties, but there would be newly impacted areas, totaling approximately 170 acres that would be exposed to higher noise levels that were not previously exposed to the 65dB CNEL.

Existing Newly Exposed Noise Sensitive Land Uses - There are three schools – Beulah Payne Elementary School, Clyde Woodworth Elementary School and Morningside High School – that will be located in the newly exposed area. These schools have an enrollment of 3,835 students[6]. In addition to the schools, there are seven other noise sensitive uses[7] – five churches, one hospital and one park – within this area. The inclusion of educational facilities in areas experiencing noise levels of 65 dB CNEL are

[6] Source of data Los Angeles County Office of Education, Public Schools Directory 2003-04 – Electronic version of the directory is available at:
http://www.lacoe.edu/lacoeweb/DocsForms/20031208014737_PSDirectory-2003-04.pdf

[7] Noise sensitive uses include schools, churches, hospitals, convalescent hospitals, parks and libraries.

clearly contrary to the CLUP's Land Use Compatibility Table which indicates such areas as "Avoid Land Use Unless Related to Airport Service".

Existing Newly Exposed Land Uses - The land use inventory of existing uses indicates that there would be a total of 1,823 residential units with an estimated population of 5,382 in the areas newly exposed to the 65 dB CNEL as follows: 565 single family units with an estimated population of 1,825 in the newly exposed area, and 1,258 multi-family units with an estimated population of 3,557. These impacts are identified in **Figure** and **Table 1b-1 (see Attachment E)**. This is a significant number of additional people and homes that would be affected by the change in the noise contour.

Planned Land Uses - This area includes the following planned land uses (from LA City, LA County and Inglewood General Plans): 140 acres in Residential categories which is almost 82% of the total newly impacted area and approximately 30 acres in Commercial categories or almost 18% of the total area. The remaining land constituted only 0.05 acres of Industrial and 0.01 acres of Institutional. These impacts are identified in **Figure and Table 1a-1 (see Attachment F).** This expansion is considered significant because of the future uses of this area are residential and commercial. If, instead, these areas were planned for industrial or agricultural uses, the expansion of the higher level noise would not be considered significant.

A Land Use Compatibility Table is included in the CLUP (Page 13). The purpose of the table is to define levels of noise exposure compatibility for a broad range of land use categories, which include: Residential, Educational Facilities, Commercial, Industrial, Agriculture and Recreation. The Table indicates that educational facilities in the 65dB CNEL are to be avoided. Residential, commercial and recreational uses require review with caution and the provision that noise insulation needs be assessed. Industrial and agricultural uses are considered compatible.

Using the CLUP Land Use Compatibility Table, a significant change is considered when a use becomes affected by noise to a level where the Table recommends to *"Avoid Land Use Unless Related to Airport Services"*, and where the local agency's land use category previously was outside the 1991 noise affected area or when it fell within the *"Satisfactory* or *Caution, Review Noise Insulation Needs"* CLUP category.

Noise Exposure Above 70dB CNEL - The following information regarding 70 and 75dB CNEL is provided for formational purposes only. Contours for these noise exposure areas are not available for 1991; the closest available data is for 1992. The data provided can only be used as an approximation of the conditions in 1991 and are not part of the adopted CLUP. This information is provided to demonstrate the general magnitude of noise changes that the change in runway configurations may have and whether noise level changes warrant concern. Comparison between the 1992 data and 2015 shows that it is unlikely that there is a significant increase in area exposed to noise levels in excess of 70dB CNEL between what was assumed in the CLUP with the proposed 2015 scenario.

The 70dB CNEL Noise Contour for the north runway complex (Runways 24R and 24L) will reduce in area and affect fewer properties. However, there will be approximately 29 acres designated Light Industrial that was not previously exposed to noise levels of 70dB CNEL will be as a result of implementation of the LAX Master Plan. An existing land use inventory indicates that this area contains 10 acres of Industrial and 11 acres of Commercial. The remaining 8 acres is Other (Assumed Vacant) **(see Figure & Table 1b-2 at Attachment G)** No noise sensitive uses are within the newly exposed area. There will be fewer properties affected and no new areas exposed to 70dB CNEL for the south runway complex.

The 75dB CNEL Noise Contour for the north runway complex (Runways 6L/24R and 6R/24L) will reduce in area and affect fewer properties. However, approximately 8 acres designated General Corridor/Highway that was not previously exposed to noise levels of 75dB CNEL in 1992 will be so exposed under the proposed 2015 scenario. The existing land use inventory indicates the use is commercial **(see Figure & Table 1b-3 at Attachment H)**, which includes a motel. No noise sensitive uses are within the newly exposed area. There will be fewer properties affected and no new area exposed to 75dB CNEL for the south runway complex.

c) Summary of Inconsistent Noise Exposure Impacts

The noise impacts associated with the proposed LAX Master Plan Program are inconsistent with the CLUP for the following reasons:

Existing Newly Exposed Noise Sensitive Land Uses

- Three schools, two elementary and one high school, with a combined enrollment of 3,835 would be subject to greater noise levels than the CLUP identified.

Existing Newly Exposed Land Uses

- The expansion of the 65 db CNEL includes a total of 1,823 residential units with an estimated population of 5,382 exposed to higher noise levels than assumed under the CLUP.

Planned Land Uses

- The expansion of the 65 dB CNEL also includes 170 acres of newly impacted areas which are planned for residential and commercial land uses. The CLUP indicates such uses as "Caution, Review Noise Insulation Needs".

VI. CONSISTENCY EVALUATION - SAFETY

a) Safety Policy

Safety policy is contained in the two sections of the CLUP - the Policy and Programs statement and the description of Plan Boundaries section. Four of the seven stated noise policies in the Policy and Programs statement relate to the RPZs. The other three policies are related to activities that could occur anywhere within the planning boundary/influence area that affect the safe operation of aircraft into the airport. Additional airport management practices that relate to safety that are required for compatibility are discussed in the Plan Boundaries section on page 9 of the CLUP. This section defines the RPZ, its purpose and the type activities and development that is prohibited.

The following discussion compares the safety policies contained in the LAX Plan on pages 4-6 (refer to Subsection III. b. for an explanation of the purpose of the LAX Plan) with the CLUP safety policies (see CLUP page 12):

- The CLUP Policy S-1 and LAX Plan Policy P7 require RPZs to be established. The CLUP requires that RPZ be clear of structures and that no use that congregates people be allowed. It also states that airport control over this zone is essential. However, LAX Plan Policy P-7 does not include these requirements.
- CLUP Policy S-2 prohibits the above ground storage of more than 100 gallons of flammable liquids. The LAX Plan, the Specific Plan and the LAMC do not have restrictions of this type.
- CLUP Policy S-3 prohibits lighting that would interfere with an aircraft approaching or departing from the airport. No comparable policy exists in the LAX Plan.
- CLUP Policy S-5 and LAX Plan Policy P9 both prohibit uses that attract a large concentration of birds, emit smoke, or which otherwise affect safe air navigation.
- CLUP Policy S-6 and LAX Plan Policy P10 both prohibit uses that generate electrical interference.
- CLUP Policies S-4 and S-7 require compliance with the height restriction standards and procedures set forth in FAR Part 77. Although the LAX Plan does not specifically require compliance, compliance is monitored by the Federal Aviation Administration (FAA).
- As discussed below, LAX Policy P-8 addressed safety issues in the RPZ only in a non-specific manner.

b) RPZ: Regulations and Structures

Land Use Regulations in the RPZ

Compatibility inconsistencies regarding use between the LAX Master Plan Program and the CLUP would exist in RPZs in the following areas:

- Policy S-1 - LAX has established RPZs for all runways as required by the LAX Plan, but the Plan Boundary section of the CLUP requires that RPZs be kept free of structures and the congregation of people. The Master Plan Program does not place adequate restrictions to keep this area free of structures or the congregation of people.

- Policy S-2 prohibits the above ground storage of over 100 gallons of flammable or toxic materials. The prohibition is not specifically addressed in the LAX Plan or its implementing programs.

- Policy S-3 prohibits light that would interfere with an aircraft approaching or departing from the airport. Limitations exist in the LAMC that restrict hazardous, flashing lighting on business signs and billboards, but other forms of lighting that would be a hazard to aircraft are not specifically prohibited in the LAMC.

Although not specific in its intent, Policy P8 of the LAX Plan prohibits uses within a designated runway protection zone that will create safety hazards. There is however no corresponding implementing mechanism in the LAMC or Specific Plan. Section 12.50 of the LAMC, which provides Airport Approach Zoning Regulations does not address restrictions on uses. The LAX Plan, Specific Plan and LAMC also do not limit the number of people in the RPZ as required by the Plan Boundaries section of the CLUP (page 9).

Structures Newly Exposed in the RPZ

The following discussion identifies the compatibility inconsistencies that result from the new RPZ boundaries as proposed by the LAX Master Plan that will include additional structures. The CLUP explains (page 9) that the RPZ is the most critical safety area under the approach path and should be kept free of all obstructions. No structures should be permitted, nor congregations of people allowed within this zone. Control of the RPZ by the airport owner is essential. The FAA recommends that the airport operator have sufficient control over property rights within an RPZ to assure the safety of aircraft approaches and to keep the area clear of congregations of people. All existing structures are below the height limit set for the approach surface in FAA Part 77. The restrictions on use and the potential for congregations of people within the zone are however absent from LAX Plan policies and implementing programs in the Specific Plan and LAMC. The specific concerns regarding structures are:

- A portion of a three-story multi-family structure, Pacific Sands Apartments at 770 Imperial Avenue, El Segundo will be included in the RPZ for Runway 7R (this is the

same as Runway 25L, but from the west). The project shifts the RPZ to include the northwest corner of the building at the outer most corner of the RPZ. The LAX Plan and provisions of Specific Plan LAX Zone-L do not apply to this building because it is within the City of El Segundo (see RPZ diagram - Runway 7L-7R RPZ in Attachment I).

- An existing three-story Cantinela Hospital Airport Medical Clinic at 9601 Sepulveda Boulevard will be included in the RPZ with the reconstruction of Runway 24L. The existing clinic is a use that could potentially concentrate or cause the congregation of people within this hazard area. The clinic is located on property owned by the airport and therefore subject to the LAX Plan and Los Angeles International Airport Specific Plan. The project shifts the RPZ to include the entire structure in the proposed RPZ. The Specific Plan and LAMC do not contain restrictions that are necessary to limit the congregation of people within the zone (see RPZ diagram - Runway 24L-24R RPZ in Attachment I).

- A cluster of buildings at the south edge of the RPZ of Runway 24L will be included in the new RPZ. Runway 24L is being extended eastward and positioned further south. Most of the buildings within this cluster are owned by Los Angeles City Community College District and is used as a movie prop training and storage facility. Another building is under private ownership and is used as a valet car park facility. The table submitted by LAWA attached to the exhibit indicates they are industrial and commercial buildings (see RPZ diagram - Runway 24L-24R RPZ in Attachment I).

The portions of the RPZs which are beyond the east end of the runways are located within LAX Zone-L (Airport Landside). Permitted uses and restrictions are explained in the Los Angeles International Airport Specific Plan. On page 15 of this document, under "Permitted Uses" it explains that all uses allowed in the C2 and M2 Zones are permitted in this zone, this includes uses that would attract congregations of people,such as restaurants. Prohibited uses in the LAX Zone–L include any building containing a dwelling residence.

It is also important to note that policies in the LAX Plan and implementation through the Specific Plan only apply to property that is owned by the LAWA, property not owned by LAWA, but within the LAX Plan area will continue to remain subject to the present zoning standards. This concern is relevant to existing as well a future uses.

c) Summary of Inconsistent Safety Provisions

Safety policy contained in the LAX Plan and implementing land use measures in Specific Plan and the LAMC are inconsistent with the CLUP for the following reasons:

- The LAX Plan is inconsistent with Policy S-1 that requires RPZs to be established because it does not restrict use to the level described in the CLUP.

- The LAX Plan is inconsistent with Policy S-2 that prohibits the above ground storage of over 100 gallons of flammable or toxic materials. The prohibition is not addressed in the LAX Plan, the Specific Plan or the LAMC.

- The LAX Plan is inconsistent with Policy S-3 which prohibits light that would interfere with an aircraft approaching or departing from the airport.

- The Specific Plan and LAMC do not contain restrictions that are necessary to limit the congregation of people within the RPZ.

- There are also areas where the airport agency will not have sufficient control over land in the RPZ to directly affect the concentration of people.

- The proposed adjustments to the RPZ boundaries would include structures (i.e. multi-family residential building and a medical clinic) that are not consistent with the CLUP's description of appropriate uses in an RPZ.

VII. ENVIRONMENTAL DOCUMENTATION

During the late 1990s a Draft Environmental Impact Statement (EIS)/ Environmental Impact Report (EIR) was prepared that proposed four scenarios named Alternatives A, B and C and the No Action/No Project Alternative. The planning effort was in the advanced stages by 2000 when the aviation industry experienced turmoil as a result of the increased threat of terrorism. After September 2001, when the threat of terrorism became a major concern for the airport, LAWA and the City made the decision to explore other airport configuration options. The result of this effort was a new alternative named Alternative D. The public process was opened up again and a supplemental EIS/EIR was prepared that added Alternative D to the four previous options.

A Final EIS/EIR has been prepared by LAWA and the FAA that includes Alternative D. The complete environmental document is provided on a series of compact discs. In addition, the EIS/EIR is available at our office and can also be accessed from the following web page: http://www.laxmasterplan.org/publications/final_eir_v1_5.html

When a California Environmental Quality Act (CEQA) document such as an EIR has been prepared in conjunction with the action submitted for ALUC review, a copy should be provided to the Commission along with other information on the project. The ALUC may then excerpt portions which might be relevant to a compatibility determination by the Commission. (Handbook Page 4-10).

VIII. PUBLIC COMMENT

At the time this report was prepared, one comment letter dated July 28, 2004 has been received from Carlyle W. Hall, Jr. of Akin Gump Strauss Hauer & Feld LLP on behalf of LAWA indicating that the LAX Master Plan Program is consistent with the CLUP. A copy of this correspondence is included in Attachment J.

IX. RECOMMENDATIONS

Staff recommends that the ALUC determine that the proposed LAX Master Plan Program is inconsistent with the CLUP for the following reasons and because the noise and safety exposure impacts are significantly different and there are material increased impacts beyond what was assumed in the CLUP:

- Three schools, two elementary and one high school, with a combined enrollment of 3,835 would be subject to greater noise levels than the CLUP identified.

- The expansion of the 65 db CNEL includes a total of 1,823 residential units with an estimated population of 5,382 exposed to higher noise levels than assumed under the CLUP.

- The 170 acres of newly impacted area of 65 dB CNEL are planned for residential and commercial land uses which the CLUP indicates as "Caution, Review Noise Insulation Needs".

- Important safety policies and criteria in the CLUP are not addressed in the LAX Master Plan Program.

- New structures will be included in the reconfigured Runway Protection Zones (RPZs) that allow the concentration of people within the RPZs.

- The Los Angeles International Airport Specific Plan and current provisions of the Los Angeles Municipal Code (LAMC) do not prevent future land use incompatibilities.

Recommended Motion

Staff suggests the following recommended motion:

"I move that the Airport Land Use Commission close the public hearing and indicate its intent to determine that the proposed LAX Master Plan Program is INCONSISTENT with the County's Airport Land Use Plan (CLUP) and instruct staff to prepare the resolution and findings for our consideration and possible action prior to the end of the 60-day review period."

Attachments:

Attachments A through J

CD set of Final Environmental Impact Report, April 2004 (commissioners only)

Prepared by: Mark Child, Principal Regional Planning Assistant

Approved by: Julie Moore, Supervising Regional Planner, Community Studies I

RDH:JTM:MC

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SHUTE, MIHALY & WEINBERGER LLP
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December 29, 2004

Leslie G. Bellamy, Chair
Airport Land Use Commission, Department of Regional Planning
320 West Temple Street, Room 1354
Los Angeles, CA 90012

Re: Appeal to the Los Angeles County Airport Land Use Commission of the December 7, 2004 action by the Los Angeles City Council adopting the LAX Master Plan Improvements Project

Dear Mr. Bellamy:

On behalf of the City of El Segundo ("El Segundo"), we submit this Appeal to the Los Angeles County Airport Land Use Commission ("ALUC"). El Segundo is appealing the December 7, 2004 decision by the Los Angeles City Council to adopt the Los Angeles International Airport ("LAX") Master Plan, LAX Plan, LAX Specific Plan, Airport Layout Plan, and Draft Relocation Plan, as well as associated General Plan Amendments, Code Amendments, Zone Changes, and Tentative Tract Maps (collectively, "the Project").

We file this appeal under the authority of the California State Aeronautics Act ("Act"), Public Utilities Code section 21670 *et seq*, and the Los Angeles County Airport Land Use Commission Review Procedures, Chapter 2 ("Review Procedures"). The Act provides, at Public Utilities Code section 21670.2, subdivision (a):

> In [Los Angeles County], the county regional planning commission has the responsibility for coordinating the airport planning of public agencies within the county. In instances where impasses result relative to this planning, an appeal may be made to the county regional planning commission by any public agency involved. The action taken by the county regional planning commission on an appeal may be overruled by a four-fifths vote of the governing body of a public agency whose planning led to the appeal.

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I. El Segundo has Reached an Impasse with the City of Los Angeles over Airport Capacity and the Rejection of a Regional Approach.

The recently revised ALUC Review Procedures clarify the process for filing an appeal with the ALUC. The Review Procedures explain that an "impasse" consists of "[a]ny significant unresolved issue between the appellant public agency and the public agency proposing the project regarding proper airport planning as it relates to the project at issue." Review Procedures, Section 1.2. El Segundo has reached an impasse with Los Angeles World Airports and the City of Los Angeles (collectively "City of Los Angeles") over the Project.

A. Impasse Regarding Capacity Issues.

The City of Los Angeles claims implementation of the Project will result in an airport capacity of 78.9 million annual passengers ("MAP"). All analysis in the environmental review documents prepared pursuant to the California Environmental Quality Act ("CEQA") assumed this number as the capacity ceiling. Yet, as El Segundo has repeatedly pointed out in extensive comments, the Project fails to provide any commitments that would actually limit LAX capacity or operations to 78.9 MAP. *See* November 4, 2003 Comment Letter on the Supplement to the Draft Environmental Impact Statement/Environmental Impact Report ("Draft EIS/EIR") at pp. 5-7, attached hereto as Exhibit A; December 1, 2004 Comment Letter on the Final Environmental Impact Report and Addendum to the Final EIR at pp. 1-4, attached hereto as Exhibit B. These comments are supported by analysis from Professor Adib Kanafani, an expert in airport design and capacity. As Dr. Kanafani's reports (submitted with El Segundo's comments as Exhibit 7 to the November 4, 2003 Comment Letter, and Exhibit A to the December 1, 2004 Comment Letter) make clear, the Project does not provide any guarantees that capacity will be limited to 78.9 MAP. In fact, conservative estimates by Dr. Kanafani demonstrate that, if the project is implemented, LAX's capacity is likely to exceed 87 MAP.

The City of Los Angeles nonetheless continues to claim that under its Master Plan as adopted, operations will not exceed 78.9 MAP. Los Angeles has based its entire environmental review for the project on that faulty assumption, which has resulted in a systematic understatement of environmental impacts. El Segundo residents already suffer from the effects of LAX's development and operation, and higher capacity will result in greater harm to the city and its residents. Because the City of Los Angeles has not recognized the true capacity of the Project, analyzed the impacts of that capacity, and/or imposed necessary limitations, El Segundo has reached an impasse with the City of Los Angeles.

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B. Impasse Regarding the Regional Approach Alternative.

El Segundo, like other communities, has called for a truly regional approach to serving aviation demand in the Los Angeles region. A regional approach would alleviate the need for capacity increase at LAX by spreading the area's aviation demand among other regional airports. El Segundo has reached an impasse with the City of Los Angeles because the City of Los Angeles has rejected such an approach.

El Segundo has repeatedly pointed out that approval of the Project by the City of Los Angeles constitutes a rejection of a truly regional approach to accommodating aviation. *See, e.g.* September 18, 2001 Comment Letter on the Draft EIS/EIR at 2-3, attached hereto as Exhibit C. Such comments have been echoed by Los Angeles County Supervisors. *See, e.g.* Minutes from the Board of Supervisors of the County of Los Angeles Sept. 14, 2004 Meeting at 1, 3 (requesting that the ALUC find the Project inconsistent with the County Land Use Plan ["CLUP"] and emphasizing, in contrast to the Project, the County's continued support for a regional plan), attached hereto as Exhibit D.

The City of Los Angeles continues to make unsupported claims that the Project represents a regional approach to serving aviation demand. In fact, when it introduced Alternative D in the Supplement to the Draft EIS/EIR the City of Los Angeles argued that one of its reasons for developing the Alternative, which evolved into the approved Project, was to respond to public calls for a regional approach. El Segundo's analysis of Alternative D demonstrates, however, that it would greatly increase the capacity of LAX, not encourage a regional sharing of aviation demand.

II. The Project is Inconsistent with the Purposes of the Act.

According to the Review Procedures, after receiving a properly submitted appeal and holding a public hearing on it, the ALUC will uphold the appeal if it determines that the actions of the public agency whose planning is the subject of the appeal are inconsistent with the purposes of the Act. Review Procedures, Section 5.5.

The Act's two stated purposes are: 1) to provide for orderly expansion of the state's public use airports, and 2) to facilitate the "adoption of land use measures that minimize the public's exposure to excessive noise and safety hazards within areas around public airports." Pub. Util. Code section 21670(a)(2). The Project does not constitute orderly expansion, nor does it minimize public exposure to excessive noise and safety hazards. Thus, it is incompatible with the Act, and the ALUC should uphold this appeal.

A. The Project Conflicts with the Act's Purpose of Providing for Orderly Airport Expansion.

As explained above, the Project as currently defined would result in a significant increase in airport capacity, well beyond the 78.9 MAP claimed by Los Angeles. The City of Los Angeles has failed to plan for the millions of additional passengers that the new Master Plan can accommodate, beyond 78.9 MAP. Similarly, the capacity claim is based on a phasing out of existing passenger gates when new gates are built, yet the City of Los Angeles has not committed to a schedule for eliminating use of current gates, or even provided a reasonable explanation of how this would be accomplished, without resulting in a greater number of gates than has been planned for in the Master Plan process. This absence of planning and commitments stands in direct conflict with the Act's purpose of orderly expansion.

The City of Los Angeles' failure to comply with the Act's purpose of orderly expansion is also apparent in its decision to make significant last minute changes to the Project without adequate planning, study, or public review. Under a political compromise late in the process – the so-called "Consensus Plan" – the Project actually approved by the City of Los Angeles did not include major project components analyzed in the EIR. The elements not approved included the construction of a Ground Transportation Center, the demolition of Terminals 1, 2 and 3, and the re-configuration of the northern runway complex. These changes rendered the Project that was ultimately approved significantly different from the Master Plan evaluated by the City of Los Angeles in its planning and environmental studies. No environmental review was conducted for the dramatically altered Project actually adopted by the City of Los Angeles. These last-minute alterations seriously undermine the overall integrity of the planning process and do not represent orderly expansion.

B. The Project Conflicts with the Act's Purpose of Minimizing Noise and Safety Hazards.

As the ALUC has previously found, the Project increases, rather than minimizes, noise and safety hazards associated with LAX. *See* Staff Report For Aviation Case No. 04-162-(2,4), at 15 (Aug. 10, 2004) ("ALUC Staff Report"), attached hereto as Exhibit E; Resolution of the Airport Land Use Commission Aviation Case No. 04-162-(2,4), at 4 (Aug. 26, 2004) ("ALUC Resolution"), attached hereto as Exhibit F. El Segundo has pointed out in previous comments, supported by expert analysts, that the EIR's analysis of noise and safety concerns is inadequate and significantly understates the significance of the Project's impacts. *See, e.g.* November 4, 2003 Comment Letter, at pp. 19-22 (Ex. A); September 18, 2001 Comment Letter, at pp. 104-105 (Ex. C). The noise and safety hazards posed by implementation of the Project depart from the purposes of the Act in numerous regards.

1. Noise

The Project does not minimize exposure to noise. To the contrary, even the City of Los Angeles' own environmental documents, which consistently understate impacts, acknowledge increased noise exposure under the Master Plan. As detailed in the ALUC findings of inconsistency with the CLUP, the Project exposes an additional 170 acres of land to a community noise equivalent level of 65 decibels ("dB CNEL"), and subjects three schools and 1,823 residential units to higher noise levels than were previously identified. *See* ALUC Staff Report, at 10 (Ex. E); ALUC Resolution, at 5 (Ex. F).

While these findings were made in the context of the ALUC's determination of inconsistency with the CLUP, they also apply to a determination of consistency with the Act, as they demonstrate the additional noise problems posed by the Project. Far from achieving the Act's purposes of reducing such problems, the Project intensifies the already significant noise impacts caused by operation of LAX.

In addition, the Project would exacerbate LAX's existing conflict with state noise standards. Pursuant to section 21669 of the Public Utilities Code, the California Department of Transportation ("Caltrans") developed and adopted noise standards that define acceptable levels of exposure for "a reasonable person residing in the vicinity of the airport." According to these regulations, the acceptable level of noise exposure in the airport vicinity is 65 dB CNEL. Cal. Code Regs. tit. 21, § 5012. These regulations further provide that no airport can operate at a level exceeding 65 dB CNEL unless it has applied for or received a variance according to procedures described elsewhere in the regulations. *Id.*

LAX currently exceeds, and has for decades exceeded, the standard established by Caltrans. While the airport has continued to obtain the required variance, it has not made significant progress toward compliance with the state noise standard. Rather, the unrelenting growth of LAX has led to LAX's continued substantial inconsistency with the noise standard. Implementation of the Project, with its attendant increase in capacity and level of operations, would create further conflicts with state noise standards and further reduce the likelihood that LAX will ever comply with state noise standards.

2. Safety

In determining the Project's inconsistency with the CLUP, the ALUC also made several findings regarding the safety hazards posed by the Project. For example, the Project expands the Runway Protection Zones ("RPZs") without sufficient safeguards to ensure airport supervision and/or to prevent congregation of people; and fails to make necessary safety guarantees such as prohibiting above-ground storage of more than 100 gallons of flammable or

toxic materials, and prohibiting light that could interfere with aircraft approaching or departing the airport. *See* ALUC Staff Report, at 14 (Ex. E); ALUC Resolution, at 7-9 (Ex. F). As with the ALUC noise determinations, these findings are relevant to the question of the Project's consistency with the Act.

Of particular concern to El Segundo is the new RPZ boundary created by the southern runway reconfiguration called for in the Project. The new RPZ would include a portion of a three-story multi-family structure in El Segundo. ALUC Staff Report, at 12-13 (Ex. E). However, as the ALUC emphasized in its determination of inconsistency, the LAX Specific Plan provisions intended to protect the public within RPZs will not apply to this newly exposed area because it is not owned by the airport. *Id.* at 13. Thus, LAWA will not have sufficient control over this area to prevent unsafe levels of congregation of people. *Id.* at 14. Moreover, the mere existence of an apartment building within an RPZ, regardless of the level of control that LAWA might exercise, conflicts with the Act's fundamental goal of minimization of safety hazards.

The City of Los Angeles has also consistently disregarded the significant public safety hazards resulting from the Project's air quality impacts. To date, the analysis of human health risks caused by toxic air pollutant emissions associated with LAX operations relies on outdated databases, underestimates emissions from various airport sources, and uses an inappropriate threshold of significance for both chronic noncancer health risks and cancer risks; it also falls far short of CEQA's requirement to formulate effective mitigation measures. In addition, the adverse impacts on the health of construction workers from toxic contamination of soil and groundwater on the LAX site has not been properly analyzed.

Finally, although the City of Los Angeles has claimed that a main purpose of the Project is to improve safety and security at LAX, it rushed to approve the Project rather than wait for the results of an important ongoing security study. The security study, which is being conducted by the RAND Corporation, will present a critical evaluation of whether the Project actually offers security benefits, or instead suffers from serious security problems. The RAND study is scheduled to be released shortly – in the spring of 2005 – but the City of Los Angeles approved the Project without waiting for the information the study will provide. The City of Los Angeles' refusal to await the results of the RAND study provides reason to question its commitment to minimize safety hazards at LAX.

III. El Segundo Has a Right of Appeal

According to the Review Procedures, an appeal can be filed by any public agency involved in an impasse over airport planning within 30 days of the final decision of the governing body. Review Procedures, Section 5.2(a)-(b). As explained above, El Segundo, a public agency, is at an impasse with the City of Los Angeles over the planning of LAX. This

appeal has been filed within 30 days of the December 7, 2004 decision of the City Council to approve the project.

IV. Additional Submissions

Section 5.3 of the Review Procedures lists the submissions that must accompany an appeal:

(a) A copy of a resolution or formal action approved or adopted by a majority of the governing body of the appellant public agency indicating its intent to file the appeal;

(b) Documentation of the appellant public agency's participation in the airport planning process;

(c) An explanation of the concerns, impacts, issues, etc. related to the impasses that is the subject of the appeal;

(d) Any applicable review fees as established by the ALUC.

A copy of Resolution No. 4411 adopted by the El Segundo City Council, authorizing this action is attached hereto as Exhibit G. Copies of comment letters submitted to LAWA and the Los Angeles City Council on behalf of El Segundo regarding the Draft EIS/EIR, the Supplement to the Draft EIS/EIR, and the Final EIR are attached hereto as Exhibits A through C. This letter constitutes an explanation of the impasse reached between El Segundo and the City of Los Angeles. A check for $857, the review fee for "Appeals on Impasses," is enclosed. *See* Review Procedures, Section 6.1.3.

If you have any questions on this matter, please feel free to contact me.

Very truly yours,

SHUTE, MIHALY & WEINBERGER LLP

OSA L. ARMI

cc: Mayor and City Council, City of El Segundo (without exhibits)
Claudia Culling, Office of the Los Angeles City Attorney (without exhibits)

Enclosure: Check for appeal fee

List of Exhibits

Exhibit A	November 4, 2003 Comment Letter on the Supplement to the Draft Environmental Impact Statement/Environmental Impact Report
Exhibit B	December 1, 2004 Comment Letter on the Final Environmental Impact Report and Addendum to the Final EIR
Exhibit C	September 18, 2001 Comment Letter on the Draft EIS/EIR
Exhibit D	Minutes from the Board of Supervisors of the County of Los Angeles September 14, 2004 Meeting
Exhibit E	Staff Report For Aviation Case No. 04-162-(2,4)
Exhibit F	Resolution of the Airport Land Use Commission Aviation Case No. 04-162-(2,4)
Exhibit G	Resolution No. 4411 of the El Segundo City Council

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cargo
community relations
noise management
tenant directory
frequently asked questions
lax master plan
NBC "LAX" TV Show

Statistic > Ten Year Summary > Passengers

10 YEAR SUMMARY OF PASSENGERS

YEAR	TOTAL	DEPARTING	ARRIVING
1993	47,844,794	24,141,068	23,703,726
1994	51,050,275	25,812,087	25,238,188
1995	53,909,223	27,234,353	26,674,870
1996	57,974,559	29,162,942	28,811,617
1997	60,142,568	30,313,688	29,828,880
1998	61,215,712	30,826,859	30,388,853
1999	64,279,571	32,298,944	31,980,627
2000	67,303,182	33,836,077	33,467,105
2001	61,606,204	31,007,930	30,598,274
2002	56,223,843	28,181,481	28,042,362
2003	54,982,838	27,544,606	27,438,232

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Los Angeles World Airports

Date Released: Jan 27, 2005

news release

Contact: [illegible]
(310) 646-5260

LAX AND ONTARIO INTERNATIONAL POST HIGHER PASSENGER VOLUMES IN 2004; LAX'S GROWTH RATE HIGHEST SINCE 1978; ONT SETS PASSENGER RECORD

(Los Angeles, California – January 27, 2005) Airport officials today announced that in 2004 Los Angeles International Airport (LAX) posted its highest rate of increase in passengers since 1978 and Ontario International Airport (ONT) served a record number of travelers. Los Angeles World Airports (LAWA), the City of Los Angeles department that owns and operates LAX, ONT and two other Southern California airports, released year-end statistics showing LAX served 60,688,609 passengers in 2004, strongly rebounding by 10.4 percent from the previous year's total of 54,982,838 passengers. The growth rate at LAX in 2004 was the largest year-over-year increase since 1978, when airline industry deregulation began and reversed three consecutive years of lower volumes.

Domestic passenger traffic at LAX increased 9.6 percent to 44,220,819 last year from 40,358,935 in 2003. International traveler volume was up 12.6 percent from 14,623,903 in 2003 to 16,468,590 last year. Figures for the month of December continued a trend that began February 2004, where each month's passenger total was greater than the same month in 2003.

"We are very pleased to have had a record year at Ontario International in 2004," said Kim Day, LAWA executive director. "At LAX, it now appears that a full recovery of passenger volumes from the aftermath of September 11, 2001, is in sight. Both airports are entering 2005 with passenger traffic momentum. We are also pleased to have recently resumed passenger service at Palmdale Regional Airport."

At Ontario International Airport (ONT), passenger traffic increased 5.95 percent to 6,937,337 passengers from 6,547,877 in 2003. The previous record was 6,756,086 in 2000.

Total air cargo (mail and freight) processed at LAX during 2004 was 2,109,895 tons - 4.38 percent higher than 2003's 2,021,278 tons. The freight (commodities) portion of the total cargo volume was up 4.86 percent from 1,924,087 tons in 2003 to 2,017,541 tons last year. The airmail portion of the total cargo volume was down to 92,353 tons in 2004 from 97,191 tons in 2003.

At ONT, air cargo tonnage for 2004 totaled 605,132 tons, an increase of 5.81 percent over the same period last year.

Statistical tables are available on LAWA's Internet website at www.lawa.org under each airport's statistics section.

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LAX Los Angeles World Airports

Statistic > Ten Year Summary > Air Freight

10 YEAR SUMMARY OF AIR FREIGHT

YEAR	AIR FREIGHT IN TONS
1993	1,788,503
1994	1,516,567
1995	1,567,248
1996	1,696,663
1997	1,857,487
1998	1,787,400
1999	1,884,576
2000	2,002,614
2001	1,779,065
2002	1,869,932
2003	1,924,883

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DailyBreeze.com

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Thursday, October 07, 2004
Compromise LAX plan has key backing

Council committee backs approval of $3 billion proposal, but Weiss wanted an element eliminated.
By David Zahniser
Copley News Service

Backers of Councilwoman Cindy Miscikowski's $3 billion compromise plan for modernizing Los Angeles International Airport won a key victory Wednesday, with a divided council committee recommending approval of the plan.

The council's Planning and Land Use Management Committee voted 2-1 to move forward with the "consensus" plan, which would require controversial elements of Mayor James Hahn's $9 billion LAX plan to undergo additional scrutiny.

Councilman Jack Weiss cast the lone opposing vote, saying the council should completely eliminate the most hotly contested element of the plan -- a remote passenger check-in facility east of the airport in the city's Manchester Square neighborhood.

"Everyone knows that there's no community support or expert support for the mayor's check-in facility, and I think we should be honest with the public about that and vote it down," he said.

Weiss called on Los Angeles World Airports to prepare the paperwork that would remove Manchester Square and all other controversial projects, such as the demolition of Terminals 1, 2 and 3.

But Senior Assistant City Attorney Claudia Culling warned that if the Manchester Square facility is removed, it would alter the project to such a degree that the city would be required under federal law to re-analyze the project's environmental impacts. Such a process would likely extend the environmental review process by 30 months, Culling said.

"It's clear that Jack's proposal scuttles the whole thing for now, and now (means) a couple years," Miscikowski said.

Her consensus plan carves the previous Hahn plan into two categories -- "green light" and "yellow light" projects. Green-lighted projects, such as a realigned south runway and a consolidated rental car facility, would receive speedier approval.

Yellow-lighted projects, such as Manchester Square, would face additional hurdles before they could win approval. Still, both sets of projects would require separate environmental impact reports and airport commission votes.

Backers of the consensus plan are pushing for a final vote by the end of the year, before next year's municipal election campaign enters its contentious final weeks.

Three council candidates running to replace Miscikowski have already come out against the consensus plan, while one mayoral candidate -- Councilman Bernard Parks -- opposes it as well.

Another mayoral contender, Councilman Antonio Villaraigosa, is considered by activists in Westchester and elsewhere to be a possible third vote against the airport plan.

Today the consensus plan heads before the council's Commerce, Energy and Natural Resources Committee, which oversees airport issues.

That panel is almost certain to recommend the plan's approval, since two of its three members are Miscikowski and Councilwoman Janice Hahn, the mayor's sister.

Councilman Tony Cardenas, who serves on both council committees reviewing the airport plan, insisted he still hasn't taken a position on the LAX project in its entirety.

"I'm reserving my vote at every stage" of the approval process, Cardenas said.

Tim McOsker, Hahn's chief of staff, said airport officials are prepared to give Cardenas the information he needs to cast a vote.

"Just as we did today, we will carefully comb through all their questions and look forward to satisfying all their concerns," he said.

latimes.com

http://www.latimes.com/news/local/la-me-lax30sep30,1,2147616.story?coll=la-headlines-california

LOS ANGELES

City Panel Delays Vote on LAX Plan

By Jennifer Oldham
Times Staff Writer

September 30, 2004

A City Council committee deferred a vote Wednesday on a modernization plan for Los Angeles International Airport, asking the city attorney and the airport agency to answer numerous questions about legal and security issues.

The Planning and Land Use Committee's decision to postpone action for a week is a sign of how difficult it may be for the council to follow an ambitious schedule that aims for a final vote on Mayor James K. Hahn's $9-billion plan by Dec. 14.

"I understand that bureaucrats have been working on this for years," Councilman Jack Weiss said. "But this just formally arrived at the council at 2:15 p.m. today."

The mayor's aides said they were optimistic the council could stick to the timetable.

"I'm encouraged that they came up with a list of questions and gave [the city's airport agency] a tight timetable to turn them around," said Tim McOsker, Hahn's chief of staff. "This keeps us on schedule."

Airport officials have spent 14 years and $130 million drafting a politically palatable blueprint to remodel the world's fifth-busiest airport. LAX last received a makeover before the 1984 Olympics.

To win support for his plan from airlines, businesses and elected officials, Hahn struck a deal with Councilwoman Cindy Miscikowski that postpones the most controversial elements of his plan to a second phase.

On Wednesday, the committee asked the city attorney to discuss on Oct. 6 whether the council could legally eliminate the most disliked project in Hahn's plan a check-in center near the San Diego Freeway.

Airport officials have said the center must remain part of the required environmental studies because it's needed to absorb increased traffic expected to choke surface streets near the airport by 2015. Under Miscikowski's compromise, however, the center might not be built if it does not meet more rigorous criteria.

Weiss, who has often spoken out about security at LAX, suggested the council use approval of Hahn's LAX plan as "leverage" to persuade the airlines to add more personnel so passengers would pass more quickly through lines at ticket counters.

"We have a golden opportunity to use this as leverage because they're coming in and asking for our votes," he said.

Adding more ticket agents and screeners to process travelers faster through lines at ticket counters and security checkpoints was the leading recommendation of a Rand Corp. report released last week. Such lines make a "tempting target for terrorists," researchers found.

Weiss asked airport officials to report back on how they plan to address Rand's recommendations. The airport's interim executive director, Kim Day, said the agency is running computer simulations to determine how many more ticket agents and screeners would be needed.

Before its 90-minute debate on Hahn's plan, the planning committee heard several hours of testimony from about three dozen speakers.

Airlines, business groups and labor leaders spoke in favor of Miscikowski's plan, saying it is crucial to preserve the airport's role as one of the region's leading economic engines.

"This is the No. 1 priority for every working man and working woman in Los Angeles County and we will look to you to move this project forward," testified Miguel Contreras, an airport commissioner and head of the Los Angeles County Federation of Labor.

Residents from communities ringing the airport spoke against the plan, saying it would not restrain growth at LAX. "We don't want LAX to expand into our frontyard, sideyard and backyard," said Robert Acherman, a Westchester resident.

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http://www.latimes.com/news/local/la-me-airport7oct07,1,653145.story?coll=la-headlines-california

LOS ANGELES

City Panel Backs LAX Plan

Planning committee's endorsement of the $9-billion airport overhaul could set the stage for a full council vote by year's end.

By Jessica Garrison
Times Staff Writer

October 7, 2004

In the first City Council action on the $9-billion modernization plan for Los Angeles International Airport, the planning committee voted 2 to 1 Wednesday to endorse the proposal and send it on for further review.

The council's commerce committee will hold more hearings today on the plan, setting the stage for a full council vote before the end of the year on the airport overhaul, which has involved years of planning and $130 million to come up with a blueprint.

If 10 members of the 15-member council approve the plan, it will go on to the Federal Aviation Administration for a final review, and construction could begin next year at the world's fifth-busiest airport.

"It gets the good things started now," said Councilwoman Cindy Miscikowski, who earlier this summer worked out an 11th-hour compromise with Mayor James K. Hahn that postpones the most controversial aspects of his renovation proposal.

So-called "green light projects" such as a consolidated rental-car facility, a transit hub and an elevated tram would be built first at an estimated cost of about $3 billion.

The postponed elements include a central check-in center at Manchester Square near the San Diego Freeway and demolition of Terminals 1, 2, and 3 on the north side of the airport.

Those "yellow light projects" would require further review before approval could be given.

The central check-in facility has been highly controversial, with some security experts suggesting it would make passengers more vulnerable to a terrorist attack by concentrating them in one place.

It was criticized once again during the two-hour Planning and Land Use Management Committee hearing.

Edward Saenz, a representative of Rep. Maxine Waters (D-Los Angeles), told the council that the check-

in facility represented "the world's first billion-dollar curb" and should be eliminated.

Councilmen Tony Cardenas and Ed Reyes voted to support the modernization plan, with Reyes saying it "gets off the ground" with needed improvements.

But Councilman Jack Weiss, who has repeatedly questioned security measures at the airport, voted against the plan.

Weiss suggested it was dishonest and irresponsible to include the yellow light projects because many officials, he said, have no intention of ever building them.

"I think it would be better to be honest with the people of the city," said Weiss, who wants to scratch the check-in center from the plan. If the council decided to eliminate the yellow light projects, officially doing so would force the airport to conduct more environmental studies, which could take up to 2 1/2 years, said Assistant City Atty. Claudia Culling.

The entire plan, including the limited improvements and the more controversial check-in center, were considered as a single package in the environmental reports. "To do nothing would mean we stagnate, we would be paralyzed, there would be no improvements," Reyes said.

Miscikowski agreed, saying Weiss' proposal would scuttle "the whole thing for now."

Weiss disagreed.

"Just because someone has seen fit to crazy glue bad public policy proposals onto good public policy proposals" doesn't mean "that the council should go along with it," he said.

Cardenas, who chairs the commerce committee, said he planned to ask more questions today about the plan's financing.

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http://www.latimes.com/news/local/la-me-lax17oct17,1,3130664.story

As Airport Vote Nears, Questions Divide Council

Debate over legality, capacity, security and traffic is likely as a compromise plan for modernizing LAX slowly gains support.

By Jennifer Oldham
Times Staff Writer

October 17, 2004

As the City Council prepares to vote this week on its most ambitious public works project and the largest remake of Los Angeles International Airport in its 75-year history, critical questions that have dogged the project for months are still unanswered.

The council is sure to debate these key issues when it takes up Mayor James K. Hahn's modernization proposal on Tuesday. But it's unlikely the issues will be settled before the vote. How they are resolved will ultimately determine if the project is built.

Among the major issues:

- It's unclear if a proposal that splits projects into two phases is legal or whether it would invalidate the voluminous environmental studies. A lawsuit could place the entire proposal at risk.
- Hahn assured airport-area residents that his plan would hold LAX to 78 million annual passengers, but some studies have concluded that the proposal would allow up to 90 million travelers a year.
- Officials don't know if the plan would make LAX, considered the state's No. 1 terrorist target, more secure. The Rand Corp. found that the plan's centerpiece, a central check-in center near the 405 Freeway, could make passengers more vulnerable to attack.
- The initial projects may not significantly ease traffic in and around the airport. Plans for a transit hub and a consolidated rental car center would remove only a tiny fraction of vehicles in the airport's congested horseshoe-shaped roadway.

"Questions have been raised," acknowledged Councilwoman Cindy Miscikowski, who worked with Hahn to devise a proposal that postpones the most controversial elements of the mayor's plan. "But we're trying to find a way through the politics to forge something that's credible."

Hahn defended his plan in an interview last week.

"This plan does what I said it would," he said. "It allows us to control growth at LAX, it allows us to deal with pollution and traffic congestion, and I don't think any plan has gotten more environmental review than this one has."

4 Remain Undecided

The plan has been steadily gaining support at City Hall. Eight council members plan to vote "yes." Four remain undecided and three are opposed. The 15-member council must muster 10 votes to pass the LAX proposal.

No one questions that something needs to be done at LAX, which passengers consistently rank as one of the nation's worst airports. The city's airport agency has spent 10 years and $130 million in an effort to devise a politically palatable modernization plan. The airport had its last face-lift before the 1984 Olympics.

Hahn scrapped an expansion plan put forward by his predecessor, Mayor Richard Riordan, in the fall of 2001 to try to build a consensus with surrounding communities. Residents, airlines and businesses had complained that they were shut out of the process.

Last spring, critics predicted that Hahn's proposal would be dead on arrival at City Hall, citing its $9-billion price tag and a highly controversial plan to build a passenger check-in facility near the San Diego Freeway.

But an 11th-hour compromise in June between Hahn and Miscikowski, who represents airport-area residents, brought airlines and business groups on board. The proposal, written by Miscikowski, was designed to assure critics that the most controversial projects would not be built without further consideration.

The blueprint, contained in a separate planning document known as a "specific plan," puts some projects in a first or "green light" phase and others into a second or "yellow light" phase.

The "green light" projects include moving the southernmost runway 55 feet closer to El Segundo and building a rental car center, an elevated people mover with a transit hub, an employee parking lot and more gates where airplanes park at the Tom Bradley International Terminal. Those projects would cost about $3 billion.

"Yellow light" projects include two new terminals, the passenger check-in center at Manchester Square in nearby Westchester, a second people mover line and the demolition of central parking garages and Terminals 1, 2 and 3. Those projects come in at about $8 billion.

If all the projects in the mayor's plan were constructed, the total cost would come to $11 billion, $2 billion more than initial estimates.

Late last week, proponents and opponents were preparing for a showdown at City Hall. Opponents released a 12-page letter to the council from a Santa Monica-based law firm and warned that if council members failed to rework the plan, "they are going to get sued."

Airport-area residents and Los Angeles County officials are concerned that the plan fails to ensure that the check-in center and the terminal demolitions won't happen without further study.

"There's no precedent in law for yellow-lighting something," said Ian Chatten-Brown, an environmental attorney hired by residents, who drafted the letter to the council.

Miscikowski called her plan "legally defensible" and countered that it would require the "yellow light"

projects to pass rigorous environmental, traffic and security studies.

The proposal has slowly won acceptance among City Council members, who want to get something started at the world's fifth-busiest airport.

Councilman Martin Ludlow, who last week was undecided, said Friday that he planned to support the plan.

"Of all the evolving proposals, at the end of the day, I think Cindy's proposal is the smartest move for the city right now," he said. "Cindy is presenting a proposal that allows key modernization issues to be addressed but doesn't take on colossal fights."

The plan received the go-ahead from the city's planning and airport commissions and two council committees earlier this year.

But several council members still have reservations about Miscikowski's approach and have called for the city to eliminate the check-in facility and to redo the environmental studies without it. City attorneys say the new studies would take up to 30 months, while opponents say they could be redone in six months.

"I don't believe in emperor's-new-clothes style of government," Councilman Jack Weiss said. "I think the council and the mayor need to be honest with the public and be forthright about what is actually being approved."

Weiss has introduced a motion to kill the "yellow light" projects.

Opponents have also questioned whether Miscikowski's plan would increase security at LAX. When Hahn introduced his plan in 2001, he said it would make LAX more secure by dispersing passengers among several facilities.

In an initial review, however, the Rand Corp. concluded that concentrating passengers at a central check-in facility could put them in greater danger. A more thorough Rand study on Hahn's plan will not be completed until next year.

Miscikowski said that Rand would review each project in the plan before it is constructed to ensure that it is built in the most secure way.

Residents have also raised concerns about whether the plan would ease traffic. Two major "green light" projects — a consolidated rental car center and a transit hub to link the Green Line light rail with the people mover -- would decrease traffic in the airport's horseshoe-shaped roadway by 5.2% a year, airport agency statistics show.

Miscikowski said her plan required city officials to continually monitor traffic and that it would be adjusted to deal with congestion.

As late as Friday, Miscikowski's aides were trying to bring detractors on board.

City officials met with El Segundo representatives Friday afternoon in an ongoing effort to draft a legally binding agreement that would attempt to hold LAX to 78 million annual passengers.

Legality Questioned

The Federal Aviation Administration, which would have to sign off on a deal between the cities of El Segundo and Los Angeles, has questioned whether it would be legal, saying airports are prohibited by federal law from capping capacity.

El Segundo and Los Angeles County have repeatedly voiced concerns that Hahn's plan, which would decrease the number of gates where airplanes park, fails to restrain growth at LAX.

Several transportation analysts, including a Berkeley airport capacity expert and the Southern California Assn. of Governments, agree that Hahn's plan could handle 90 million travelers a year.

Miscikowski countered that the specific plan requires the city to conduct yearly passenger counts at each gate. When the total approaches 78 million annual passengers a year, she said, city officials would study which projects are contributing to the increase.

Proponents of the plan were also marshaling their forces last week.

A partnership forged by the Los Angeles Area Chamber of Commerce and the Los Angeles County Federation of Labor announced it would hold a rally outside City Hall on Tuesday morning.

"If we do not move forward with this now, with these projects that nearly everyone agrees to," said George Kieffer, the chamber's chairman, "we're going to delay these needed improvements, including safety improvements, for four years."

Times staff writer Jessica Garrison contributed to this report.

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LAX **Oct. 1**

LA Council planning panel supports LAX plan 2-1

BY HELGA CARR

The Los Angeles City Planning and Land Use Management Committee (PLUM) approved a modernization plan for Los Angeles International Airport (LAX) in a 2-1 vote Wednesday, October 6th, sending the LAX proposal to the City Council Commerce Committee for further review Thursday, October 7th.

City Councilmembers Tony Cardenas and Ed Reyes voted to support the modernization plan.

"It gets off the ground," said Reyes about the proposed plan.

Councilman Jack Weiss voted against the LAX modernization plan, citing security concerns he said have not been addressed.

"Many officials have no intention of ever building the yellow-light projects and it's dishonest and irresponsible to include them in the plan," said Weiss, who wants to eliminate a Manchester Square ground transportation center from the plan.

Los Angeles Councilwoman Cindy Miscikowski has proposed a consensus plan that would give a "green light" to noncontroversial parts of the LAX plan and a "yellow light" to controversial portions of the plan which would require further study.

Weiss had requested a legal analysis on the interconnection between the green lighted projects and the yellow-lighted projects from the city attorney's office at the previous week's Planning and Land Use Management Committee meeting.

Assistant city attorney Claudia Culling said that if the City Council wants to eliminate the yellow-light projects, the council would force the city airport department to begin new environmental studies that could take up to two-and-a half years to complete.

Weiss asked how Los Angeles World Airports (LAWA) – the city agency that operates LAX and other city-owned airports – would implement security issues recommended by RAND.

Phase 1 of the RAND study, released late last month, identified 11 major classes of possible attacks at LAX.

The RAND study found that "one fact that consistently emerges from our analysis is that it is not the size of the bomb that matters most; it is where it is detonated."

"All of the most dangerous terrorist attacks involve terrorists placing a bomb in close proximity to a vulnerable crowd of people," the RAND report said.

"There are two general ways to reduce this vulnerability: move the possible bomb detonation away from the people or move the people away from the possible bomb detonation."

The RAND study recommends limiting the density of people in unsecured areas where baggage has not been inspected such as curb-side check-in – or near uninspected vehicles.

Culling told the committee that a 120-day computer model study would provide recommendations to implement the terminal density issue.

A 90-day study on vehicle checkpoints and terminals will involve running scenario simulations and then a review with the federal Transportation Security Administration (TSA) to discuss related issues and the financial situation, said Culling. TSA is responsible for airport safety in the United States.

Results of those two studies would then be presented to the City Council, Culling said.

"The mayor crazy-glued public policy onto the green-light items, and un crazy-gluing it is much more difficult," said Weiss.

Councilman Bernard Parks told the committee that concerns for residents of his Eighth Council District included health, environment and traffic issues that aren't dealt with in the plan.

Parks said both phases of the RAND Corporation study, commissioned by the City Council, needed to be completed and reviewed before the modernization plan is approved.

"A security plan might alter with new RAND information, and the EIR/EIS (environmental impact report/environmental impact statement) are no longer viable because they are outdated," said Parks.

The number one issue is a ground transportation center at Manchester Square, which is opposed by many residents, said Parks.

Parks claimed that the Green Line and other light rail options have not been properly addressed.

"This is a lifetime decision for many residents and there is a broader area impact," said Parks.

Attorney Edgar Saenz, a representative of Congresswoman Maxine Waters, said Waters is closely following the situation, and opposes the proposed ground transportation center at Manchester Square.

Waters' congressional district includes Manchester Square and adjacent neighborhoods.

"Manchester Square would not technically be a 'check in', because there's no boarding of passengers, no luggage check; it only drops off passengers to be moved by the people mover to the airport," said Saenz.

"Even the ATA (Air Transport Association) hates the ground transportation center," Saenz claimed. The ATA represents the majority of domestic airlines that serve LAX.

"This is the world's first billion-dollar curb and it needs to be eliminated," said Saenz.

A report on the complete RAND study will be presented to the Los Angeles City Council Tuesday, October 19th.

printable version *e-mail this story*

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FAA-041227-004

12-20-04

Admin. Marion Blakey
Federal Aviation Admin.

The Los Angeles International (LAX) Airport is being considered for major changes, including expansion of the facility up to the 405 Freeway, which would involve significant reconstruction that would take place over a 10-year-to-15-year period.

The potential cost of the proposed project for LAX Airport is realistically between $15 billion and $25 billion that include: expenditures for acquisition of property in the nearby area, replacement of public and private buildings, upgrades of the infrastructure in the region, improvements in other related areas, mitigation of negative environmental effects, compensation for financial losses by residents, businesses, and local governments, outlays for cost overruns in various aspects of a major project, etc.

While the proposals by Mayor James Hahn and Councilperson Cindy Miscikowski of Los Angeles for LAX Airport have been touted by its supporters as the solution to various inadequacies of the facility, they unfortunately fail to improve 1) user-friendly aspects for passengers, visitors, etc., 2) efficiency of operations at the airport, 3) level of safety and security for people in and around it, 4) quality of life for residents, workers, etc., 5) permanent jobs at businesses in the L.A. region.

LAX Airport IV
December 9, 2004

Gordon Michael Mego
4535 W. 141st St.
Hawthorne, CA 90250-6927

1 of 3.

FPC00001

FAA-041227-004

On Monday, Dec. 6, 2004, the Los Angeles World Airport (LAWA) Board of Commissioners voted to approve the "Community Benefits Agreement" which involves the expenditure of $500 million to minimize the negative fallout from current operations at and proposed expansion of LAX Airport. Unfortunately, the overall scope is limited, the proposed funding is inadequate, and the expected improvements are long overdue for the people of the Los Angeles region.

On Wednesday Oct. 20, 2004 and again on Tuesday Dec. 7, 2004, the City Council of Los Angeles voted 12 to 3 in favor of the Hahn / Miscikowski proposals for LAX Airport. Unfortunately, the "Yes" votes by a number of L.A. Council members were based upon a multitude of promises that may not be fulfilled regarding various aspects of proposed improvements in the L.A. region.

It has been the contention of Mayor Hahn, Councilperson Miscikowski, and their supporters that the proposed changes for LAX Airport had to be approved in their entirety. Otherwise, they claimed that LAWA and the City of Los Angeles would be forced to start the process all over and will have wasted $130 million of the taxpayers' money.

LAX Airport IV
December 9, 2004

Gordon Michael Mego
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FPC00001

FAA-041227-004

Mayor Hahn could have saved himself and many other people a lot of trouble down the line regarding the proposals for changes at LAX Airport if he had started the process with numerous public meetings to gather input from the stakeholders in various communities which would have assured everyone more acceptable proposals that are created from the bottom up.

Of course, Mayor Hahn refuses to now accept responsibility for his failure of leadership on such an important matter and his decision to ignore environmental laws of the Federal EPA and California EPA. Further, he refused to accept legal opinions of the L.A. County Counsel who has said that the objectionable elements of the Hahn/Miscikowski proposals can be taken out without requiring more environmental studies or public review.

On Tues. Dec. 7, 2004, the L.A. County Board of Supervisors voted unanimously to pursue legal action against the City of Los Angeles for their approval of the Hahn/Miscikowski proposals for LAX Airport.

In conclusion, it has become necessary to seek legal remedies in the form of lawsuits by governmental bodies, organizations, businesses, residents, etc. in L.A. County so that we can achieve truly acceptable proposals for LAX Airport.

LAX Airport IV
December 9, 2004

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3 of 3

FPC00001

COMMENTS FROM AN OLD TIMER

TO WHOM IT MAY CONCERN

In reviewing LAX (D) and LAX (E) I find them full of holes and VERY EXPENSIVE.

1. Leave the terminals and existing access as is. This allows people to drop off and pick up the elderly and handy capped right at their terminals. This scatter of terminals is safer than the proposed concentration

2. Moving runways and putting a taxiway between them has not improved wing tip clearance versus 45 degree holding between existing runways. Nobody shows which way the airplanes would be going in those center taxiways. This is very unsafe.

3. The time and cost of moving a runway will effect a shortage of operational runways for a long time and with the existing air traffic will cause a real delay problem.

4. The location of the new tower solved the visibility problem that occurred on the north runway and taxiway that one time. NO PROBLEMS SINCE

5. With the financial shortage in Federal, State and City, leave as is except to improve the security in the existing terminals.

6. I went to the library to review the airport plan D and was shocked by the extent of the environmental study. About 6 feet of books full of GOBBLED- GOOK. When there wasn't an acceptable plan to evaluate. What a waste of taxpayer funds.

7. Cargo truck traffic mixed with passenger traffic could be solved by utilizing Ontario airport where the truck traffic can come and go in all directions and not restricted to approach only in one direction

8. To accommodate the new double deck Acrobus at the terminal, a two level ramp system must be available.

John S. Ehret
8219 Calabar Ave.
Playa Del Rey, CA 90293
Retired McDonnell Douglas 79"after 31yrs. Retired from the FAA 89", continued as a consultant with McDonnell Douglas Technical Service Co until Boeing took over.
Private Pilot, Land and Sea for 53yrs.

FPC00002

Feb 9, 2005

Dear David Kessler ,FAA

Subject: LAX Master Plan D-Concerns about expansion.

Thank you for taking your time to review my concerns about Plan D.

My Concerns

As a longtime residents of Playa del Rey. We have not truly been represented by our Councilwomen Miscikowski regarding extending the runway on the Playa del Rey/Westchester Northside.

History will show you that more expansions and more flights take off on the PDR/Westchester side vs. the El Segundo side. This is due to the better representation of the city of El Segundo fighting to keep reduction down on their side of the runway. Our Councilwomen Miscikowski (whom we did not vote for, but rather forced on us by redistricting) has failed to consider our Long-time concerns (see below). In her recent move to place a feather in her hat as the outgoing representative of district 11, she has OVERLOOKED our concerns to make a name for herself in joining with Mayor Hahn LAX Multibillion expansion plan D.

CONCERNS if runway is expanded again on the Northside

1. INCREASED NOISE.

2. SAFETY of homeowner . Many times planes fly over our homes flying outside the runway flying right over Manchester just making it over the hills of Playa del Rey. This happens several times a month. Planes taking off turn to soon thereby FLY OVER our Homes. By giving more runways on the PDR side this occurrence will increase and our safety and passenger will be at a greater risk.

3. PLANES Divert right over Playa del Rey. Perhaps due to aborted landings several times a month planes divert to the Northside of the runway. When they divert they fly dangerously over our homes outside the proper runway departure zone. Because no flight diversions fly south over the El Segundo side (except for the furthest south runway) due to further danger to other takeoff/landing planes, we again take ALL the diversions on the PDR side. With several thousand take off & landings daily, moving the runway closer to the PDR side will increase potential harm to homeowners & passengers.

FPC00003

I urge you to please review our concerns in deciding on this long-term decision that will impact all of us. Further more our true representation will take place when we will be voting March 3, 2005 for our Council|person to truly represent us in the 11th District (note all candidates share the above concerns). Please listen to our concerns and not allow additional expansion on the Playa del Rey/Westchester side.

Regards,

Jill Rowe

Jill Rowe
8248 Tuscany Ave
Playa del Rey
(310) 827-4561

FPC00003

Alliance for a Regional Solution to Airport Congestion

ARSAC.

Alliance for a Regional Solution to Airport Congestion

322 Culver Boulevard, Ste. 231 Playa del Rey, CA 90293
(310) 827-7411
info@regionalsolution.org

February 20, 2005

Mr. David B. Kessler, AICP
US Department of Transportation, FAA
PO Box 92007
Los Angeles, CA 90009-2007

Subject: LAX Master Plan Final Environmental Statement dated January 2005

The Record of Decision approving LAX Master Plan Alternative D should not be issued.

ARSAC agrees that a safe, secure, and convenient LAX Airport is not just desirable, but is a necessity. But, the preferred Alternative D fails to meet those objectives. The FAA should acknowledge that the documentation package is incomplete, has inadequate analysis, and promotes misleading statements in several substantive ways. Despite extensive draft Master Plan/ EIS/EIR hearings that resulted in over 19,000+ comments generated no substantive changes to the Plan were made. The substantial mass of paperwork generated contains fatal flaw assumptions, is based on old and incomplete data resulting in inaccurate environmental assessments

The resultant safety and security projected by the extensive modifications is questionable.

There are differing opinions about the effectiveness of the ground and air safety and security approach in Alternative D. To reduce opposition to Alternative D an independent, cost/benefit assessment was promised with great fanfare in July 2004. It has not been performed. The FAA should require this critical information.

The baseline no action/no project alternative specified is flawed resulting in inappropriate conclusions.

Instead of a straight forward no action/no project baseline for comparison with selected alternatives future projects and assumptions of their magnitude are cherry picked to predetermine conclusions.

Any Plan should minimize the impacts upon the surrounding communities while remaining a key element in the Regional Solution to air commerce. Elements including video monitored fences and gates, upgrades to the Bradley International Terminal facilities and gates, replacement of the baggage handling system throughout LAX, and cargo handling facility improvements are already on-going. Each project was approved without being a part of the master plan. These are a part of the baseline; how were these accounted for in the analyses?

The no project/no action "baseline" contains many additions and changes beyond the Interim LAX Plan and adds future projects not yet fully conceived. Virtually all of the projects since the 1980s were approved incrementally without environmental review (other than a project Negative Declaration) to assess cumulative impacts. Further, airport capacity has been increased by incrementally by the addition of boarding gates and taxiways. Are future increases of this type in the "baseline" for comparison, how/where are they identified?

FPC00004

There is also a pattern of assigning large impacts to the "baseline" while complementary projects are reduced in the Alternatives presented. Baseline projects include the Northside Development (ND). The ND removed hundreds of local housing units in 1981 to become a 4.5 million square foot "light industrial/commercial buffer zone" between the airport and the community to the immediate north, Westchester. ND was proposed to have been completed in 2000 but remains virtually empty except for the new fire station recently built. Alternative D takes a credit for reducing traffic from the "baseline" by calling for an undefined, reduced 1.5 million square foot build out renamed Westchester South. No one realistically expects any of the hotel development in ND as reduced in Alternative D, but not from baseline consideration.

Similarly, an early 1980s project to the southeast of LAX, Continental City, was approved for a large square footage but was abandoned as a hole in the ground for over twenty years. Again, nothing of the originally conceived size is expected to be built out yet environmental credit for Continental City reduction is not taken from the "baseline."

Questions about the "baseline" versus alternatives exist. Traffic impact projections were reduced to account for the reduced, but still massive Playa Vista Project Phase II to the north. In addition to the mega project, however, the many other smaller projects added have a cumulative impact in the other direction. Dramatic growth in surrounding cities and in unincorporated County areas is minimized by the review yet the LAX area is already among the most congested in the nation. How are these accounted for in the "baseline" for comparison? As much of the environmental data was collected in the 1994-96 time frame and not conceived at that time, how does the FAA account for the substantially changed conditions both at LAX and the surrounding regions?

Assumptions are unsubstantiated and future growth prospects are not addressed.

The capacity of LAX, and therefore environmental impacts, does not reflect current or future conditions. Assumptions related to boarding gate types (present and to be built), aircraft mix, gate locations and quantities, and throughput capacity need to be substantiated. Virtually all environmental impacts relate to airport passenger and cargo capacity yet there is no enforceable capacity restriction in place. Although we are told that the LAWA capacity assessment for Alternative D constrains capacity to 78.9 MAP, a comprehensive review by Professor Kanafani, preeminent expert on airport capacity at University of California, Berkeley, states LAX ground air traffic to be a much higher number. How does the LAWA and the FAA justify not accounting for any level of service above the 78.9 MAP? Further, there are numerous changes to the existing Alternative D that could increase either passenger or cargo capacity. How are these accounted for in the assessment?

Potential for additional growth is established for LAX with the open spaces created and airport layout changes made. Right now there are no ways to constrain growth in a "market driven" only environment. Yet future impacts are not discussed. Transportation growth into and around LAX and connecting to other airports in the region is not addressed for either passengers or cargo.

Another example of misleading assessments is the revision of the south runway complex. Priority has been given to increasing the spacing between runways by "only" 50 feet and to add a new center line taxiway. This large expenditure will facilitate increased ground air traffic. This controversial element is purported to address incursion avoidance, but an independent analysis and simulation by AAMES Research Labs using actual controllers questioned the relevance.

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Mitigations proposed, timing, and their effectiveness are questionable.

Development at LAX has a long history of mitigation promises deferred and forgotten. The Interim LAX Plan of 1981, now superseded by the new documentation in December 2004, lists numerous mitigations never finished. The Interim Plan stated that if LAX exceeded 40 million annual passengers (MAP) the air commerce should be disbursed to Ontario and Palmdale. LAX passenger traffic was about 68 MAP prior to September 11, 2001 without such action.

LAX has rebounded to 62 MAP (and cargo tonnage has increased). The resultant LAX incremental traffic will have an even greater impact. Traffic mitigation potential is limited as there are few north-south arteries. The local non-airport related traffic and congestion has grown substantially since 2001 and is expected to worsen. The City of LA, for instance, has enacted a 34% density bonus above zoning allowance for all developments along transit corridors. Additionally, the local Community Plan authorized further increases.

The timing and completion of mitigation of impacts in and out of Environmental Justice areas is of serious concern. The health impacts of increased traffic and pollution affect *all* people and these costs are not included in any analyses. Tables documenting project characteristics and mitigations do not include schedules nor do they include responsible agencies to track remediation. In many cases mitigations such as intersection improvements and road widening is the responsibility of agencies in which the funding is not even requested (i.e. listed in the SCAG Regional Transportation Plan). The EIS assumes full procurement of Manchester Square before implementation of the Master Plan, yet the "voluntary" buyout has not been accomplished because some people do not want to sell. The Master Plan and EIS/EIR all assume fully empty land where the Ground Transportation Center is to be built. Eminent domain is mentioned in a few short paragraphs, but no schedule or the impacts of this are mentioned. What is the federal government going to do to ensure tracking and completion?

The analysis approach mandates a take it all or leave it.

The Master Plan and associated environmental reviews are inadequate. The preferred alternative, Alternative D, was added as an entirely new item by Addendum in 2002. Although necessarily lacking in specifics, an array of similar approaches (and project elements) from which to choose was not made. Environmental assessments, we've been told, were prepared for the comprehensive alternative only. Elements could not be segmented. These elements should be independently studied. No project segregating out the negative impacting elements can be configured.

NEPA versus CEQA differences and the multiple Addendums biased.

Although we have previously provided detailed comments to the common element responses, many of the detailed questions remain either unaddressed or inadequately addressed by reference to a generic response that doesn't answer the specific issues. The generic responses prepared for the EIS/EIR draft review failed to address numerous issues related to noise, health, traffic, and other environmental mitigation questions. **Local stakeholders in the long standing LAX Advisory Committee, Westchester Neighbors Association, several Los Angeles Neighborhood Councils and the LAX-Community Noise Roundtable have expressed disappointment with the lack of specific responses.**

Although community leaders and airlines made numerous suggestions to alleviate shortcomings identified early in the development of Alternative D (and even created subset projects of Alternative D), none were ever seriously considered. Several iterations were conceived and at least two were

presented at different hearings during the Plan development process. Sadly, LAWA and the Mayor refused to commit any resources out of the reported hundred twenty million dollars expended. Suggestions were only "filed" until after Alternative D was formalized and the Plan was approved. Addendum to the Final EIR (September 2004) referenced in Volume A presented an analysis for several community Alternative E (and E-1) plans that implied a highly detailed review, but they were rough cut at best. Conclusions were conjecture as best as analyses were based on basic layout drawings and necessarily very limited verbiage. None of the parties involved in the development of the ideas were even contacted for clarifications or further information.

Another issue previously identified, but not adequately addressed is the study of air quality. Studies conducted to determine $PM_{2.5}$ levels were not done, the locations where test specimens were taken (off airport at 120th Street and at the West LA Veterans Administration rather than in areas directly around LAX or along the flight paths), adequacy and frequency of tests, the ability to differentiate stationary sources from aircraft, and much more. Will these health impacts and additional tests be addressed?

Endangered and threatened species/Coastal Zone issues include impacts on flora and fauna that are not mitigated. When promises are made to ensure mitigations in the future, how will the federal government ensure that promises are followed up? Also, has anyone looked into the illegal refilling of the immense hole in Continental City property owned by LAWA during June-August 2004 time frame with unknown origin fill? During that time period, before the Miscikowsi City Council Office staff became advocates for Mayor Hahn's plan, the level of the hole was raised at least ten feet with hundreds of loads of dirt. The Council Office verbally told us that no permit had been issued and that it was eventually stopped by LA City Building and Safety. We have no written reports on that activity

As mentioned earlier, noise health issues have not been fully addressed either. Single event noise, autonomic response health impacts, areas not "designated" that are adjacent to the 65 CNEL impacted areas that receive extensive noise but not necessarily the "average" high value are not federally "impacted" but recent health studies are showing that these people are still damaged to a significant extent. The assumptions of flight tracks followed, aircraft quantity and mix, low frequency noise levels that are not currently measured or tracked, effects of topography, and many more issues are unaddressed. When and how will the federal government address these? In calculating CNEL impacts for sound proofing a certain number of days of eastern take offs are assumed, but what about "abnormal" years like this one when there has been an inordinate number of days of eastern take offs that changes the locations of 65 CNEL on a "temporary" basis? Also, recent studies show a disproportionate impact on youth from air contaminations. When will this be included?

Conclusion.

Although Volume A attempts to bring organization to the tens of thousands of pages of conflicting, inconsistent documentation it is insufficient to overcome the Plan and environmental impact assessment fatal flaws. Mitigations are proposed, but not guaranteed - with some relying on promises made for other governmental agencies that have not included them in their financial plans.

Everyone agrees that LAX needs improvements to become safe, secure, and more efficient but none of the options presented do this.

Less can be more. A smaller plan, without the most objectionable elements, could (and should) have been achieved by further analysis and real, open discussion. Give-and-take is required, not hundreds of meetings to tell people what is going to be done.

To prop up a faltering Plan, Councilwoman Miscikowski prepared, in 2004, a politically generated list of "consensus" items many of which actually enjoy general stakeholder acceptance. Several of the elements of Alternative D, however, continue to be almost universally opposed.

Physical design and placement of even the "consensus" elements remains at issue in addition to the ability to mitigate impacts (and their timing). **Despite this opposition, Alternative D implementation plans were approved by the City of Los Angeles and are moving forward with scheduling of ALL projects for construction (see Master Plan section 2.10).**

We, like the multiple Congressmen, County Supervisors, local State Representatives and various elected officials of surrounding cities would like to see the comment period extended so that more detailed comments can be submitted and a new plan established. A rush to approve this plan should be avoided despite the extended time period and massive financial expenditures.

We urge the FAA to take the lead in protecting the health of the large population surrounding LAX, the airlines' economic viability, and to avoid risking harm to the general economy any incident might bring. **Reject each of the alternatives and force development of a new, more effective alternative.**

THANK YOU.

Valeria Velasco, President

Denny Schneider, Vice President

Los Angeles City Council

BERNARD C. PARKS
Councilmember, Eighth District

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David B. Kessler, AICP
U.S. Department of Transportation
Federal Aviation Administration
P.O. Box 92007
Los Angeles, CA 90009 2007

February 22, 2005

RE: Comments on the Final Environmental Impact Statement

Dear Mr. Kessler:

I send this letter with much disappointment and frustration over The Federal Aviation Administration's (FAA) lack of response to genuine concern and request to extend the comment deadline from February 22, 2005 – March 21, 2005. The said document took the well-funded and specialized agencies, FAA and Los Angeles World Airport (LAWA) several months to complete yet today, smaller agencies, citizen groups and concerned neighbors of the airport are required to read and comment within one month. That is simply unacceptable.

My brief review of the material did not offer much of a difference. Instead, my superior Plan E was belittled without any interview or meeting with my staff and me. I have therefore decided to offer comments while also explaining my plan in very simple yet somewhat detailed way.

Introduction

The Consensus Plan for LAX is an exorbitantly expensive proposal that lacks common sense and community support. It is time to rethink the entire master planning process and make a fresh start. Los Angeles World Airports should go back to the drawing board and craft a sensible, cost-effective plan for LAX that makes the most of scarce transportation dollars and benefits the entire region.

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It is clear that LAX, one of the crown jewels of Southern California's economy, needs to be modernized. Many of its facilities are outmoded and inadequate for handling a new generation of 21st-century aircraft. The aviation world changed after September 11, 2001, and new security challenges need to be met. Although LAX passenger and aircraft traffic plummeted after 9/11, it has rebounded and is almost back to pre-9/11 levels. Runway and taxiway improvements are needed to address runway incursion problems that plague the airfield, to ensure the safety of the traveling public.

However, the LAX Consensus Plan is a misguided approach to modernization. It is based on the premise that car or truck bombs are the primary threat to the security of passengers and the functioning of LAX. To address this threat, it would build major new off-airport facilities such as the proposed Ground Transportation Center to separate passengers and vehicles from a new Central Terminal Area. Still, there would be risks associated with concentrating passengers in those facilities, and the Automated People Mover System that would connect them would also be vulnerable to attack. Building these new facilities would be enormously expensive, comprising a major part of the $11 billion price tag for the plan. It is questionable that making such costly, irreversible changes at LAX to address a single threat scenario is a prudent use of limited airport funds. Better information is needed to assess and compare the cost-effective of a variety of security alternatives at LAX before making irreversible commitments.

It also questionable whether the "hassle factor" at LAX that has recently driven so many passengers to alternate airports in the region would be less with the new master plan. Most passengers would need to first park, take the people mover or a shuttle to the Ground Transportation Center for initial screening, and then take another two mile trip on the people mover to the new Central Terminal Area for a final security check. This circuitous journey could increase the perceived "hassle factor" for many LAX passengers.

The Consensus Plan would also create an entirely new set of airport ground access problems. Passengers currently access LAX from a variety of directions (Lincoln, Sepulveda, Century, La Tijera, etc.). Under the new proposal, passenger access would be concentrated near the San Diego Freeway, which would increase congestion and traffic backups on that highly congested facility. The alternative would also increase congestion on local streets in communities around the Manchester Square area where the Ground Transportation Center is being proposed. A number of ground access improvements are being proposed to mitigate these potential problems, including a new interchange at Lennox Boulevard at the San Diego Freeway. It is unclear how much these improvements would cost, or how they would be paid for.

The estimated $11 billion dollar cost of the Consensus Plan would place an enormous financial burden on airport tenants and users at LAX. It is more than twice the cost of planning and constructing Denver International ($4.2 billion). It is almost twice the cost of the $6 billion needed to modernize San Francisco International (SFO). Airport costs per passenger at SFO are now three times that of LAX ($18 vs. $6) because of new fees needed to fund its modernization. This drove cost-conscious airlines and passengers to less expensive airports in the Bay Area, particularly Oakland International. In combination with the events of September 11, 2001 and the SARS crisis, passenger

traffic at SFO plummeted. The airport's bond ratings have been lowered twice, and it recently lowered its fees to $12 per passenger to regain the lost service.

Other major airports have also experienced negative repercussions from expensive development or redevelopment projects. Miami International Airport is in the middle of a $4.8 billion terminal and runway expansion project, and has recently lost 4 million passenger a year, mainly due to its high landing fees and discount carriers moving to the cheaper Fort Lauderdale International Airport as a result. Escalating expansion bills have driven costs higher, raising the cost per passenger even more at Miami International and driving away more discount service in a downward spiral.

At Indianapolis Airport, there is great concern that airlines will cut routes or leave the airport altogether because of the airline fee hikes from $7 per passenger to $10 per passenger needed to fund the airport's new $1 billion terminal.

Because of the very high landing fees at Narita and Kansai airports, airlines that used to fly to Japan are now flying directly to less expensive airports in South Korea or Taiwan.

LAX will become a similarly high-priced airport if it goes ahead with implementing the Consensus Plan. At $8.85 per enplaning passenger, LAX currently has one of the lowest landing fees in the country. However, it was estimated by the LA Times that fees would have to almost quadruple to $22 per passenger to fund a $9 billion Consensus Plan (past estimate). Fees per passenger would have to be even higher to fund a $11 billion Consensus Plan (current estimate), and greater still to support a plan with escalating, unanticipated costs, which are likely for a "mega project" such as this. In addition, the Consensus Plan proposes runway relocations (one of the "Yellow Light" projects) that would require the elimination of passenger terminals 1, 2 and 3. These terminals provide low-cost, short-haul flights by airlines such as Southwest. Alternative short-haul airports including Bob Hope, Long Beach and John Wayne all are capacity-constrained, and have limited potential to make up for this loss of short-haul service.

The Consensus Plan would be a tremendously costly upgrade of a major international airport that would not produce any increase in capacity. Its primary impact will be to make LAX much more expensive for airline tenants who will be asked to foot the bill for the improvements. This would inevitable translate into higher airfares for the traveling public. Economically, airlines are in dire straits, and even the low-cost discount carriers are struggling to absorb soaring fuel costs. Carriers are moving to low-cost airports to ensure their economic survival. Even international air service is increasingly being taken over by low-cost discount carriers that avoid expensive airports with high landing fees. Flying a new generation of longer-range aircraft, international carriers can now fly over the region to alternative airports like Phoenix Sky Harbor and Las Vegas McCarron. With high landing fees (and/or increased Passenger Facility Charges) needed to fund the Consensus Plan, only the most expensive carriers would remain at LAX, offering premium service at high fares. A jump in lease rates for all airport tenants would also be expected, and air travelers would face higher prices for goods bought in airport stores and restaurants. By so markedly increasing its costs to airport users, LAX would be an airport that turns its back on airlines and other tenants interested in providing affordable air service to the traveling public. Full implementation of the Consensus Plan would

make LAX a very expensive and exclusive airport that would have to cater to the "traveling elite" that could afford its high airfares and costs.

A new smart and sensible LAX master plan should be developed that maximizes airport dollars and enhances the ability of Los Angeles World Airport to implement a truly regional vision. A "strategic planning" approach should be pursued, that implements the most critically needed improvements in the short term, and has the flexibility to adjust to changing events and circumstances over time. Cost effective security alternatives to the proposed Ground Transportation Center should be evaluated. These could include installing bomb resistant glazing and barriers in terminal buildings, increased inspection and surveillance of vehicles using state-of-the-art technology, and prohibition of some high-risk vehicles from entering the Central Terminal Area. Most importantly, the master plan should be part of an integrated master plan for all airports run by Los Angeles World Airports, which emphasizes strategies for decentralizing air service to Palmdale, Ontario, and other airports in the region.

The exorbitant expense of the Consensus Plan would saddle Los Angeles World Airports with an enormous debt to be serviced for years to come, which would hamstring its ability to carry out a true regional aviation vision. This would greatly limit the ability of the organization to fund worthy projects at other airports it runs, such as making ground access and other facility improvement at Palmdale Airport, and planning for high-speed rail access to both Palmdale and Ontario airports. These and other projects will be needed to extend the market reach of these airfields so that they can become viable options for many Southern California passengers that currently use LAX.

Since the Consensus Plan is fundamentally flawed and lacks community support, it will certainly face legal challenges in the future. Its phased approach is ambiguous and leaves too many questions to be answered at a later date, likely through future litigation. These questions include whether the controversial "Yellow Light" projects serve as mitigation measures for the entire plan, and whether the entire Consensus Plan would retain its integrity if these measures were not implemented. Also, future litigation will address the question of whether the environmental impact report for the plan, that has old information dating to 1996, is still relevant.

The Consensus Plan implies that the controversial "Yellow Light" projects may not be implemented because they would have to go through a greater degree of scrutiny than the "Green Light" projects. However, the plan is misleading in that it makes no provisions for the possibility for not implementing these projects, by offering alternative measures that would attain results similar to that of the "Yellow Light" projects, but at much less expense and impact on surrounding communities. These results would include reducing aircraft runway incursions, reducing traffic in the central terminal area, and achieving security for the traveling public. Further, it is questionable whether the "Yellow Light" projects will have all of the positive benefits that have been attributed to them, particularly the Ground Transportation Center. More study is needed to determine the exact level security that it would afford compared to alternative safeguards. Its traffic impacts also warrants further study, particularly since it will concentrate passenger access off an already highly congested I-405 freeway.

Accordingly, there is an LAX master plan alternative to the Consensus Plan that not only removes the uncertainties that [illegible] litigation, but [illegible] more cost-effective as well. It would also serve a broader spectrum of the traveling public while minimizing impacts on surrounding communities. That master plan alternative is called Alternative E-1, which eliminates the controversial "Yellow Light" projects that have generated so much opposition and concern among impacted communities. This superior master plan alternative is described in further detail below.

Primary Characteristics of Alternative E-1

The "Green Light" projects in the Consensus Plan that are retained in Alternative E-1 include the following:

- Security enhancements to existing facilities within the Airport Airside and/or Airport Landside areas
- Improvements to the South Airfield, including runways and taxiways
- Expansion of satellite terminal/FlyAway bus systems
- West face improvements to the Tom Bradley International Terminal
- Construction of employee parking facilities
- Construction of the Intermodal Transportation Center (ITC)
- Construction of the Consolidated Rental Car Facility (RAC)
- Construction of the Automated People Mover System (APM)

The primary differences in these projects between Alternative E-1 and the Consensus Plan as described include the following:

- More comprehensive security enhancements to existing airside facilities would be implemented by Alternative E-1. The most cost-effective strategies recommended by the ongoing RAND study of LAX would be implemented. The study has recently completed a report on short-term options for improving security at LAX, and will complete a study of long-term options by early 2005. Cost effective security measures could include limiting density of people in unsecured areas, increasing inspection and surveillance of vehicles entering the Central Terminal Area, enhancing screening of airport personnel, and increasing the security of passengers in terminal buildings by installing bomb resistant glazing and barriers.
- Alternatives to the proposed improvements to the South Airfield that would reduce the risk of runway incursions, such as the peripheral taxiway being discussed in the proposed agreement between the City of El Segundo and the Los Angeles Board of Airport Commissioners, should be explored. A Special Study should be conducted that would address this issue, including methods of also reducing the risk of runway incursions in the North Airfield. These methods could include the installation of state-of-the-art Airport Surface Detection Equipment (ASDE) at the airport (recently initiated by the FAA), and the installation of better visual aids including signs and lighting.
- The proposed FlyAway facility in Inglewood should be eliminated from the five that are currently proposed, because of its low probability of being cost-effective being so close to the airport. A Special Study should be conducted of the other proposed

facilities, including potential ridership, access to local and regional transit feeder networks, and access to regional high-occupancy vehicle (HOV) networks. The study should also evaluate the potential of these facilities to provide remote ticketing and baggage check-in services.

- New gates that are required to accommodate new, very large A-380 aircraft should be constructed on the ends and on the west side of the Bradley International Terminal. This could require the relocation of a number of facilities including north/south taxiways, aircraft maintenance facilities, a commuter aircraft facility, flight kitchen facilities, and airfield command post, and an Aircraft Rescue and Fire Fighting (ARFF) Station. A Special Study should be conducted that would determine specific facility relocation requirements and costs.
- **(Note: Alternative E-1 recommends that the Consolidated Rental Car Facility-RAC- not be located at Lot "C," but located at the intersection of Imperial and Aviation instead, at the site of the ITC proposed in the Consensus Plan. It is questionable whether this is good idea, given the high level of existing congestion at the intersection and the substantial traffic at this intersection, which is close to residential neighborhoods. Unless connected to an Automated People Mover (APM), rental car users would have to be shuttled or bused to the CTA from this location. Also, the proposal in Alternative E-1 to construct multi-story rental car parking and reconstruct Aviation Blvd. below grade along LAX would be very costly, which would contradict the intent of Alternative E-1 to be a cost-effective alternative to the Consensus Plan. Also, it is unlikely that there is enough space at this location for rental car maintenance and fueling facilities, and long-term vehicle storage. It is therefore recommended that the RAC be retained at Lot C as in the Consensus Plan, and the loss of parking space there be made up at other locations, such as in Manchester Square. It is also recommended that the ITC be retained at the intersection of Imperial and Aviation as in the Consensus Plan, with a APM connection to the CTA and a pedestrian bridge connection to the Green Line station).**
- The APM would need to be reconfigured since it would no longer need to access the GTC.
- An aircraft reduction and management strategy would need to be implemented in order to hold LAX to a capacity of 78.9 million air passengers (MAP). Such a strategy is currently part of a proposed agreement between the City of El Segundo and the Los Angeles Board of Airport Commissioners that is in the final stages of negotiation. When finalized, it will become incorporated into Alternative E-1.

Alternative E-1 is also distinguished by the fact that it eliminates all of the highly controversial "Yellow Light" projects. These projects include:

- Construction of the Ground Transportation Center (GTC)
- North Runway realignment and centerline taxiway construction
- Demolition and reconstruction of terminals 1, 2 and 3
- Construction of Western Satellite Terminal

The primary reasons for eliminating these projects include the following:

- The exorbitant costs of these projects, which would make LAX less competitive with other international gateway airports, can be avoided. This would eliminate the need for LAX to cater to a narrower spectrum of air passengers and income groups to pay these costs, by serving primary the "traveling elite."
- By avoiding the burdensome debt that would be incurred in funding these questionable projects, Los Angeles World Airports would not be hampered in implementing a true regional vision at the other LAWA run airports.
- By not constructing the Ground Transportation Center (GTC), which would concentrate ground access traffic off the higher congested I-405 freeway, the worsening of congestion on that freeway, as well as on surface streets in communities surrounding the GTC, can be avoided.
- The preservation of Terminals 1, 2 and 3 would preserve service by the short-haul, discount airlines that operate gates in those terminals, which would help maintain a wide range of service provided by the airport.
- Alternative E-1 is much more transparent and straightforward than the Consensus Plan. It clearly eliminates the highly controversial Yellow Light projects instead of giving them an ambiguous "maybe/maybe not" status, which has caused much consternation and anxiety in local communities.

Ground Access Improvements

Ground access improvements required to mitigate congestion impacts in Alternative E-1 will be fewer and less expensive than in the Consensus Plan. This is because Alternative E-1 makes fewer changes to existing traffic patterns, and will still benefit from the trip reduction capabilities of the ITC in combination with the new FlyAway facilities. The Consensus Plan proposes a number of ground access improvement to mitigate ground access impacts, including a new interchange at Lennox Blvd. and I-405, new ramps off I-105 and between La Cienega and Aviation, and various intersection and arterial improvements to local roadways. The highly expensive new interchange at Lennox and I-405 would no longer be needed with Alternative E-1 because of the elimination of the GTC and its attendant impacts on congestion on the I-405. Also, funding availability for this major improvement is questionable; it is not programmed in either SCAG's 2004 Regional Transportation Plan (RTP) or Regional Transportation Improvement Program (RTIP). The proposed new ramps off the I-105 will still be needed because of the retention of the ITC in Alternative E-1. All other improvements will need to be reassessed because of the different distribution of traffic in Alternative E-1 compared to the Consensus Plan. Ground access improvements that are identified consistent with Alternative E-1 would be coordinated with airport ground access planning conducted by SCAG, to ensure that needed improvements are included in the 2007 RTP and RTIP.

Green Line Extension

(Note: the proposed Green Line extension along Aviation and Florence to Union Station in Alternative E-1, with below grade construction along LAX is a very costly proposition that contradicts the intent of Alternative E-1 to be a cost-effective alternative to the Consensus Plan. It would also duplicate service provided by the proposed SCAG MagLev line that would run from Union Station to West Los Angeles and eventually to LAX, and be much faster and more efficient than the

Green Line service. Further, Federal Aviation Law prohibits airport revenues from being diverted to fund off-airport ground access projects, except for segments that directly access the airport. It is therefore likely that most of the proposed Green Line extension in Alternative E-1 would have to be funded by the MTA, and that future funding availability for this project is highly uncertain. The proposed location of the ITC in Alternative E-1 at the northwest corner of Century and Aviation is contingent upon this highly problematic extension to have a light rail connection. It is therefore recommended that the proposed Green Line extension should be deleted from Alternative E-1, and that the ITC should be maintained as proposed in the Consensus Plan).

Regional Strategy of Alternative E-1

The long-term, regional strategy of Alternative E-1 plays an important role in placing the LAX master plan in a regional context, so that demand that cannot be served at LAX constrained to 78.9 MAP can be served by other airports in the region. The strategy is consistent with the adopted aviation strategy in SCAG's 2004 RTP.

The first step in the long-term strategy will be the development of an "Integrated Metropolitan Airport System Plan" by Los Angeles World Airports (LAWA). This plan will integrate the master plans of the three air carrier airports LAWA operates--LAX, Ontario and Palmdale--into an integrated action plan. The plan will detail how projects will be phased and funded over time at each airport, and will specify how these airports will coordinate and interface with each other and with other airports in the region to meet forecast regional aviation demand. The other non LAWA airport of greatest interest are those with capacity to meet future demand, including March Inland Port, San Bernardino International and Southern California Logistics airports.

The Integrated Metropolitan Airport System Plan will contain a financial element that will determine how new projects at all three airports, including ground access projects, will be funded. It will also specify how LAWA will provide needed financial support to Palmdale and Ontario airports to construct new facilities and establish long haul and international service through attractive pricing arrangements and other inducements. These inducements could include substantially lower landing and other fees at Palmdale and Ontario compared to LAX, made possible by including all three airports under the same cost center and providing needed financial cross-subsidization. Fees could be tied at least partially to community environmental impacts instead of just aircraft weight, so that the greater level of community impacts at LAX are taken into account in the fee structures. Attractive packages including low landing fees and lease rates could be offered to start-up carriers to induce them to pioneer initial service at these airports. Other airline inducements could include airport marketing programs, low cost parking, and free or low cost shuttle service from major activity centers and transit nodes.

The plan will also specify how LAWA will broker cooperation from airlines to provide more robust flight portfolios at Palmdale and Ontario, including long haul and international service. Besides attractive financial packages, inducements could include construction of common use/shared facilities to keep costs low, and flexible lease and

operating agreements. Airlines would be encouraged to cooperate to the extent possible to make the most efficient use of shared-use facilities, including sharing staff, to spread costs among themselves. For example, airlines could share check-in staff at common use terminal counters, as well as baggage handlers.

Airline cooperation would also include making the most efficient use of the planned regional MagLev system that is planned to interconnect all of the LAWA airports. LAWA should broker cooperative agreements between airlines, travel agents and web-based travel reservation systems to integrate airfares with MagLev fares. Also, full information should be provided to air passengers about airport and service alternatives on all web-based travel reservation system. For example, if an international flight with the desired time, destination and price is not available at LAX, an air passenger or travel agent would automatically be directed to available flights at Ontario Airport or Palmdale, with the MagLev fare for traveling to that airport included in his airfare.

It is envisioned that a MagLev Joint Powers Authority (JPA) will be formed that will guide the planning, funding, development and operation of the regional MagLev system. As a member of the MagLev JPA, LAWA should assume a prominent leadership role to ensure that the future regional MagLev system efficiently connects with and serves all LAWA air carrier airports.

The last element of the Regional Strategy for Alternative E-1 is the development of agreements between LAWA and non-LAWA airports such as March Inland Port, San Bernardino International and Southern California Logistics, to promote further decentralization of the regional aviation system. This would include not only the decentralization of air passenger service, but air cargo service as well, since several of these airports are concentrating on serving air cargo in the short-term, and can make up for air cargo processing constraints at LAX. Different roles and market niches for all of the airports will be defined, so as to reduce competition and increase cooperation and coordination between them, and maximize utilization of available airport capacities in the region. The agreements will establish a common framework for a regional "Airport Consortium" that will coordinate all airport master planning and facility construction consistent with an adopted Regional Aviation Plan. The Regional Airport Consortium will coordinate with the MagLev Joint Powers Authority to ensure seamless MagLev connections to airports, and increase air passenger ridership via MagLev through integrated fares and other market tools.

Feel free to call and speak with my deputy for LAWA, Steve Ongele.

Respectfully,

BERNARD C. PARKS
Councilmember

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MEMBER OF CONGRESS
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February 22, 2005

By Fax and Mail
(310) 725-6849

Mr. David Kessler, AICP
U.S. Department of Transportation
Federal Aviation Administration
P.O. Box 92007
Los Angeles, California 90009-2007

Re: Comments to LAX Final EIS (January 2005)

Dear Mr. Kessler,

The diligence undertaken by you and your staff in preparing the Final Environmental Impact Statement (FEIS) is readily apparent. I can appreciate the monumental task involved the preparation of such a significant document.

Below you will find my comments to the information and analysis contained in Volume A to the FEIS, including that presented in the related appendices. I look forward to your responses.

Capacity – Gates – Passenger Activity

I have reason to believe that the 78.9 MAP forecast for Alternative D is meaningless, utterly meaningless. The FEIS states,

> "It is important to understand that the levels of passengers that each alternative is designed to accommodate are not finite limits where the airport would somehow be closed or where aircraft would be redirected to some other facility when this number is reached. These levels are an indication of the number of passengers that can be accommodated at a reasonable level of service. *The airport can accommodate additional aircraft and passengers beyond these limits, however, the result is a degraded level of service.*" (FEIS, Part I, vol. 1, p. 3-57 (emphasis added).)

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Thus, the question is not *whether* Alternative D accommodates more than 78.9 MAP. It does. The question is *how many millions more passengers* it accommodates. I would be grateful if you could address the following questions regarding the 78.9 MAP forecast.

1. How is "reasonable level of service" defined?
2. How is "degraded level of service" defined?
3. Does the FAA believe that LAX is currently operating at a degraded level of service? Why or why not?
4. What is a reasonable level of service for the current configuration of the airport? What are the number of passengers that LAX can accommodate at a reasonable level of service under the No Action/No Plan alternative?
5. Under Alternative D, how many aircraft can LAX accommodate at a degraded level of service?
6. Under Alternative D, how many passengers can be accommodated at a degraded level of service?
7. What legal methods are available to enforce a cap of 78.9 MAP under Alternative D?
8. The unconstrained 2015 demand forecast for LAX is 97.9 MAP. What *physical* constraints of Alternative D prevent LAX from handling 97.9 MAP, albeit at a degraded level of service?
9. The number of LAX passengers directly affects amounts of noise, traffic, and air pollution around the airport. The greater the number, the worse the impacts. Would you agree that accurate passenger activity forecasts are essential to assessing an alternative's environmental impacts?

The FEIS compares apples and oranges because it compares alternatives at different levels of service. The No Action/No Project ("NA/NP") alternative assumes degraded level of service. The NA/NP maximum capability is 78.7 MAP, "but only under extremely congested and inconvenient conditions." (Arguably, these conditions exist today.) (FEIS, Part I, Vol. 1, p. 2-7 ("Existing capacity constraints at LAX").) (FEIS, Vol. A, p. A 1-21.)

By contrast, the Alternative D forecast assumes a *reasonable* level of service. That prediction is given as 78.9 MAP in 2015. (FEIS, Table AES-2, p. A-6.)

Thus, the proper comparisons are Alternative D and NA/NP under the same conditions. The alternatives should both be measured under either "reasonable" or "extremely congested and inconvenient conditions." To use contrasting conditions, distorts the burdens and advantages of the two alternatives.

Gates

I also have questions concerning the number and configuration of gates under Alternative D. "The most constraining component of an airport defines the practical capacity." (FEIS, Part 1, vol. 1, p. 3-58.) "The passenger activity that would be expected in 2015 with Alternative D was

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determined based on the design of the Alternative D gate facilities ..." (FEIS, Part 1, vol. 1, p. 3-62.)

1. Under Alternative D, would increasing the number of gates (or narrow body equivalent gates) improve the airport's ability to accept more arriving flights?
2. Under Alternative D, would increasing the number of gates (or narrow body equivalent gates) permit the airport to accommodate more passengers?
3. Military and government aircraft (*e.g.*, Air Force One) currently use the remote gates. Under Alternative D, will all of the remote gates be removed? If so, by when? If so, please identify where this commitment is located. If all of the remote gates are scheduled to be demolished, where will military and government aircraft park at LAX?
4. Under Alternative D, what physical impediments exist, if any, to passengers boarding aircraft at cargo facilities?
5. Under Alternative D, what physical impediments exist, if any, to the construction of remote gates after 2015?
6. Under Alternative D, what physical impediments exist to the discharge and boarding of passengers on the tarmac, as is the case in many airports around the world?

Traffic – Off-Airport Surface Transportation

Please, consider the following comments under both (1) the "Off-Airport Surface Transportation" section and (2) the "Environmental Justice (NEPA Analysis)" discussion of surface transportation of Volume A of the FEIS.

The FEIS analysis of traffic impacts is based on the assumption that LAX will accommodate 78.9 MAP under Alternative D. If passenger activity exceeds that prediction for any reason, the environmental associated impacts will be greater. Where in the FEIS are Alternative D traffic impacts analyzed for levels greater than 78.9 MAP?

The FEIS takes into account the predicted reduction of traffic from the proposed Playa Vista Phase II (the Village). To what extent did the traffic analysis take into account increased traffic since the baseline year to the roadway system brought about by numerous new residential projects in the LAX vicinity?

Specifically, were Alternative D traffic impacts analyzed for the addition of 4,525 newly built homes and apartments and 2,939 new homes and apartments that are currently under construction in the LAX vicinity?

Did the traffic analysis take into account the following:

1. 354 new Archstone apartments on Manchester Avenue and Pershing Drive?
2. 539 new apartments in the Decron Furama project at Manchester Avenue and Lincoln Boulevard?
3. 300 new apartments (approx.) in the project on the south east corner of Manchester Avenue near Falmouth Avenue?
4. 600 new apartments (approx.) approved for the Howard Hughes Center on Howard Hughes Parkway by 405?

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5. 50 new apartments (approx.) on the north side of Manchester Avenue near Park Hill Drive?
6. 35 new Sea Glass residential units planned for Toes Beach in Playa del Rey?
7. 96 new units in the five-story Alexan Fontaine on the west side of Glencoe Avenue?
8. 43 town homes planned to replace the Kentwood Apartments on Arizona Avenue?
9. unknown number of condominiums planned to replace the temple on Manchester Avenue?
10. 508 new apartments in Chateau Marina on Lincoln Boulevard?
11. 99 new apartments in Panay Marina on Panay Way?
12. 102 new apartments on the east side of Glencoe Avenue?
13. 138 new condominiums in the 18-story Cove Tower on Marina Pointe Drive?
14. 310 new units in Ocean Walk on Lincoln Blvd?
15. 526 new apartments in Legacy Residential on Marquesas Way?
16. 292 new apartments in the Waterfront on Admiralty Way?
17. 125 new apartments in the Waterfront on Palawan Way?
18. 179 new apartments in the Admiralty Apartments on Admiralty Way and Palawan Way?
19. 178 new hotel rooms in the 20-story Woodfin Suite Hotel on Via Marina?
20. 108 new time share units in the 20-story Woodfin Suite Hotel?
21. 147 new hotel rooms in the Residence Inn in Marina del Rey?

Alternative D moves passenger entry east of the existing central terminal area to a location closer to the 405 Freeway. Heavy concentrations of minority and low-income people are located to the east of the airport and the 405. Does the dislocation of surface traffic to the 405 create a disproportionate impact on minority and low-income communities relative to surface transportation?

Environmental Justice - Relocation

I have previously objected to the elimination of affordable housing and relocation of residents under Alternative D. LAWA's response has been that the housing destruction and relocation are not part of Alternative D, but part of a separate "voluntary acquisition" program. I am not wholly satisfied with this answer. The "voluntary" program is essentially complete, and will in short order be followed by a very involuntary program.

It is my understanding that all of the willing sellers have sold. All or nearly all of the single family homes in Manchester Square have been acquired. However, thousands of renters continue to reside in numerous multi-unit apartment buildings in that area. It is my understanding that these owners are not inclined to sell because they are unable to match the excellent returns available to them as owners of these buildings.

In order for the Ground Transportation Center to be constructed, all of the apartments must be acquired through compulsory methods (such as inverse condemnation) and the residents of Manchester Square evicted. If Alterative D is not implemented, these low-income and minority residents will not be displaced. Thus it is not accurate to state that Alternative D will not eliminate low-income housing. Alternative D will have a significant and adverse impact on thousands of units of low-income housing.

Does the voluntary residential acquisition program ensure that Manchester Square will be vacated of all residents (including renters) by a date certain in order to permit the construction of the ground transportation center?

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What course of action is provided for under Alternative D if residents refuse or decline to accept the voluntary acquisition and relocation offer?

For owners and residents who decline the voluntary acquisition and relocation program, what steps does Alternative D provide?

Pollution - Air Quality

The alternatives would affect air quality by changing the amount of emissions released by sources at or near LAX. (FEIS, Vol. A, Main Document, p. A.1-30; p. A.2-121.) In general, the greater the aircraft and passenger activity, the greater the amount of aircraft emissions. Alternative D emissions are posited to be lower than Alternatives A, B, and C due to lower passenger levels and fewer aircraft operations. (FEIS, Vol. A, Main Document, p. A.1-32.) If the activity forecast for Alternative D is exceeded, how will Alternative D CO, VOC, NOx, SO2 emissions compare to Alternatives A, B, and C?

What are the levels of unmitigated VOC emissions under Alternative D assuming 78.9 MAP? What are the levels of unmitigated VOC emissions under Alternative D if the level of passenger activity reaches 89.6 MAP? At 97.9 MAP? Assuming activity of 89.6 MAP and 97.9 MAP, are the unmitigated VOC emissions under Alternative D higher or lower than the No Action/No Project Alternative?

What are the amounts of mitigated VOC emissions under alternative D if activity reaches 89.6 MAP? 97.9 MAP? Assuming activity of 89.6 MAP and 97.9 MAP, are the mitigated VOC emissions under Alternative D higher or lower than the No Action/No Project Alternative?

What are the amounts of mitigated criteria pollutants under alternative D if activity reaches 89.6 MAP? 97.9 MAP? Assuming activity of 89.6 MAP and 97.9 MAP, are the mitigated criteria pollutants emissions under Alternative D higher or lower than the No Action/No Project Alternative?

What are the predicted ambient air pollutant concentrations under Alternative D if and when passenger activity exceeds 78.9 MAP? Please describe the level of ambient air pollutant concentrations under Alternative D if passenger activity reaches 89.6 MAP? 97.9 MAP?

What data collection studies of air pollutants have been performed in communities to the north, east, and south of the airport since 1996, the baseline condition year?

Do studies or measurements exist establishing the levels and sources of hazardous air pollutants in the communities north, east, and south of LAX?

To what extent does the relocation of the airport's point of entry, and the associated realignment of vehicular traffic, to Manchester Square decrease the air quality of and exacerbate adverse human health effects in Westchester, Inglewood, and minority populations east of the 405?

Endangered Species

Implementation of Alternative D will result in direct impacts to two listed species, the Riverside fairy shrimp and El Segundo blue butterfly. Purportedly, the plan does not threaten the continued existence on this planet of these irreplaceable organisms. (FEIS, Vol. A1, p. A.2-140.) It is reported that the U.S. Fish and Wildlife Service agrees with this conclusion based

in part, on the creation of off-site vernal pool habitat at the former Marine Corps Air Station at El Toro.

The government, however, has recently completed the sale of the former El Toro Marine Corps Air Station in Irvine. (See, "Builder Sweeps El Toro Auction," Los Angeles Times, Feb. 17, 2005.) This development would appear to impede the plan to relocate the shrimp to El Toro.

How does the El Toro sale and buyer's plans for 3,400 new homes in the heart of Orange County affect the relocation plan?

Assuming that El Toro is no longer viable, is there a plan that specifically identifies a new off-site habitat area for the fairy shrimp?

Where will fairy shrimp cysts be relocated?

Is it appropriate to continue with the implementation of Alternative D insofar as there appears to be no home currently identified to transplant the shrimp?

The ratio to replace destroyed sensitive habitat with man-made habitat is 3:1. I do not believe that this is adequate or in keeping with the spirit of helping sensitive species thrive and be removed from the endangered list. A more ambitious ratio than 3:1 should be examined.

Coastal Zone Resources - Consistency with the California Coastal Act

There is no dispute that Alternative D will have coastal impacts. Although the north runway project would disturb the environmentally sensitive habitat area ("ESHA") and the endangered El Segundo blue butterfly, consistency conclusions by LAWA and the FAA allow the project to proceed. The FEIS contends that the navigation aids in the northern part of the ESHA are consistent with the Coastal Act to the maximum extent practicable. Yet, the decision to reconfigure the north runways (which triggers the new navigation aids) is a discretionary one.

Does the FAA or the federal government require LAWA to reconfigure Runway 24L/6R?

Does the FAA or the federal government require LAWA to extend Runway 24R/6L?

If LAWA is not compelled or mandated by federal law or action to extend or reconfigure Runways 24L and 24R as part of its Master Plan project, in what sense are the north runway improvements consistent to the maximum extent practicable with the environmentally sensitive habitat policy of the Coastal Act?

Safety and Security

The security of LAX is not only of vital local concern, but a matter of national security. There has been no objective analysis as to whether Alternative D will enhance the security of the airport and its passengers and employees. The comprehensive cost-benefit analysis of Alternative D security that was promised last year has not been initiated. I believe that in this vacuum of objective analysis, it is imprudent to move forward on the Alternative D Master Plan, whose centerpiece is the ground transportation center in Manchester Square.

Do you have any reliable information as to whether the proposed Automated People Movers, ground transportation center, and Intermodal Transportation Center would become the targets of terrorist attack?

The ground transportation center is designed as the primary passenger access point to LAX. How many people are projected to use the Ground Transportation Center during the design day? In what ways are passengers safer in the Ground Transportation Center than they are in terminals in the existing central terminal area?

How many more law enforcement personnel would be needed to secure the four major new facilities conceived by Alternative D (GTC, ITC, RAC, APM)? What would be the personnel and associated cost of such security?

Noise

The FEIS analysis of traffic and noise impacts is based on the assumption that the maximum number of passengers that Alternative D can accommodate is 78.9 MAP. If for any reason, the passenger activity cap is exceeded, then the associated impacts will also be greater.

Under Alternative D, what are the forecast 65 CNEL noise contours for 89 MAP? For 97.9 MAP?

Has an analysis been performed to determine whether any sensitive land uses (residences, schools, etc.) will be affected under Alternative D if and when activity levels exceed 78.9 MAP?

Can it be reliably stated that if activity levels under an implemented Alternative D exceed 78.9 MAP, that Alternative D has fewer impacts than the No Action/No Plan Alternative?

Phasing

How long will the Master Plan program take to be fully implemented after construction begins? At what date can the Master Plan be reasonably expected to be completed?

It appears from the illustrations submitted, that the majority of the existing remote gates need not be removed to reconfigure the north runways. How many, if any, of the remote gates must be razed to reconfigure the north runways?

Does the so-called consensus plan alter the three-stage phasing of the Alternative D Master Plan?

Historical Resources

Under Alternative D, what is the fate of the historic Proud Bird restaurant located on Aviation Boulevard?

Community-Based Agreements

Which of the benefits identified in the community-based agreements reached between LAWA and the LAX Coalition for Economic, Environmental, and Educational Justice are commitments which were previously promised by LAWA (for example, pledges contained in the MMRP, Master Plan commitments, and memoranda of understanding)? Which of the commitments are new commitments that were not previously promised by LAWA?

Which of the benefits identified in the community based agreements are restatements of existing LAWA policy or practices? Which of the benefits are not?

Which of the benefits under the community-based agreements are dependent for funding upon FAA approval? Which of the benefits are not so dependent?

Alternative Not Considered

During public testimony in 2004, especially in the context of the so-called consensus plan, I urged that the Manchester Square project (the ground Transportation Center) and other "yellow-light" projects be deleted from the Master Plan.

This "green and red light" approach is a viable alternative to airport modernization that allows the enhancement of safety and amenities and mitigation to off-airport surface transportation. This alternative should not entail undue delay since the "build" projects under this alternative (for example, the ITC) are already described in the EIS and EIR. My "red light" alternative could be implemented at a significant savings over Alternative D, since it does not implement such costly and dubious projects as the billion dollar luggage tunnel. It also has the virtue of eliminating the projects that do not enjoy widespread support.

Unfortunately, this alternative was not analyzed in the EIR or EIS. Thus, by its failure to analyze this alternative, the "Final" EIS and EIR are incomplete. No Record of Decision should issue until the "red light" alternative is prepared.

Sincerely,

Maxine Waters
Member of Congress

MW:es

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Assembly
California Legislature

MIKE GORDON
ASSEMBLYMEMBER, FIFTY-THIRD DISTRICT

February 22, 2005

SENT VIA FAX
Mr. David B. Kessler, AICP
Regional Environmental Protection Specialist
AWP-611, Airports Division
Federal Aviation Administration
Western-Pacific Region
P.O. Box 92007
Los Angeles, CA 90009-2007

Re: Comments on the Final Environmental Impact Statement for Los Angeles International Airport, Los Angeles, Los Angeles County, CA

Dear Mr. Kessler:

Following are comments on the Final Environmental Impact Statement for Los Angeles International Airport per the Notice of Availability published in the Federal Register, Vol. 70, No. 13, Friday, January 21, 2005.

1. **The FEIS Improperly Relies Upon Outdated Data in Analyzing Environmental Impacts.**

The environmental impact analysis contained in the FEIR and relied upon by the FEIS is based on old and outdated data that has been piecemealed together at the whim and pleasure of the leadership of the City of Los Angeles since the beginning of the Master Plan process in 1997. Such outdated data cannot be relied upon as a reasonable basis for the analysis of potential environmental impacts for any project alternative contained in the LAX Master Plan nor can any conclusions as to the level of significance of any environmental consequence resulting from any project alternative in the Master Plan be relied upon as a reasonable assessment.

2. **The FEIS Improperly Relies Upon Inaccurate Description and Analysis of the No Project Alternative.**

The FEIS uses the No Project Alternative as the basis for comparison of the environmental impacts of Alternatives A, B, C and D. However, the No Project Alternative in the Final EIS/EIR is fundamentally flawed in both its description and analysis and therefore, is not a reasonable basis for comparison to the build alternatives.

Both the Draft EIS/EIR and the Final EIS/EIR appear to have exaggerated the No Project Alternative in order to make the Build Alternatives appear more benign by comparison. During the development of the LAX Master Plan, Los Angeles World Airports inexplicably increased its estimation of the number of passengers and cargo tonnage that could be served under the No Project Alternative. LAWA abruptly increased the passenger estimate from 70 MAP to 79 MAP by 2015 and increased the cargo estimate from 2.5 MAT to 3.1 MAT by 2015.

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Overstating the passenger and cargo handling capacity of the No Project Alternative inflates the environmental impacts of the No Project Alternative and inappropriately makes the impacts of the Build Alternatives appear less severe by comparison.

3. **The FEIS Improperly Relies Upon a Passenger Capacity Estimate of 79 MAP for Alternative D.**

Alternative D proposes to limit LAX to approximately 79 MAP by limiting the total number and size of gate positions to a level lower than Alternatives A, B, and C, and below the current values. However, LAWA performed no analysis of the actual capacity of the number and size of gate positions and, instead, relies upon a market analysis based on assumptions about the reactions of airlines and passengers to the gate configuration proposed in Alternative D as the basis for the capacity estimate. Independent analysis of the capacity of the number and size of gates proposed in Alternative D by UC Berkeley Professor Adib Kanafani reveals a capacity of approximately 87 MAP.

4. **The FEIS Improperly Fails to Identify and Measure the Impacts of Alternative D Beyond the 79 MAP Threshold.**

As stated above, the FEIS improperly relies upon a passenger capacity estimate of 79 MAP for Alternative D although LAWA performed no true capacity analysis of Alternative D and the Master Plan offers no assurances that Alternative D will be held to a 79 MAP threshold. In limiting its analysis to impacts at the 79 MAP level, the FEIS fails to properly identify and measure the environmental impacts, including noise, traffic and pollution, of activity levels beyond 79 MAP. In doing so, the FEIS understates the potential adverse environmental impacts of Alternative D.

5. **The FEIS Fails to Reconcile Conflicts in the Methodology of Analysis and Assessment of Impacts Between the FEIS and the FEIR.**

The FEIS acknowledges a conflict in the basis of comparison of impacts and conclusions of significance for certain impact categories. The FEIS uses the No Project Alternative as the basis of comparison of impacts with the Build Alternatives where the FEIR uses the 1996 baseline. The conflict is most apparent in the areas of Environmental Justice relative to noise, air quality and human health risk.

Where the FEIR finds disproportionately high impacts from noise and pollution on minority and/or low-income communities under Alternative D, the FEIS finds no significant impacts and, in fact, concludes that noise impacts on these communities would be reduced under Alternative D.

The FEIS fails to provide a basis, methodology or rationale to reconcile the stark conflicts in the assessment of noise and pollution impacts on minority and/or low-income communities under Alternative D.

6. **The FEIS Improperly Accepts the FEIR's Inadequate Commitments to Attainable or Enforceable Mitigation Measures.**

The FEIS improperly accepts the FEIR's mitigation measures and "LAX Commitments" that are sufficiently vague in both description and feasibility as to be virtually meaningless. The FEIS/FEIR should formulate and recommend specific enforceable mitigation measures (whether

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referred to as "mitigation measures" or "LAX Commitments") and identify and commit to appropriate funding to attain such mitigation measures and commitments.

In light of the above comments, I urge you to reject the FEIS/FEIR in favor of developing an LAX Master Plan that meets safety, security objectives while limiting LAX to 78 Map to facilitate the development of a regional airport system to meet future projected demand in the region.

Thank you for your consideration.

Mike Gordon
Assemblymember
District 53

FPC00007

Dilnie Sambrano
2540 W. 111th Place
Inglewood, CA 90303
February 21, 2005

David Kessler AICP
United States Department of Transportation
Federal Aviation Administration
P.O. Box 92007
Los Angeles, CA 90009-2007

When consideration for approval of the Final Environmental Impact Study of Los Angeles International Airport is deliberated it is imperative that the following be taken into account.

Representatives from surrounding cities (Redondo Beach , Torrance, Hermosa Beach, Manhattan Beach, Palos Verdes, Rancho Palos Verdes, Rolling Hills, El Segundo, Inglewood Culver City , the Southbay Cities of Government, the Surrounding area Los Angeles Neighborhood Councils, Congress Members Jane Harman and Maxine Waters, Los Angeles County Supervisors community groups ARSAC, and LAXEN as well as a host of individual community members have spoken, written, and appeared before public hearings regarding the Alternative D and other LAX expansion plans. At most even though highly technical responses were given to significant problems created by the expansion the LAX greatest response to query or complications was not resolve but rather "Comment Noted". One can easily visualize the short skirted, gum-chewing, nail-polishing cartoon respondent. It is not only distressing but insulting that the "Comment Noted" response to serious concerns of air quality, vehicle traffic congestion, crowded skies, greater risk of incursions, sleep interruption, noise impacts, carcinogen increases is so swiftly dismissed. While it was requested that an extension of time be granted to respond the EIS it is not surprising that disregard for the impacted was again demand a quick to move on attitude.

It has been suggested that expansion must be rushed in response to the terrorist attack of 911. Logic would suggest the best solution would be to create multiple targets by establishing regional options rather than making one really easily to cause significant impact target or one even greater negative impact target. There is no debate that special interests groups are absolutely comfortable and pleased to disregard the safety and quality of life issues of the less economically advantaged. However, it is the role of government to provide regulation over the negative impacts of corporations whether they are city owned and operated or under private ownership.

The "economic growth" of one city should never out weigh the rights of individuals impacted in the areas surrounding that economic entity. The humans surrounding the airport should be granted the same right to environmental justice as those who fly first class. The very foundations of this country are set in the principles that all men are created equal. That those who established their homes prior to the advent of the jet age and discount frequent flights are to be dislocated or subjected to carcinogens is not consistent with the concept of environmental justice. It is an even greater insult that it is a "City owned and operated property" that plans to cause such impacts on the constituency of other cities and a portion of her own residents as well.

The recently voted on "Community Benefits Agreement" touted as the biggest, best and first wonder agreement is an insult on a host of levels to those of the affected area. How is it the genuine community has never been granted binding agreement negotiation table talks with the Board of Airport Commissioners who chose to negotiate with the self- proclaimed leaders. Daniel Tabor (Coalition Spokesperson) had run for Mayor of Inglewood and received only 3,666 votes in a community of 112,0000 residents and a registered voter list of 40,000. Obviously the Inglewood community at large did not choose him as their representative. The Labor organization seeking temporary jobs at the permanent expense of permanent residents made up another of the "Coalition" members. As for the Religious Leadership-since when do buildings used one day a week deserve priority consideration over homes where people dwell seven days per week. Temporary union jobs receiving priority over local homeowners seems counterproductive to the HUD goal of creating more homeownership.

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Since the Fall of Holy Roman Empire great societies decline typically not from outward invasion but of inward decay. When the principals of concern for economic growth overshadow the quality of life of her constituency that society has failed her people even if the selected few prosper in the short term. Those of us living in the area surrounding Los Angeles International Airport are no less worthy of sleep, clean air, and home ownership than those whose only contact with an airplane is the occasional business trip or family vacation. No society should put the temporary convenience of tourist above the quality of life of her residents.

While these words may seem random and passionate without scientific point consider the prior presentations dealing with studies, improper placement of monitors, misrepresentations of over-flights, chemical analysis, traffic patterns and misstated conclusions. Those prior statements however well studied annotated and presented were met with "Comment Noted" as if never read, and simply an exercise in allowing because the law demands though does not require genuine interest. It is my hope perhaps those previous comments will be considered by those whose goal is serious concern about aspects rather than simply adding to the cash flow at LAX.

Sincerely,

L. Diane Sambrano

L. Diane Sambrano

FPC00008

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To Dave Kessler/AWP/FAA@FAA
cc
bcc
Subject LAX FEIS Public Comment II

Mr. David B. Kessler, AICP

U.S. Department of Transportation

Federal Aviation Administration

P.O. Box 92007

Los Angeles, California 90009-2007

Telephone: 310/725-3615

February 22, 2005

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IN RESPONSE TO THE FAA'S FINAL ENVIRONMENTAL IMPACT STATEMENT FOR LAX EXPANSION MASTER PLAN

Citing FAA Order 5050.4A, Airport Environmental Handbook

CHAPTER 9. ENVIRONMENTAL IMPACT STATEMENT PROCESSING

94. PREPARATION AND REVIEW OF FINAL ENVIRONMENTAL IMPACT STATEMENTS.

2) For actions involving an airport location, runway location, or major runway extension pursuant to section 509(b)(5) of the 1982 Airport Act and found to have a significant adverse effect, there shall be evidence to support a conclusion that:

(a) There is no feasible and prudent alternative

LAX can already accommodate the New Large Aircraft. Reconfiguration of the north runway complex is not needed . A regional solution to air passenger and air freight traffic is a saner, safer, and more secure alternative than supporting LAX expansion through runway extensions and relocation. The public and the economy must be protected by the FAA. In these days of threatened terrorism, as well as the ever-present threat of natural disasters, allowing LAX to expand allows this economic engine to become A Bigger Target.

Cecil Carpio.

FPC00009

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02/22/2005 05:08 PM

To Dave Kessler/AWP/FAA@FAA
cc
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Subject LAX FEIS Public Comment

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February 22, 2005

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IN RESPONSE TO THE FAA'S FINAL ENVIRONMENTAL IMPACT STATEMENT FOR LAX EXPANSION MASTER PLAN

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Comment: Differential Runway Usage: As per the 2001 Caltrans Noise Variance Decision, page 7, paragraph "b":

"This rule requires, where possible, take-offs be launched from the inboard runways... There is no certainty as to how much benefit is derived from this procedure, but it is perceived as being helpful."

And, as per the 1998 Caltrans Noise Variance Proposed Decision, page 8, paragraph"b".

"This rule requires, where possible, that take-offs be launched from the inboard runways... It is not clear how beneficial this rule is. The point is to shelter the adjacent communities to the north and south of the airport property from noise. However, the bulk of the noise from jet aircraft is to the front and rear of the

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aircraft in flight, and not to the side. All runways are oriented (roughly) northeast to southwest. Thus, there would seem to be little to be gained from this."

Has a study been done to weigh the noise mitigation benefits of this Differential Runway Usage rule against the impact this noise mitigation rule has on airport runway incursions? Runway separation (moving the south runway complex) might not be necessary if this rule were reversed. Also, the proper staffing of the air traffic control tower (more controllers) would alleviate the number of incursion incidents

Has this prudent alternative been studied thusly?

Cecil Carpio

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The "economic growth" of one city should never outweigh the rights of individuals impacted in the areas surrounding that economic entity. The humans surrounding the airport should be granted the same right to environmental justice as those who fly first class. The very foundations of this country are set in the principles that all men are created equal. That those who established their homes prior to the advent of the jet age and discount frequent flights are to be dislocated or subjected to carcinogens is not consistent with the concept of environmental justice. It is an even greater insult that it is a "City owned and operated property" that plans to cause such impacts on the constituency of other cities and a portion of her own residents as well.

The recently voted on "Community Benefits Agreement" touted as the biggest, best, and first wonder agreement is an insult on a host of levels to those of the affected area. How is it the genuine community has never been granted binding agreement negotiation table talks with the Board of Airport Commissioners who chose to negotiate with the self- proclaimed leaders. Daniel Tabor (Coalition Spokesperson) had run for Mayor of Inglewood and received only 3,666 votes in a community of 112,0000 residents and a registered voter list of 40,000. Obviously the Inglewood community at large did not choose him as their representative. The Labor organization seeking temporary jobs at the permanent expense of permanent residents made up another of the "Coalition" members. As for the Religious Leadership--since when do buildings used one day a week deserve priority consideration over homes where people dwell seven days per week? Temporary union jobs receiving priority over local homeowners seems counterproductive to the HUD goal of creating more homeownership.

Since the Fall of the Holy Roman Empire, great societies have declined typically not from outward invasion but of inward decay. When the principles of concern for economic growth overshadow the quality of life of her constituency, that society has failed her people even if the selected few prosper in the short term. Those of us living in the area surrounding Los Angeles International Airport are no less worthy of sleep, clean air, and home ownership than those whose only contact with an airplane is the occasional business trip or family vacation. No society should put the temporary convenience of tourists above the quality of life of her residents.

While these words may seem random and passionate without scientific point, consider the prior presentations dealing with studies, improper placement of monitors, misrepresentations of over-flights, chemical analyses, traffic patterns and misstated conclusions. Those prior statements, however well studied, annotated and presented, were met with "Comment Noted" as if never read, and simply an exercise in allowing "because the law demands though does not require genuine interest". It is my hope that perhaps those previous comments will be considered by those whose goal is serious concern about impacts rather than simply adding to the cash flow at LAX.

Sincerely,

L. Diane Sambrano